

**IN THE SUPREME COURT OF OHIO**

In the Matter of the Application of )  
Black Fork Wind Energy, L.L.C. )  
for a Certificate to Site a Wind-Powered )  
Electric Generating Facility in )  
Crawford and Richland Counties, Ohio )

Case No. 12-0900

On Appeal from the Ohio Power Siting Board, Case No. 10-2865-EL-BGN

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**NOTICE OF APPEAL OF APPELLANTS INTERVENORS, GARY J. BIGLIN,  
BRETT A. HEFFNER, ALAN PRICE, CATHERINE PRICE,  
AND JOHN WARRINGTON**

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**FILED**  
MAY 24 2012  
CLERK OF COURT  
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Appellants Intervenors Gary J. Biglin, Brett A. Heffner, Alan Price, Catherine Price and John Warrington (collectively "Appellants") hereby give notice of their appeal pursuant to R.C. §4903.11, §4903.13, and R.C. §4906.12 to the Ohio Supreme Court from the following attached orders of the Ohio Power Siting Board in Case No. 10-2865-EL-BGN (hereinafter referred to as the "Orders"): (1) Opinion, Order and Certificate entered on January 23, 2012; and (2) Entry on Rehearing entered on March 26, 2012. Appellants are and were parties of record in Case No. 10-2865-EL-BGN and timely filed their Application for Rehearing of the Board's Opinion, Order and Certificate of January 23, 2012 pursuant to R.C. §4903.10. The Orders are unlawful and unreasonable in at least the following respects:

- I. The Board failed to comply with the requirements set forth in R.C. §4906.10 by not resolving the material issue of posting a decommissioning bond. The onus is on the Board to insure that adequate financial protection is available to protect the public interest in the event of decommissioning, prior to the issuance of the certificate. There is no evidence in the record as to the removal costs for each wind turbine from the proposed site and to the amount of bond to be posted by the Applicant for such removal. In fact, no bond is required at all for the decommissioning. Therefore, the Board's granting of the certificate to the Applicant and denial of rehearing on this issue is unreasonable and unlawful.
- II. The Board's ruling permits the Applicant to submit its final decommissioning plan to the Staff and County Engineers for review thirty (30) days prior to the preconstruction conference. Furthermore, the Applicant is to retain an independent, registered professional engineer, licensed to practice in Ohio, to estimate the total cost of decommissioning in current dollars, without regard to salvage value of the equipment seven (7) days prior to the preconstruction conference. This ruling constitutes an unlawful delegation of the Board's duties to the Applicant pursuant to R.C. §4906.02(C) and violates the Appellants due process rights to address the issue of financial security in a substantive way.
- III. The Board's decision to grant a certificate to the Applicant is not supported by the evidence. The "Joint" Stipulation and Recommendation was not entered into by all parties of record and was done in violation of the Board's own rules. Only two parties of record signed the agreed Stipulation, however, the Stipulation is not only Stipulations as to facts but also Stipulations as to post certificate conditions and conclusions of law which are not provided for pursuant to O.A.C. §4907-7-09. The Board's reliance on the facts, conditions, and conclusions of law contained in the Stipulations to arrive at its Order granting the certificate and judgment denying rehearing is unlawful and unreasonable.

- IV. The Board's acceptance of the facts, seventy-one (71) conditions subsequent and twelve (12) conclusions of law contained in the Stipulation violated the Appellants procedural and substantive due process rights as incorporated through the Fourteenth Amendment. The Board's unbridled adoption of the Stipulation denied all the Appellants and Intervenors their right to cross-examine the proponents of the Stipulation and the opportunity to present evidence on these issues at the hearing.
- V. The Board failed to follow the mandates set forth in R.C. §4906.02(C) thereby unlawfully granting a certificate to the Applicant in accordance with R.C. §4906.10. The Opinion, Order, and Certificate and judgment denying a rehearing were not approved by the Board but rather by unknown individuals. The Board's Order granting the Certificate and judgment denying rehearing were unlawful and unreasonable. Therefore, the Board's issuance of the certificate to the Applicant is void ab initio.

Accordingly, Appellants request that the Court remand the Orders to the Ohio Power Siting Board with instructions to correct the errors identified herein.

Respectfully Submitted,



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**CERTIFICATE OF SERVICE**

I hereby certify that, on May 24, 2012, a copy of the foregoing Notice of Appeal was served upon the Chairman of the Public Utilities Commission and the Ohio Power Siting Board, Todd A. Snitchler, by leaving a copy at his office at 180 East Broad Street, Columbus, Ohio 43215, and upon the following counsel and parties of record by regular U.S. mail:

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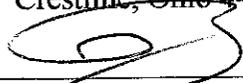
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**CERTIFICATE OF FILING**

I hereby certify that, on May 24, 2012, a copy of the foregoing Notice of Appeal was filed with the Docketing Division of the Public Utilities Commission and the Power Siting Board at 180 East Broad Street, Columbus, Ohio 43215 pursuant to R.C. §4903.13, O.A.C. §4901-1-02(A), O.A.C. §4901-1-36, and O.A.C. §4906-7-18.

  
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Patrick T. Murphy  
Counsel for Appellants

BEFORE

THE OHIO POWER SITING BOARD

In the Matter of the Application of Black Fork )  
Wind Energy, L.L.C. for a Certificate to Site a ) Case No. 10-2865-EL-BGN  
Wind-Powered Electric Generating Facility In )  
Crawford and Richland Counties, Ohio. )

OPINION, ORDER, AND CERTIFICATE

The Ohio Power Siting Board (Board), coming now to consider the above-entitled matter, having appointed administrative law judges to conduct the hearings, having reviewed the exhibits and testimony 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, Stephen M. Howard, and Michael J. Settineri, 52 East Gay Street, P.O. Box 1008, Columbus, Ohio 43216-1008, on behalf of the applicant, Black Fork Wind Energy, LLC.

Mike DeWine, Ohio Attorney General, by John J. Jones, Assistant Section Chief, and Stephen A. Reilly and Devin D. Parram, Assistant Attorneys General, Public Utilities Section, 180 East Broad Street, Columbus, Ohio 43215, and Christina E. Grasseschi, Summer J. Koladin Plantz, Assistant Attorneys General, Environmental Enforcement Section, 30 East Broad Street, 25<sup>th</sup> Floor, Columbus, Ohio 43215, on behalf of the Board's Staff.

Chad A. Endsley, 280 North High Street, P.O. Box 18238, on behalf of the Ohio Farm Bureau Federation.

Benesch, Friedlander, Coplan, & Aronoff, LLP, by Orla Collier III, 41 South High Street, 26<sup>th</sup> Floor, Columbus, Ohio 43215, on behalf of the Board of Crawford County Commissioners, the Board of Richland County Commissioners, the Richland County Engineer, the Plymouth Township Trustees, the Sharon Township Trustees, and the Sandusky Township Trustees.

John Warrington, Loren Gledhill, Carol Gledhill, Mary Studer, Alan Price, Catherine Price, Nick Rietschlin, Margaret Rietschlin, Bradley Bauer, Debra Bauer, Grover Reynolds, Brett Heffner, Gary Biglin, and Karel Davis, pro se.

OPINION:I. SUMMARY OF THE PROCEEDINGS

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

On December 1, 2010, Black Fork Wind Energy, LLC (applicant, company, or Black Fork) filed a preapplication notification letter, pursuant to Rule 4906-5-08(A), O.A.C., regarding a public informational meeting to be held in Shelby, Ohio regarding an application for a certificate of environmental compatibility and public need (certificate) that it planned to file with the Board (Applicant Ex. 1) for a proposed wind farm located in Crawford and Richland counties. On January 11, 2011, Black Fork filed proof of publication of the notice of the public information meeting which appeared in the *Mansfield News Journal* and the *Bucyrus Telegraph Forum*. On December 16, 2010, the applicant held the public informational meeting at the Shelby High School in Shelby, Ohio. Black Fork is a corporation and a person within the definition of Section 4906.01(A), Revised Code. The project is a major utility facility as defined in Section 4906.01(B)(1), Revised Code.

On March 9, 2011, Black Fork filed a motion for waivers of certain filing requirements under Rule 4906-17, O.A.C., including a waiver of the requirement to file an application one year prior to commencement of construction under Section 4906.06(A)(6), Revised Code. On March 10, 2011, Black Fork filed its application for a certificate to construct the proposed wind-powered electric generating facility. Also on March 10, 2011, Black Fork filed a motion for a protective order for certain documents as part of its application. On March 22, 2011, the Ohio Farm Bureau Federation (OFBF) filed a motion to intervene. On April 28, 2011, Black Fork and the Board's Staff (Staff) filed a joint motion to extend the time of the completeness review period pursuant to Rule 4906-7-12, O.A.C. By entry of May 3, 2011, the OFBF's motion to intervene was granted; the applicant's requests for waiver of Section 4906.06(A)(6), Revised Code, and for waiver of Rules 4906-17-05(A)(4), 4906-17-05(B)(2)(h), and 4906-17-08(C)(2)(c), O.A.C., were granted; the applicant's request for a waiver of Rule 4906-17-04, O.A.C., was denied; the motion for protective order was granted; and the parties' joint motion for an extension of time was granted.

On June 10, 2011, the Board notified Black Fork that, pursuant to Rule 4906-1-14, O.A.C., the application had been found to be complete, whereupon copies of the application were served upon local government officials. By entry of June 22, 2011, a local public hearing was scheduled on September 15, 2011, at the Shelby Senior High School, in Shelby, Ohio and an adjudicatory hearing was scheduled for September 19, 2011, in Columbus, Ohio. In accordance with Rule 4906-5-08, O.A.C., public notice of the hearings

was published in the *Mansfield News-Journal* and in the *Bucyrus Telegraph Forum* on June 30, 2011. Proof of publication was filed with the Board on July 19, 2011, and September 12, 2011. In accordance with Rule 4906-5-08(C)(3), O.A.C., the applicant filed a sample letter sent to adjoining and affected property owners. By entry of August 30, 2011, the following jurisdictions and individuals were granted intervention in this case: the Board of Crawford County Commissioners (Crawford County), the Board of Richland County Commissioners, the Richland County Engineer, the Plymouth Township Trustees, the Sharon Township Trustees, the Sandusky Township Trustees, John Warrington, Loren Gledhill, Carol Gledhill, Mary Studer, Alan Price, Catherine Price, Thomas Karbula, Nick Rietschlin, Margaret Rietschlin, Bradley Bauer, Debra Bauer, Grover Reynolds, Brett Heffner, Gary Biglin, and Karel Davis. The motion to intervene filed by William Alt was denied. Staff conducted an investigation concerning the environmental and social impacts of the project and filed its report of investigation (Staff Report) on August 31, 2011.

The local public hearing was held on September 15, 2011 in Shelby, Ohio. At the hearing, 25 witnesses gave public testimony. The adjudicatory hearing commenced on September 19, 2011, and was recessed in order to allow the parties an opportunity to conduct settlement negotiations. On September 20, 2011, the parties requested that the evidentiary hearing be continued to October 11, 2011. By entry of September 21, 2011, the evidentiary hearing was continued to October 11, 2011. On September 28, 2011, as amended on October 5, 2011, Staff, the applicant, the OFBF, and Crawford County filed a Joint Stipulation and Recommendation (Stipulation) (Jt. Ex. 1). The evidentiary hearing reconvened and was held on October 11, 12, and 13, 2011. On October 21, 2011, Thomas Karbula filed a notice of withdrawal of his intervention.

## II. PROPOSED FACILITY

The applicant proposes to construct and operate the Black Fork Wind Farm project with up to 91 wind turbines and 200 megawatt (MW) of capacity near Shelby, Ohio. The project area covers 24,200 acres in Auburn, Jackson, Jefferson, and Vernon townships in Crawford County and Plymouth, Sandusky, and Sharon townships in Richland County. The facilities in the project area would be located on approximately 14,800 acres of leased private land, with 150 participating landowners. The applicant has designed the project to accommodate three possible turbine models depending on availability and cost at the time of ordering. The structures would consist of a three-bladed horizontal axis turbine and nacelle on top of an off-white monopole tubular steel tower. The turbine layout will not change as a result of the turbine model selected by the applicant; however, the number of turbines constructed will depend on the turbine model chosen for the project, as each model has a different generation capacity. The total height would vary by turbine model, ranging from 426 feet to 494 feet. The hub height for the turbines would be between 262 feet and 328 feet. The maximum rotor diameter would be 331 feet. A 34.5 kilovolt (kV) underground electric collection system would be installed to transfer the power from

each wind turbine location to a collection substation where it would be connected to American Electric Power's (AEP) 138 kV electric transmission line at the AEP Howard substation. The applicant intends on utilizing an open arm of AEP's existing Howard-Fostoria Central 138 kV towers to place a new 138 kV conductor that would transport energy generated from the project from the applicant's new substation to AEP's existing Howard Substation, then distribute it to the electric power grid. The applicant has proposed three permanent meteorological (met) towers, up to 80 meters in height, in the project area in order to monitor wind resources during the operation of the wind farm. Up to approximately 29.6 miles of new or improved access roads would be needed to support the facility. (Staff Ex. 1 at 6-7; Applicant Ex. 7 at 3.)

### 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, 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 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 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 LOCAL PUBLIC HEARING

At the local public hearing held on September 15, 2011, 13 witnesses testified in support of Black Fork's application and 12 witnesses testified against the application. Those testifying in favor of the application highlighted, among other things, the economic benefit that would be gained by the affected counties and schools, the fact that wind power is renewable and a clean source of power, that concerns about how this project will impact local roads and drainage have largely been resolved, and that this wind project will create jobs and not be expected to have a significant adverse impact on agricultural production in the area (September 15, 2011, Local Hearing Transcript at 21-23, 58, 68, 70-71, 75, 77, 80-82, 89, 98). Those testifying in opposition to the proposed project emphasized, among other things, issues pertaining to noise, shadow flicker, ice throw, the loss of an unobstructed landscape, as well as concerns regarding whether the project will negatively impact property values, public health, existing wildlife, existing telephone, television (TV), and internet reception, existing water wells and aquifers, and the environment in general. Opponent testimony also raised questions regarding whether the project would make use of turbines produced in foreign countries, whether wind turbines require back-up power, and whether government subsidies would function to obscure the project's true costs. Other opponent testimony raised claims that the applicant has engaged in harassing behavior towards local property owners, and questioned whether the applicant can be trusted and be properly bonded (*Id.* at 14-18, 20-21, 26, 28, 32-33, 56, 91).

#### V. SUMMARY OF THE STAFF REPORT

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

Staff states that the basis of need criterion specified under Section 4906.10(A)(1), Revised Code, applies only if the major utility facility under review is an electric transmission line or gas or natural gas transmission line. Because the major utility facility

proposed in this case is an electric generating facility, rather than a transmission line, Staff submits that the basis of need criterion specified under Section 4906.10(A)(1), Revised Code, is not applicable in this case (Staff Ex. 1 at 17).

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

Section 4906.10(A)(2), Revised Code, states that the Board may not grant a certificate for the construction, operation, and maintenance of a major utility facility, unless it finds and determines the nature of the facility's probable environmental impact. The Staff Report notes the following regarding the nature of the proposed facility's probable environmental impact:

- (1) The applicant proposes a 10-month construction timeframe for this project, starting in March 2012 and having the project online by December 2012.
- (2) The demographics of the project area are not expected to change dramatically in the next 20 years. Townships containing the project area have an average population density of 46.8 persons per square mile, compared to 249 persons per square mile in Richland County and 109 persons per square mile in Crawford County. Over the next 20 years, population in the Crawford County townships that contain the project area is expected to decline by an average of less than one percent; whereas the population in Richland County townships that contain the project area is expected to grow by an average of less than one percent.
- (3) A total of 232 residential structures are within 1,000 feet of project facilities. Sixteen residential structures are within 100 feet of project facilities, three of which are within 100 feet of project access roads, and 13 within 100 feet of collection lines.
- (4) Based on the largest turbine model, the statutory minimum setback requirements equate to 543 feet from the nonparticipating property line and 914 feet from residences on nonparticipating property. In establishing minimum property line setbacks of 563 feet and residence setbacks of 1,250 feet, the applicant has designed the wind farm to exceed all statutory requirements.

- (5) Approximately 82 percent (12,136 acres) of the project area consists of agricultural fields. Construction and operation of wind turbines, access roads, the switchyard, and the substation would permanently remove less than one percent of the agricultural land from its current use and will not interfere with surrounding agricultural uses.
- (6) Residential land use accounts for approximately seven percent of the project area, and 11 percent of project area consists of forests, wetlands, and old fields.
- (7) The applicant has reviewed both Crawford County's *2000 Comprehensive Plan* and the *2035 Comprehensive Plan for Richland County, Ohio*. Both counties plan to preserve agricultural land by concentrating high-density development in centralized areas with existing water and sewer services.
- (8) There are no state or national parks, forests, wildlife management areas or refuges, or national natural landmarks within a five-mile radius of the proposed facility. There are 14 recreational areas within five miles of the proposed facility and two of these are located within one mile of the facility.
- (9) There is one National Register of Historic Places (NRHP) historic district made up of 47 contributing resources and 15 NRHP-listed sites located within the study area. The historic district is located in the city of Shelby just east of the project. There are 11 individual properties determined eligible for listing in the NRHP.
- (10) Of the 872 archaeological sites recorded in the Ohio Archaeological Inventory (OAI) within the five-mile study area, only 15 are within or adjacent to the lands leased for the project. No known archaeological sites or cemeteries would be disturbed as a result of the project.
- (11) In addition to the literature and database review, the applicant is conducting a Phase I archaeological reconnaissance survey and an architectural survey to analyze potential impacts of previously undocumented cultural resources within five miles of the project area.
- (12) During construction, some state, local, and county roads would experience an increase in truck traffic due to delivery of turbine

components, concrete, gravel, and heavy equipment to each turbine site; however, the applicant does not expect construction and operation of the wind farm to noticeably increase local traffic or impact other local services in the project area.

- (13) Wind farm construction activity would impact local roads and bridges. The pavement condition of the state, county, and township roads along the regional delivery route could be impacted by construction and material delivery equipment. Truck loads heavier than the state legal limit may impact the existing state, county, and township bridges.
- (14) The large turning radius required for the transport of wind turbine generator components may cause the truck and/or trailer to travel outside the existing pavement at intersections. In areas where wide turns are required, temporary alterations to the intersections would be required, including installation of gravel fill outside of the pavement limits as a temporary surface for truck/trailer turns, installation of drainage pipes and temporary culverts as an alternate means of drainage, and relocation of utility poles, signs, and other installations.
- (15) The applicant expects that post-construction and operational impacts to roads and bridges would be limited, as the roads would be sufficient in handling any traffic from operational and maintenance requirements that the applicant may need to perform on the wind turbine generator components.
- (16) No wetlands, ponds, or lakes would be impacted by this project during construction or operation.
- (17) The applicant has indicated that 20 bodies of water (streams and ditches) would be crossed by electrical collection lines. The applicant has committed to utilizing horizontal directional drilling (HDD) under these bodies of water to install the electrical collection lines, resulting in no disturbance to the bed and banks.
- (18) The applicant requested information from the Ohio Department of Natural Resources (ODNR) and the United States (U.S.) Fish and Wildlife Service (USFWS) regarding state and federally listed threatened and endangered plant and animal species on June 23, 2009. Additionally, during field

assessments of the survey corridor and areas, Ecology and Environment, Inc. (E&E), a consulting firm retained by the applicant identified state and federal listed species, in addition to common wildlife species.

- (19) The applicant has performed a preliminary review of the geology of both Crawford and Richland counties. At this time, there does not appear to be any geological conditions present that would restrict or constrain the construction of the facility in the designated project area.
- (20) The project would not alter any groundwater patterns or cause any significant or lasting impacts to the groundwater resources. Groundwater wells used for domestic water supplies should not be affected in any way during and after the construction of the wind turbines in the project area.
- (21) No significant adverse impacts to public or private water supplies are anticipated due to construction or operation of the project.
- (22) The applicant has stated that turbines 25, 30, 42, 43, and 83 would be located within Zone A of the Federal Emergency Management Authority's 100-year floodplain, and would not increase the base flood elevation.
- (23) All of the turbines under consideration cut-out<sup>1</sup> at wind speeds of at least 25 meters per second (m/s), or 56 miles per hour (mph). All proposed turbines are certified by the International Electrotechnical Commission that they are designed to withstand high wind speeds of at least 37.5 m/s or 84 mph.
- (24) The applicant plans to install Vestas V100, GE 1.6-100, or Siemens SWT 2.3-101 wind turbines. The project would include a substation with a locked security fence, transformer fire suppression system, a lightning protection system, and would comply with NFPA 70E standards and OSHA requirements.
- (25) Noise impacts from construction activities would include the operation of various trucks and heavy equipment. Impacts

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<sup>1</sup> Cut-out wind speed refers to the wind speed at which a wind turbine ceases to produce energy.

from construction noise would be temporary and would be primarily restricted to daylight hours.

- (26) The applicant conducted baseline sound measurements at eight points within the project area in order to estimate the actual ambient noise levels. Recorded ambient noise levels ( $L_{EQ}$ )<sup>2</sup> across these eight points ranged from 49 to 58 decibels (dBA) during the day and from 38 to 52 dBA at night.
- (27) In order to limit potentially high levels of sound to residents and other individuals, a 1,250-foot minimum separation distance was utilized by the applicant when siting wind turbines.
- (28) The applicant states that the Vestas V100 turbine would not generate operational noise in excess of the ambient  $L_{EQ}$  plus five dBA at any nonparticipating receptor. The Siemens SWT 2.3-101 and the GE 1.6-100 turbines result in 20 and 52 dBA, respectively, nonparticipating receptors that would experience sound levels in excess of the ambient  $L_{EQ}$  plus five dBA.
- (29) The applicant's realistic shadow flicker simulations identified 17 nonparticipating receptors modeled to receive 30 hours or greater per year of shadow flicker. The receptors exposed to greater than 30 hours per year are not identical across turbine technologies/layouts.
- (30) TV stations most likely to produce off-air coverage to Crawford and Richland counties are those at a distance of 40 miles or less. Specific impacts to TV reception could include noise generation at low channels in the very-high frequency (VHF) range within one-half mile of turbines and reduced picture quality. Signal loss could occur after construction.
- (31) The applicant states that the facility will not impact radio, TV, and other communication services in the project area, and that the facility has been sited to avoid known tower structures in the project area.
- (32) The applicant identified 10 microwave paths intersecting the project area. Based upon the calculated worst-case scenario and subsequent internal analysis, no proposed turbine

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<sup>2</sup>  $L_{EQ}$  refers to the equivalent continuous sound level, or average sound level, over a specific period of time.

locations are expected to obstruct the identified microwave paths.

- (33) Wireless telephone network communications should be unaffected by wind turbine presence and operation.
- (34) On February 28, 2011, the applicant submitted the turbine coordinates to the National Telecommunications and Information Administration (NTIA) for review. No potential for radar interference was identified through this government agency review.
- (35) The proposed facility would be decommissioned once it is no longer operational. Decommissioning includes the dismantling and removal of all towers, turbine generators, transformers, and overhead cables; removal of underground electric cables; removal of foundations, buildings, and ancillary equipment; removal of surface road material; and restoration of the roads and turbine sites to the same physical condition that existed immediately prior to erection of the commercial wind-powered electric generating facility.
- (36) The applicant has not proposed the posting of a bond or equivalent financial security in an amount to ensure that funds are available to complete decommissioning. They have proposed posting a financial instrument within 180 days after the twentieth anniversary of the operations date, per landowner lease agreements. Staff believes this schedule is inadequate.

(Staff Ex. 1 at 18-26.)

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.)

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

Section 4906.10(A)(3), Revised Code, states that the Board may not grant a certificate for the construction, operation, and maintenance of a major utility facility unless

it finds and determines 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. The Staff Report includes the following information concerning the topic of whether the facility represents the minimum adverse environmental impact, considered in light of the criteria set out in Section 4906.10(A)(3), Revised Code:

(1) Site Selection

The applicant received a waiver from providing a comprehensive site selection study due to specific requirements of a wind-powered electric generation facility. The applicant provided a general discussion that addressed the factors deemed necessary for a viable wind project and illustrated the process by which the project was micro-sited within the project area. Abundant wind resources, agricultural land, and available transmission interconnections were discovered in Richland and Crawford counties. Additionally, Colorado-based energy developer, Gary Energetics, had already initiated preliminary technical and environmental studies and secured lease agreements from land owners for the construction of a wind farm in the area. Having identified this project site as promising for wind generation, the applicant acquired the Black Fork Wind Farm from Gary Energetics. The project area had, thus, already been established prior to acquisition of the project and no other regional sites were considered. Additional factors were considered in the siting of individual wind turbines, collection lines, and access roads within the project area. The applicant installed three additional meteorological towers in March, April, and May 2009 to measure wind resources in the project area. The wind data from these towers was used to predict electric production from potential turbine locations, using various turbine models. The applicant identified and implemented setback requirements for residences, property lines, public rights-of-way, and other features. Additionally, the applicant evaluated visual effects, ice throw, blade shear, shadow flicker, impacts to local fauna, flora, and wetlands, as well as effects on local roads, cultural resources, and agricultural lands. Access roads were sited to avoid or minimize crossing wetlands, streams, and forested areas, as well as to minimize loss of agricultural land. (Staff Ex. 2 at 27.)

(2) Collection Line System

The applicant is proposing to place all collection lines underground, minimizing impacts to waterways and aesthetic impacts. However, Staff does not find the collection system between turbines 30 and 44 running to turbine 57 to represent minimal adverse impacts. This portion of line runs nearly four miles between the nearest turbines, across agricultural fields. Staff recommends that the applicant design a system to incorporate these lines into the western portion of the project, bundled with other proposed collection corridors. (Staff Ex. 2 at 27.)

(3) Transmission Line

The applicant is proposing to utilize an existing 138 kV transmission line corridor for the primary transmission of electricity for this project. This line has existing tower structures with an open arm that could be utilized for this project. The applicant has entered into a Memorandum of Understanding with the owner and operator of the towers, AEP in this regard. According to Staff, utilizing an existing corridor, with existing infrastructure requiring minimal upgrades, represents minimal impact. (Staff Ex. 2 at 28.)

(4) Socioeconomic Impacts

(a) Land Use

The project is not expected to have any significant impact on existing land use within the project area. The facility would be located in an agricultural area and all agricultural activities could continue upon completion of facility construction. Impacts to farmland would be minimized by locating and designing facilities close to field borders and property lines. To the extent practicable, access roads and collection lines will follow field boundaries or other features that are barriers to farm implements in order to maintain machine operation efficiency. Additionally, the applicant states that farmers will be compensated for lost income due to conversion of farmland to project facilities. (Staff Ex. 2 at 28.)

Section 4906.20(B)(2), Revised Code, delineates how minimum setbacks for economically significant wind farms are to be determined. The Board incorporated these minimum setback requirements into Rule 4906-17-08(C)(1)(c), O.A.C., and indicated that such minimum setbacks would be applied to all wind projects under its jurisdiction. The minimum distance from a turbine's base to the property line of the wind farm facility must be at least 1.1 times the total height of the turbine as measured from its base to the tip of the blade at its highest point. Assuming a maximum turbine height of 494 feet as proposed in the application, this property line setback equates to a distance of 543 feet. The applicant has designed the turbine layout using parcel setbacks of 563 feet, which exceeds the statutory requirement. The minimum distance from a wind turbine to the exterior of the nearest habitable residential structure located on an adjacent property at the time of the certification application must be no less than 750 feet in horizontal distance from the tip of the turbine's blade at 90 degrees to the structure. Using maximum blade lengths of 164 feet as presented in the application, this maximum setback calculates to 914 feet. The applicant designed the turbine layout using a 1,250-foot setback from all residences, which exceeds the statutory requirement. According to Staff, the applicant designed the wind farm layout using greater setbacks than the minimum required by rule. The applicant's setbacks, along with other avoidance and mitigation measures, help to minimize project impacts. (Staff Ex. 2 at 28.)

(b) Recreational Areas

Two recreational use areas are within one mile of the project area: Woody Ridge Golf Course and Lowe-Volk Park. Woody Ridge Golf course is a public, 18-hole golf course that is located approximately 0.5 miles south of the northern project boundary. The nearest turbine to the course is 0.5 miles. At this distance, visual and noise impacts and shadow flicker are expected to be minimal. Lowe-Volk Park, located 0.7 miles south of the southwestern project boundary, is a 38-acre park with hiking trails, a picnic area, fishing, and a nature center. The closest wind turbines would be 1.5 miles from the park. While visible from some areas of the park, forested zones would act as natural screening, reducing the visual impact of the wind project. Noise impacts and shadow flicker are not expected to impact park visitors. (Staff Ex. 2 at 28.)

(c) Cultural and Archaeological Resources

The applicant has identified 27 historic structures, six archaeological sites, and six Ohio Genealogical Society-listed cemeteries within the project area for the facility. The applicant determined that the indirect visual impact from the project would not alter or affect the qualities or attributes that contribute to the historical or architectural significance of each identified landmark or NRHP-listed and NRHP-eligible structure. The applicant has noted that although mitigation options are limited due to the nature of the project, it has considered and incorporated mitigation options to reduce the visual impacts, including screening, uniform turbine design, and turbine color to blend with the sky at the horizon. (Staff Ex. 2 at 29.)

(d) Aesthetics

The applicant conducted a view-shed analysis, considering topography and project structure heights, to determine the visibility of the turbines within a five-mile radius of the project area. No vegetative or structural screening was accounted for in the study. Based on this analysis, the applicant estimates that one or more wind turbines would be visible from most vantage points within the study area. Wind turbines would also be visible from recreational use areas, cultural landmarks, and area residences. The project area is predominantly open land used for agriculture, making vegetative screening impractical. Furthermore, due to the height of the wind turbines, the applicant is required to implement a Federal Aviation Administration (FAA) lighting plan, in which red flashing lights are placed atop the nacelle of several turbines to assure safe flight navigation through the area. When complying with FAA lighting requirements, the applicant will install the minimum number of lights at the minimum intensity required by the FAA to diminish potential visual impacts. The project is expected to have a long-term aesthetic impact on residences near the facility. The facility would be visible from many of the

residences in the project area. Screening the turbines from view is not a practical mitigation measure as the project area is predominantly open land used for agriculture, and visual impacts would be unavoidable. (Staff Ex. 2 at 29.)

(e) Economics

Construction of the project would result in \$290 to \$400 million in spending. Between \$51 and \$69 million of total construction costs would be spent within the region on equipment, materials, labor, site preparation, and associated development costs. The facility would have a direct and indirect economic benefit to the region during construction and operation of the project. Total construction employment is estimated to be between 70 and 95 on-site workers, with an estimated construction payroll of \$5.7 to \$7.2 million during the one-year construction phase. Operations and maintenance (O&M) activities would require eight to 10 full-time employees with a total annual payroll between \$443,000 and \$575,000. Once fully constructed, this project could indirectly create between 37 and 51 jobs locally for operational and maintenance support. The local economy would benefit from direct and indirect purchases for locally-supplied goods and services. (Staff Ex. 2 at 29-30.)

(5) Ecological Impacts

(a) Surface Waters

The project area is located on the Lake Erie-Ohio River Basin Divide with 64 percent of the project area falling into the Lake Erie Watershed and 36 percent in the Ohio River Watershed. No major rivers are present in the project area; however, there are several perennial and intermediate streams draining to three watersheds. The project is not expected to impact any high-quality surface waters because the area is predominately being used to produce cultivated crops. However, the project could pose some impacts to surface waters, primarily associated with erosion and sedimentation that can impact downstream surface waters. The use of best management practices (BMPs) will minimize impacts associated with turbidity and downstream sedimentation. (Staff Ex. 2 at 30.)

Impacts to water bodies (streams and ditches) would be minimized by utilizing HDD for installing the underground electric collection system. Potential waterbody impacts associated with HDD would include disturbances around the bore pits and impacts from potential frac-outs.<sup>3</sup> 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. Staff recommends that the applicant submit a detailed frac-out contingency plan for Staff review and approval. (Staff Ex. 2 at 30.)

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<sup>3</sup> Frac-outs occur when drilling mud or other lubricants used during the drilling process escape through fractures in the underlying material.

(b) Vegetation

The applicant determined that approximately four acres of forested areas would be removed as a result of construction of the project, with the majority of the tree clearing occurring as a result of electric collection line installation. To avoid the cutting of trees within a high-quality woodlot, Staff would require the applicant to reroute the underground electric collection lines proposed between turbine sites 16 and 90, so as to avoid the woodlot between these two turbine sites, or utilize HDD or another avoidance measure acceptable to Staff. (Staff Ex. 2 at 30.)

Installing culverts or other crossing methods can damage stream banks, which can lead to more erosion. The applicant would utilize BMPs to minimize erosion during the placement of a permanent culvert to access turbine 37. After construction, the applicant would immediately reseed the bank to minimize erosion. Additionally, Staff, ODNR-Division of Wildlife (ODNR-DOW), and the USFWS recommend that the applicant adhere to seasonal cutting dates (September 30<sup>th</sup> to April 1<sup>st</sup>) for the clearing of trees that exhibit suitable Indiana bat summer habitat, such as roosting and maternity roost trees. (Staff Ex. 2 at 30-31.)

(c) Wildlife

Segments of this project contain habitats likely to support common reptilian, amphibian, avian, mammalian, and aquatic 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 habitat fragmentation; increased disturbance such as noise, lighting, and human activity; and temporary and permanent displacement. In addition, operational impacts are expected to include bird and bat mortalities through direct strikes. Furthermore, mortality to bats is likely to occur from barotraumas.<sup>4</sup> (Staff Ex. 2 at 31.)

The findings from the mist-netting survey report conducted by E&E suggested that there are breeding populations of five bat species within the project boundaries. The applicant used a minimum turbine setback of at least 100 meters (328 feet) from turbine centers, and approximately 50 meters (164 feet) from the blade tip, to forest edges to eliminate the potential for turbine blades to spin over forested areas where bat activity is most concentrated. The applicant further states that it does not anticipate that operation of the project would have a significant impact on bat populations in the project area. Staff states that, if it is determined that significant mortality, as defined in ODNR's approved, standardized protocol, has occurred, then a mitigation plan will be required to reduce the risk of mortality to birds and bats. (Staff Ex. 2 at 31.)

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<sup>4</sup> Barotraumas are any of several injuries arising from changes in pressure upon the body.

(d) Public and Private Water Supplies

The applicant has stated that no significant adverse impacts to public or private water supplies are anticipated due to construction of the project. Staff states that the applicant should conduct spill response training to construction and O&M Staff as needed to limit potential for impact. According to Staff, the applicant should also use prudent design including, but not limited to, the use of containment structures for oil and chemicals used during construction, operation, and/or maintenance. Staff also recommends compliance with any drinking water source protection plans developed by cities and villages within the project boundaries. Staff explains that compliance with these control mechanisms minimizes the potential impact to public and private water supplies. (Staff Ex. 2 at 31.)

(6) Geology and Seismology

(a) Geology

The applicant identified, in general, the geologic units within the project area for Richland and Crawford counties. Glacial drift covers the entire project area, although this material thins to the south, and overlies bedrock material consisting of shale and sandstone. According to Staff, the geotechnical exploration report shall include an evaluation of site specific conditions at each wind turbine location. This evaluation will include soil characteristics, static water level, rock quality description (RQD) percent recovery, 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 will be required to fill all boreholes, and borehole abandonment must be in accordance to state and local regulations. Staff also notes that the applicant shall also complete a full and detailed geotechnical report for each wind turbine location to confirm that there are no issues that would restrict or constrain the construction of the facility. The applicant has requested and received a waiver to allow for an extension in submitting site-specific information regarding wind turbine locations. Staff states that, although the applicant does not anticipate the need to blast at this project, should site-specific conditions warrant blasting, the applicant must submit a blasting plan to the Staff for review and acceptance at least 60 days in advance of any blasting. (Staff Ex. 2 at 32.)

(b) Soil Suitability

The applicant has identified 81 different soil types within the facility area. The site-specific engineering qualities and characteristics of the soils have yet to be determined. CTL Thompson, Inc., has provided a preliminary summary of the soil suitability within

the project area. The applicant does not anticipate any restrictions or hazards that would prevent construction of this project. (Staff Ex. 2 at 32.)

(7) Public Safety

(a) Public Services and Facilities

The project is not expected to cause any significant impacts on local services or facilities. During facility construction, local, state, and county roads might experience increased traffic; however, sufficient road capacity exists to absorb these increases. Demand for certain public services, like permit issuance and/or traffic guidance, might also increase temporarily. Project-related increases in local school enrollment are expected to be negligible, as the wind farm would employ only 8 to 10 permanent operators. Finally, required adherence to strict hazard and safety standards will mitigate the potential for fire or medical accidents during facility construction. (Staff Ex. 2 at 32.)

The applicant states that existing roads are adequate to handle increases in traffic during construction. Some traffic management may be necessary during construction and some modifications to existing roads may be needed to facilitate the delivery of turbine components. The applicant claims that road modifications will be authorized by the Richland County Engineer and Crawford County Engineer prior to construction and the applicant would obtain all necessary traffic permits from the Ohio Department of Transportation (ODOT), the Richland County Engineer, and the Crawford County Engineer. Because local emergency responders would likely be unfamiliar with addressing emergencies related to wind turbines, the applicant would meet with local emergency personnel to provide training and review site-specific risks prior to construction. (Staff Ex. 2 at 32.)

Staff explains that the electric collection system for the wind farm would be buried four feet underground. By law, anyone with underground facilities must be a member of a one-call system such as the Ohio Utilities Protection Service (OUPS). The OUPS establishes a communication link between the wind farm owner and individuals planning any digging activity. Staff notes that the owner of the buried facilities is required to mark underground lines before any digging or excavation work begins. (Staff Ex. 2 at 33.)

(b) Roads and Bridges

Wind farm construction equipment is expected to impact local roads. The pavement condition of state, local, and county thoroughfares along regional delivery routes could be damaged by construction and material delivery equipment, particularly dump truck and concrete truck traffic. The Staff Report notes that some modifications to local roads would be needed, including the expansion of intersection turns to accommodate specialized

turbine component delivery vehicles and conventional construction trucks. (Staff Ex. 2 at 33.)

All intersections in the area would need improvements to accommodate the oversized/overweight vehicles for turbine delivery from the manufacturer. These trucks require minimum clearances due to their size and turning radii. According to Staff, there does not appear to be any significant construction challenges such as steep grades, existing structures, or significant clearing with the proposed improvements. Clearing of vegetation, relocating traffic signs, grading of the terrain, extension and/or reinforcement of existing drainage pipes and/or culverts, reestablishment of a ditch line, if necessary, and construction of a suitable roadway surface to carry construction traffic must be addressed for each public roadway. Staff states that it is waiting to review the final route study to determine the roads used for delivery, road conditions, and obstructions. (Staff Ex. 2 at 33.)

(c) Construction Noise

Noise impacts from construction activities would include the operation of various trucks and heavy equipment. The applicant provided estimates of sound levels associated with operation of this construction equipment. Although the applicant intends to use BMPs for noise abatement during construction, many of the construction activities would generate significant noise levels. However, Staff believes that the adverse impact of construction 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. 2 at 33.)

(d) Operational Noise

The applicant retained Resource Systems Group, Inc. (RSG) to conduct noise studies of potential impacts from operation of the facility. Staff notes that some atmospheric conditions can further propagate or amplify sound, e.g., wind shear and temperature inversions. Wind shear can result in aerodynamic modulation, a rhythmic noise pattern, or pulsing, which occurs as each blade passes through areas of different wind speed/direction. (Staff Ex. 2 at 33.)

The noise impact of the wind farm also depends on the existing ambient noise level of the project area. An acoustic survey of the project area was conducted between June 3 and 11, 2009. Eight survey locations were acoustically sampled. Recorded ambient noise levels across the three points within the project area ranged from 49 to 58 dBA during the day and from 38 to 52 dBA at night. In order to limit sound levels to residents and other individuals, 1,250-foot buffer areas were utilized by the applicant when siting wind turbine generators. The applicant utilized an operational sound output of 48 dBA at all

nonparticipating receptors as a design goal. The Vestas V100 turbine meets this goal. The Vestas turbine would not result in operational increases to the ambient LEQ by greater than five dBA at any nonparticipating receptor. However, the Siemens SWT 2.3-101 and the GE 1.6-100 turbines do not meet this goal; they result in 20 and 52 nonparticipating receptors that, respectively, would exceed the applicable standard. (Staff Ex. 2 at 34.)

A 2001 New York State Department of Environmental Conservation (NYSDEC) document<sup>5</sup> states that "in non-industrial settings the noise level should probably not exceed ambient noise by more than 6 dBA at the receptor. An increase of 6 dBA may cause complaints. There may be occasions where an increase in noise levels of greater than 6 dBA might be acceptable." The NYSDEC recommends that, while it may be acceptable in some nonindustrial settings, an increase in ambient noise levels of greater than 6 dBA warrants further study of potential impacts. The Vestas V100 layout presents the minimum adverse acoustical impact to nonparticipating residents within one-mile of the project area. (Staff Ex. 2 at 34.)

(e) Shadow Flicker

The applicant used WindPRO to calculate how often and in which intervals a specific receptor could be affected by shadows generated by one or more wind turbines. The calculation of the potential shadow impact at a given shadow receptor, defined as a one-meter square area located one meter above ground level, is carried out by stimulating the environment near the wind turbines and shadow receptors. The position of the sun relative to the turbine rotor disk and the resulting shadow is calculated in time steps of one minute throughout a complete year. If the shadow of the rotor disk, which in the calculation is assumed solid, at any time casts a shadow on a receptor, then this step is registered as one minute of potential shadow impact. These calculations took into account the wind turbine location, elevation, and dimensions, and the receptor location and elevation. (Staff Ex. 2 at 35.)

A wind turbine's total height and rotor diameter were included in the WindPRO shadow flicker models. The taller the turbine, the more likely shadow flicker could have an effect on the local receptors, as the longer shadow has greater potential to reach beyond obstacles such as trees or hills. The larger the rotor diameter, the more area on the ground could be affected by shadow flicker. The Vestas V100 turbine creates the most shadow flicker impact to receptors. The Vestas turbine would expose 17 nonparticipating receptors to greater than 30 hours per year. The GE 1.6-100 turbine creates the least shadow flicker impact to receptors. The GE turbine would expose 13 nonparticipating receptors to greater than 30 hours per year. (Staff Ex. 2 at 35.)

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<sup>5</sup> NYSDEC. (February 2, 2001). *Assessing and Mitigating Noise Impacts* (p. 14). Albany, New York. Retrieved from the NYSDEC Web site: [http://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/noise2000.pdf](http://www.dec.ny.gov/docs/permits_ej_operations_pdf/noise2000.pdf)

Realistic conditions based on the turbine's operational time, operational direction, and sunshine probabilities were used to calculate a realistic amount of shadow flicker to be expected at each shadow receptor. The applicant simulated shadow flicker from the proposed turbines out to one kilometer (3,280 feet). Shadow flicker beyond one kilometer from a turbine in northern latitudes such as Ohio can occur seasonally at sunrise and sunset when lower sun elevation angles occur. Staff notes that no state or national standards exist for frequency or duration of shadow flicker from wind turbine projects. However, according to Staff, international studies and guidelines from Germany and Australia have suggested 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. This 30-hour standard is used in at least four other states, including Michigan, New York, Minnesota, and New Hampshire. Accordingly, the applicant and Staff utilized a threshold of 30 hours of shadow flicker per year for their analyses. (Staff Ex. 2 at 35.)

Additional screening factors such as trees and adjacent buildings were not considered within the realistic analysis. The same is true for receptors expected to receive greater than 30 hours of shadow flicker exposure. Staff points out that, if additional screening were modeled, this could result in lower shadow flicker exposure amounts and possibly reduce receptors above 30 hours per year to below that threshold. (Staff Ex. 2 at 35.)

Staff explains that shadow flicker frequency is related to the wind turbine's rotor blade speed and the number of blades on the rotor. Shadow flicker at certain frequencies may potentially affect persons with epilepsy. For about three percent of epileptics, exposure to flashing lights at certain intensities or to certain visual patterns may trigger seizures. This condition is known as photosensitive epilepsy. The frequency or speed of flashing light that is most likely to cause seizures varies from person to person. Flashing lights most likely to trigger seizures are between the frequency of five to 30 flashes per second or hertz (Hz).<sup>6</sup> Staff states that this project's maximum wind turbine rotor speed translates to a blade pass frequency of approximately 0.8 Hz and, therefore, would not be likely to trigger seizures. As modeled, the GE 1.6-100 turbine presents the minimum adverse shadow flicker impact to nonparticipating residents within one-mile of the project area. (Staff Ex. 2 at 35-36.)

(f) Communication Interference

Staff explains that off-air TV stations transmit broadcast signals from terrestrial facilities. The signals can be received directly by a TV receiver or house-mounted antenna. TV stations most likely to produce off-air coverage to Crawford and Richland counties are

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<sup>6</sup> Epilepsy Foundation of America: Retrieved Dec. 21, 2009, from Epilepsy Foundation Web site: <http://www.epilepsyfoundation.org/about/photosensitivity>

those at a distance of 40 miles or less. Specific impacts to TV reception could include noise generation at low channels in the VHF range within one-half mile of turbines, and reduced picture quality. Signal loss could occur after facility construction; therefore, the applicant proposes to mitigate accordingly. According to Staff, the transition to digital signal has reduced the likelihood of these effects occurring. (Staff Ex. 2 at 36.)

The applicant states that the facility will not impact radio, TV, and other communication services in the project area, and that the facility has been sited to avoid known tower structures in the project area. The applicant does not offer mitigation for these towers should an impact occur but proposes coordination and mitigation if any unanticipated impacts to TV or AM/FM radio reception were to occur. Mitigation could include offering TV hookups, where a cable system is available, or direct broadcast satellite TV reception systems to those affected. Staff believes a third party should complete a baseline TV reception study prior to facility construction and that any subsequent losses to reception during facility operation should be mitigated. (Staff Ex. 2 at 36-37.)

Staff states that microwave telecommunication systems are wireless point-to-point links that communicate between two antennas and require clear line-of-sight conditions between each antenna. The applicant identified 10 microwave paths intersecting the project area. Based upon the calculated worst-case scenario, no proposed turbine locations are expected to obstruct the identified microwave paths. The applicant concluded that no potential for microwave interference exists for the turbine locations considered within the application. Signal blockage caused by the wind turbines would not degrade the wireless telephone network because of the way these systems are designed to operate. If the signal cannot reach one cell, the network design allows it to be able to reach one or more other cells in the system. As such, Staff asserts that local obstacles are not normally an issue for wireless telephone systems. (Staff Ex. 2 at 36.)

(g) Local and Long Range Radar Interference

Wind turbines can interfere with civilian and military radar in some scenarios. The potential interference occurs when wind turbines reflect radar waves and cause ghosting (false returns) or shadowing (dead zones) on receiving monitors. Radar interference thus raises national security and safety concerns. In the majority of cases, the U.S. Department of Defense finds that the interference is either not present, is not deemed significant, or can be readily mitigated. Potential interference is highly site-specific and depends on local features, the type of radar, and wind farm characteristics. In some cases, radar interference can be corrected with software that deletes radar signals from stationary targets. On February 28, 2011, the applicant submitted the turbine coordinates to the National Telecommunications and Information Administration (NTIA) for review. No

potential for radar interference was identified through this government agency review. (Staff Ex. 2 at 36-37.)

(h) Blade Shear and Ice Throw

Staff explains that blade shear is the phenomenon where a rotating wind turbine blade, or segment, separates from the nacelle and is thrown a distance from the tower. The applicant asserts that past incidences of blade shear have generally been the results of human error. Staff has also found that past incidences can be attributed to design defects during manufacturing, poor maintenance, control system malfunction, or lightning strikes. Staff points out that the GE Energy (GE) 1.6-100, Siemens SWT 2.3-101, and Vestas V100 are certified to international engineering standards. The turbines have the following safety features to address blade shear: two independent braking systems, a pitch control system, a lightning protection system, and turbine shut down at excessive wind speeds and at excess blade vibration or stress, and the use of setbacks. The applicant has incorporated a wind turbine layout with a minimum residential setback distance of 1,250 feet, and a property setback of 563 feet. Staff believes that installing and utilizing these safety control mechanisms minimizes the potential for blade shear and associated impacts. (Staff Ex. 2 at 37.)

Similarly, Staff explains that ice throw is the phenomenon where accumulated ice on the wind turbine blades separates from the blade and falls or is thrown from the tower. The applicant indicates that all turbines would have the following safety features to address ice throw: two independent braking systems, ice detection software, automatic turbine shut down at excessive vibration, and automatic turbine shut down at excessive wind speeds. The applicant has incorporated a wind turbine layout with a minimum residential setback distance of 1,250 feet. (Staff Ex. 2 at 37.)

GE, the manufacturer of one of the turbine models under consideration by the applicant, has developed specific safety standards for ice throw and blade shear for all of their turbine models and has recommended the use of an ice detector and other measures if people or objects (e.g., occupied structures, roads) are within a distance of 150 percent of the sum of the hub height and rotor diameter. Staff offers that it has been determined that turbines of the similar dimensions as the GE models would need to be located a distance of approximately 301.5 meters (989 feet) from any structure or roads. (Staff Ex. 2 at 37.)

Staff's evaluation of the turbine locations, utilizing this study, determined that turbines 44 and 51 would need to be relocated or resized to meet this minimum setback distance. Staff recommends that public access be restricted with hazards of ice conditions, and that the applicant would install ice detection software for the site and an ice detector/sensor alarm that triggers an automatic shutdown. Staff also recommends that the applicant relocate and/or resize proposed turbines 44 and 51 to conform to a setback

distance of 150 percent of the sum of the hub height and rotor diameter from roads and structures. Staff believes that adhering to these safety measures would sufficiently address the issue of ice throw. (Staff Ex. 2 at 37-38.)

(i) High Winds

Staff explains that the turbines are designed to withstand high wind speeds and have the following safety features in case of high winds: two independent braking systems and automatic turbine shut down at excessive wind speeds. The GE 1.6-100 and Siemens SWT 2.3-101 turbines are certified by the International Electrotechnical Commission (IEC) as Class II wind turbines, and have been designed to withstand wind speeds of 42.5 m/s or 95 mph. The Vestas V100 wind turbine has been certified by the IEC as a Class S wind turbine, and has been designed to withstand 42.5 m/s or 95 mph wind speeds. The applicant has incorporated a wind turbine layout with a minimum residential setback distance of 1,250 feet, and a property setback of 563 feet. Staff submits that installing and utilizing these safety control mechanisms minimizes the potential impacts from high winds. (Staff Ex. 2 at 38.)

(j) Pipeline Protection

Staff has found that there are at least five natural gas pipelines within the project area. In order to avoid a serious safety risk and significant environmental impact, Staff recommends that all turbines be located a minimum setback distance from natural gas pipelines of at least 1.1 times the total height of the turbine structure as measured from its tower's base, excluding the subsurface foundation, to the tip of its highest blade. This setback would ensure that, if a turbine were to fall with a blade fully extended, the tower and/or blade would not land on the pipeline right-of-way and affect the operation of the pipeline. Based on the tallest turbine model proposed for this project, with a tip height of 150.6 meters, the recommended pipeline setback would equate to 166 meters (544 feet). The applicant has indicated that proposed turbines 8, 15, 18, 33, and 37 are located approximately 166 meters or less from the pipelines. Staff recommends that these turbines be resized and/or relocated in order to meet the recommended setback from the pipelines. (Staff Ex. 2 at 38.)

(k) Decommissioning

According to Staff, MW-scale wind turbine generators typically have a life expectancy of 20 to 25 years. The current trend has been to upgrade older turbines with more efficient ones, while retaining existing tower structures. If not upgraded, turbines may go into a period of nonoperation, where no expectation of reoperation exists, and they are generally decommissioned at such time. Staff states that, 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 commercial facility, with topsoil re-spread over the disturbed areas at a depth similar to that in existence prior to the disturbance. (Staff Ex. 2 at 38.)

Staff notes that the applicant has not proposed the posting of a bond or equivalent financial security in an amount to ensure that funds are available to complete decommissioning. According to Staff, the applicant has proposed posting a financial instrument within 180 days after the twentieth anniversary of the operations date, per landowner lease agreements. Staff believes this schedule is inadequate due to the time that would elapse before assurance funds would be posted. Staff also believes that the application lacks specificity in a schedule and method by which requisite decommissioning funds are to be posted. Staff states that a project-specific decommissioning plan, which provides a proposed timetable and methodology for posting adequate decommissioning funds, should be required at least 30 days prior to a preconstruction conference for Staff review and acceptance. (Staff Ex. 2 at 39.)

(I) Staff Recommendation Regarding Whether the Record Supports a Board Determination That the Proposed Facility Complies with the Requirements of Section 4906.10(A)(3), Revised Code

Overall, the Staff concludes that the project, as proposed, would result in both temporary and permanent impacts to the project area and surrounding areas. Staff has recommended several conditions in order to address and minimize these impacts. With the recommended conditions, Staff concludes that minimum adverse environmental impacts would be realized. (Staff Ex. 2 at 39.)

The Staff recommends that the Board find that the proposed facility represents the minimum adverse environmental impact, and, therefore, complies with the requirements specified in Section 4906.10(A)(3), Revised Code, provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of the Staff Report. (Staff Ex. 2 at 39.)

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

Pursuant to Section 4906.10(A)(4), Revised Code, the Board must determine that the proposed electric generation 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. In its report, Staff evaluates the impact of interconnecting the project into the existing regional electric transmission system and would be located in the AEP zone of the PJM Interconnection (PJM) control area. According to Staff, the applicant plans to use a 34.5 kV collection system to gather the energy into a single project substation owned by

the applicant. Staff explains that the energy from the applicant's substation and AEP's operated switchyard would step up the voltage to 138 kV. The power would be delivered to the AEP Howard Substation via a 138 kV AEP transmission line for distribution to the local and regional electric grid. (Staff Ex. 2 at 40.)

Staff notes that PJM is a regional transmission organization (RTO) that coordinates the movement of wholesale electric in all or parts of 13 states including Ohio and the District of Columbia. In addition, PJM administers the interconnection process of new generation to the system. Generators wanting to interconnect to the bulk electric transmission system located in the PJM control area are required to submit an interconnection application for review of potential impacts to the system and system upgrades necessary to maintain system reliability. (Staff Ex. 2 at 40.)

Staff points out that PJM has completed the Feasibility Study and System Impact Study for the project. The studies summarized the impacts of adding 200 MW from 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 applicant has not yet signed a construction service agreement for the upgrades identified in the studies or an interconnection service agreement with PJM for the proposed facility. According to Staff, these agreements will need to be completed before the applicant will be allowed to interconnect the proposed facility to the bulk electric transmission system. (Staff Ex. 2 at 40.)

The Staff Report indicates that the applicant provided PJM's generation interconnection analysis to Staff for review of the impacts of connecting the Black Fork Wind Farm to the regional transmission grid. These studies were performed by PJM and comply with North American Electric Reliability Corporation standards for adding new facilities. The studies indicated the project would cause no new problems on the local AEP system or the PJM regional system, the project is consistent with plans for expansion of the regional power system, and serves the interests of electric system economy and reliability. (Staff Ex. 2 at 43.)

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. Therefore, the facility complies with the requirements specified in Section 4906.10(A)(4), Revised Code, provided that any certificate issued by the Board for the proposed facility include the conditions specified in the Staff Report. (Staff Ex. 2 at 43.)

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

Pursuant to Section 4906.10(A)(5), Revised Code, the facility must comply with specific sections of the Ohio Revised Code regarding air and water pollution control, withdrawal of waters of the state, solid and hazardous wastes, and air navigation.

(1) Air

Staff explains that the applicant provided ambient air quality data for the proposed project area. There are no air monitoring stations in Richland and Crawford counties; however, air monitoring stations in Knox, Franklin, Lorain, and Cuyahoga counties monitor for the pollutants. The Ohio Environmental Protection Agency (OEPA) lists Richland and Crawford counties as in attainment with the National Ambient Air Quality Standards (NAAQS). According to the Staff Report, the operation of the wind farm would not produce air pollution, therefore, 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. Staff notes that a permit-to-install or permit-to-install and operate may be required for access roads. The applicant plans on using an existing concrete batch plant, which already has an approved permit and would not require a new permit for a concrete batch plant. The applicant may also need to obtain the OEPA *General Permit for Unpaved Roadways and Parking Areas, with a maximum of 120,000 Vehicle Miles Traveled per Year* (General Permit 5.1). In addition, Staff states that the applicant plans to minimize emissions during site clearing and construction by using BMPs such as using water to wet down open soil surfaces to prevent dust emission. (Staff Ex. 2 at 44.)

Staff believes that construction and operation of the facility, as described by the applicant and in accordance with the conditions included in the Staff Report, would be in compliance with air emission regulations in Chapter 3704, Revised Code, and the rules and laws adopted under that chapter. (Staff Ex. 2 at 44.)

(2) Water

The Staff Report notes that neither construction nor operation of the proposed facility would require the use of significant amounts of water, so requirements under Sections 1501.33 and 1501.34, Revised Code, are not applicable to this project. Approximately 13 acres of impervious surface would be generated as a result of the facility, including turbine foundations and the substation. 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, or flow patterns of storm water run-off are anticipated. Therefore, Staff believes that construction and

operation of this facility would comply with requirements of Chapter 6111, Revised Code, and the rules and laws adopted under that chapter. (Staff Ex. 2 at 44-45.)

(3) Solid Waste

The applicant has indicated that it is not aware of preconstruction solid waste except for limited amounts of woody vegetation debris in the project area. Waste generated during construction would be approximately 3,500 pounds per turbine and would consist of packing materials (i.e., plastic, wood, cardboard, and metal packing) construction scrap, and general refuse. Solid waste generated during operation would not be a significant amount. The solid waste would be disposed of through the local solid waste disposal services. Staff believes that the applicant's solid waste disposal plans would comply with solid waste disposal requirements in Chapter 3734, Revised Code, and the rules and laws adopted under that chapter. (Staff Ex. 2 at 45.)

(4) Aviation

Three general aviation public use airports exist within 10 miles of the proposed facility: Shelby Community Airport (FAA Identifier 12G), which is located two miles east of the proposed facility and is a privately-owned airport that maintains two active runways; Galion Municipal Airport (FAA Identifier KGQQ), which is located 3.6 miles south-southeast of the proposed facility and is a publicly-owned, airport that maintains one active runway; and Port Bucyrus-Crawford County Airport (FAA Identifier 17G), which is located 8.6 miles south of the project boundary and is a publicly-owned airport that maintains two active runways. (Staff Ex. 2 at 45-46.)

Any structure that the FAA deems to be an impact to air travel and/or would have an adverse physical or electromagnetic interference effect upon navigable airspace or air navigation facilities will receive a presumed hazard designation. According to Staff, as of the date the Staff Report was prepared, all turbine locations had been submitted for FAA review, and had received determinations of no hazard to aviation. The applicant also filed with the ODOT-Office of Aviation (ODOT-OA) for review, and received notices of clearance for this case. (Staff Ex. 2 at 46.)

In accordance with Section 4561.32, Revised Code, Staff contacted ODOT-OA during review of this application in order to coordinate review of potential impacts the facility might have on local airports. When creating the recommended conditions for the certificate, Staff implemented FAA and/or ODOT-OA recommendations where deemed justified through conversation and exchange with subject matter experts. (Staff Ex. 2 at 46.)

(5) Staff Recommendation Regarding Whether the Record Supports a Board Determination That the Proposed Facility Complies with the Requirements of Section 4906.10(A)(5), Revised Code

Staff states that the proposed facility complies with the requirements specified in Section 4906.10(A)(5), Revised Code, provided that any certificate issued by the Board for the certification of the proposed facility include the conditions specified in the Staff Report. (Staff Ex. 2 at 46.)

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

Pursuant to Section 4906.10(A)(6), Revised Code, the Board must determine that the facility will serve the public interest, convenience, and necessity.

(1) Public Notice

In the Staff Report it is noted that, pursuant to Rule 4906-5-06, O.A.C., a copy of the accepted, complete application in this proceeding was duly served upon the Richland and Crawford county commissioners, the Crawford County Economic Development Partnership, the Richland County Regional Planning Commission, and the Auburn, Jackson, Jefferson, Sandusky, Vernon, Richland, Plymouth, Sandusky, and Sharon township trustees on June 17, 2011. On the same date a copy of the application was sent as well to the Bucyrus, Galion, Mansfield-Richland County (Main and Ontario branches), and Marvin Memorial (Shelby, Ohio) libraries. (Staff Ex. 2 at 47.)

Furthermore, Staff notes that, in accordance with Rule 4906-7-07(C), O.A.C., the ALJ scheduled a local public hearing for September 15, 2011, in Shelby, Ohio, and an adjudicatory hearing for September 19, 2011. The applicant was also directed to issue public notice of these hearings in newspapers of general circulation in the project area. The public notice for these hearings appeared in the *Mansfield News Journal* and the *Bucyrus Telegraph Forum* on June 30, 2011. Staff verifies that the applicant submitted proof of publication on July 19, 2011. (Staff Ex. 2 at 47.)

(2) Public Interaction

Staff states that, pursuant to Rule 4906-17-08(E)(1), O.A.C., an application for a certificate of environmental compatibility and public need must include a description of the applicant's public interaction programs. According to the applicant, company representatives have been meeting with local government officials, as well as participating landowners, since 2010, and the applicant has maintained an official community presence

since that time and plans to open a local office near the project area to help further communications with project stakeholders during facility construction. (Staff Ex. 2 at 47.)

Staff also summarizes that the applicant hosted a public informational meeting on December 16, 2010, to provide project information to the general public and to answer any questions about the project, and notice of the meeting appeared in the *Mansfield News Journal* and the *Bucyrus Telegraph Forum* on December 7, 2010. According to the applicant, almost 200 people attended the public meeting and many of the questions at the public meeting covered topics discussed in the certificate application, including construction impact on traffic, groundwater, birds and bats, as well as public services, tax subsidies, and renewable energy resources. (Staff Ex. 2 at 47-48.)

(3) Public Comment

According to the Staff Report, to date, 20 entities have requested leave for intervention in this proceeding and many of them have expressed opposition to the project as proposed by the applicant. The most common complaint is the proximity of turbines and associated facilities to residential structures. Other complaints include risks to health and safety, noise, damage to the environment, and the use of public funds. Blade shear, ice throw, shadow flicker, and interference with communication equipment are also mentioned. At the time of the Staff Report, Staff notes that there was one letter of support filed in this proceeding. (Staff Ex. 2 at 48.)

(4) Liability Insurance

Staff notes that, pursuant to Rule 4906-17-08(E)(2), O.A.C., a certificate application must also include a description of any insurance programs for providing liability compensation for damages to the public during construction or operation of the proposed facility. According to the applicant, liability insurance will be maintained at all times during the development, construction, and operation of the proposed project. The company will maintain in force a general liability policy with \$1 million per occurrence and \$2 million in the aggregate during the construction phase. Excess liability coverage will insure against claims of \$4 million per occurrence and in the aggregate. Following construction, the applicant will maintain in force general and excess liability coverage with a combined limit of no less than \$10 million per occurrence and in the aggregate. Participating landowners are listed as additional insured on the policies and can obtain a copy of the certificate by submitting a written request to the applicant. As indicated above, the applicant began meeting with participating landowners in 2010. Since then, the applicant has entered into voluntary lease agreements with about 150 landowners for the use of more than 14,800 acres of land in Richland and Crawford counties. According to the applicant, approximately 99 percent of the land leased for this project would be returned to its current use once construction is complete. In addition, all participating

landowners, at the election of the applicant, would receive annual payments during facility operations. According to the applicant, total lease payments are expected to fall between about \$120,000 to \$250,000 annually. The lease agreements are valid for 30 years from the date of commercial operation with an option to extend for two additional 10-year terms. According to the applicant, a memorandum of each executed lease agreement has been filed with the County Recorder's Offices of Richland and Crawford counties. (Staff Ex. 2 at 48.)

(5) Alternative Energy Portfolio Standard

Staff notes that Amended Substitute Senate Bill Number 221 (SB 221) of the 127th General Assembly requires that, beginning in 2009, a portion of the electricity sold to retail customers in Ohio come from renewable energy resources. Renewable energy resources include wind generation technologies. At least 50 percent of the renewable energy requirement must be satisfied with resources located within the state of Ohio. Electric distribution utilities or electric services companies may, at their discretion, comply with all or part of the renewable energy requirements through an electricity supply contract or through the use of renewable energy credits (RECs). (Staff Ex. 2 at 48-49.)

According to the applicant, the proposed facility would provide up to 200 MW of renewable energy to the bulk transmission system operated by PJM. Staff notes that the applicant intends to fill the need for a more diverse national energy portfolio and to enable Ohio electric utilities and services companies to meet the renewable energy requirements of SB 221. Staff believes the proposed facility would likely qualify as an in-state renewable energy resource under SB 221 and could play an important role in helping Ohio electric utilities meet their requirements under the law. However, to date, the applicant has not signed a power purchase agreement for the electricity or any RECs that may be generated by the proposed facility. (Staff Ex. 2 at 48-49.)

(6) Economics

Staff provides that, in accordance with Rule 4906-17-08(C)(2), O.A.C., an application for an environmental certificate must also describe the economic impact of the proposed facility. Staff explains that economic impacts from this type of project are usually divided into three categories: direct, indirect, and induced. Direct impacts are the result of spending that otherwise would not have occurred in the area and typically include spending on construction materials, supplies, and labor. Indirect impacts refer to the economic output of businesses that provide goods and services essential to the project. These are sometimes called supplier impacts. Induced impacts are those that result from increased household spending on such items as food and housing. (Staff Ex. 2 at 49.)

Staff estimates that the total economic impact of construction activities ranges from \$85.39 million to \$116.68 million, depending on the type and size of the turbine selected by the applicant. Construction activities could add anywhere between 660 and 896 new direct, indirect, and induced jobs with estimated earnings between \$31.64 million and \$42.95 million. Estimates for total economic activity during facility operations range from \$10.23 million to \$13.98 million. Operation-type activities could add anywhere between 56 and 77 additional direct, indirect, and induced jobs with estimated earnings between \$2.60 million and \$3.53 million each year. (Staff Ex. 2 at 49.)

(7) State and Local Taxes

Staff notes that, on June 4, 2010, the Ohio General Assembly passed Senate Bill 232, which adjusted the tax structure for advanced energy projects in Ohio. Subject to certain requirements, qualifying wind energy projects under construction before January 1, 2012, and placed into service before January 1, 2013, are exempt from real and personal property taxation. Owners and lessees of such projects are instead required to make annual payments in lieu of taxes (PILOT) of up to \$9,000 per MW of installed capacity. This provision was later extended to qualifying wind energy projects under construction before January 1, 2015, and placed into service before January 1, 2016.<sup>7</sup> The applicant anticipates paying the maximum annual PILOT of \$9,000 per installed MW, about \$1.8 million per year for the proposed project. (Staff Ex. 2 at 50.)

(8) Federal Tax

Staff further offers that the American Recovery and Reinvestment Act of 2009 (ARRA) directed about \$16.8 billion towards the U.S. energy industry with the intent of increasing investment in energy efficiency, renewable energy technology, and grid modernization. Among other things, the ARRA provided until January 1, 2013, for wind facilities, and until January 1, 2014, for other qualified renewable facilities, a renewable energy production credit, i.e., Section 45 credit. It also provided until January 1, 2012, a renewable energy investment credit, i.e., Section 48 credit, and established a cash grant, i.e., Section 1603 grant, for any person who placed a qualified energy facility into service before the end of 2010. In December of 2010, the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 extended the availability of Section 1603 cash grants by extending the in-service requirement to December 31, 2011.<sup>8</sup> According to Staff, now any qualifying wind facility placed into service during 2011 or after 2011, if construction of the facility began during 2009, 2010, or 2011, and the facility is placed into service before January 1, 2013, is eligible for the Section 1603 cash grant. The project

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<sup>7</sup> House Bill 153, 129th General Assembly (Enacted June 29, 2011).

<sup>8</sup> Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010. Title VII, Subtitle A, Section 707 of P.L. 11-312 (Enacted December 17, 2010).

schedule submitted by the applicant reveals that construction is intended to begin in 2012. Thus, Staff notes that the applicant is not eligible for the 1603 cash grant, but is eligible for renewable energy production credits. However, according to the applicant, this project could be constructed with or without ARRA grants. (Staff Ex. 2 at 50.)

(9) Staff Recommendation Regarding Whether the Record Supports a Board Determination That the Proposed Facility Complies with the Requirements of Section 4906.10(A)(6), Revised Code

Staff recommends that the Board find that the proposed facility would serve the public interest, convenience, and necessity, and, therefore, complies with the requirements specified in Section 4906.10(A)(6), Revised Code, provided that any certificate issued by the Board for the proposed facility include the conditions specified in the Staff Report. (Staff Ex. 2 at 50.)

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

Staff notes that, pursuant to Section 4906.10(A)(7), Revised Code, the Board must determine the facility's impact on the viability as agricultural land of any land in an existing agricultural district within the site of the proposed facility. Within the project area, a total of 196 acres of temporary impacts and 60.9 acres of permanent impacts would occur to agricultural land. The impacts to the agricultural district land would not affect the agricultural district designation of any of the properties within the project area. (Staff Ex. 2 at 51.)

Staff explains that construction-related activities, such as vehicle traffic and materials storage, could lead to temporary reductions in farm productivity caused by direct crop damage, soil compaction, broken drainage tiles, and reduction of space available for planting. However, the applicant has discussed and approved the siting of facility components with landowners in order to minimize impacts, and also intends to take steps in order to address such potential impacts to farmland, including: repairing all drainage tiles damaged during construction, removing construction debris, compensating farmers for lost crops, and restoring temporarily impacted land to its original use. After construction, only the agricultural land associated with turbines and access roads would be removed from farm production. (Staff Ex. 2 at 51.)

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, therefore, the application complies with the requirements specified in Section 4906.10(A)(7), Revised Code, provided that any certificate issued by the Board for the

proposed facility include the conditions specified in the section of the Staff Report. (Staff Ex. 2 at 51.)

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

As Staff notes, pursuant to Section 4906.10(A)(8), Revised Code, the proposed facility must incorporate maximum feasible water conservation practices, considering available technology and the nature and economics of the various alternatives. Staff states that it has reviewed the information pertaining to the consumptive use of water for the construction and operation of the proposed facility. According to Staff, wind-powered electric generating facilities do not utilize water in the process of electricity production; therefore, water consumption associated with the proposed electric generation equipment does not warrant specific conservation efforts. A potable water supply would be provided to the O&M building for project and personal needs of the several employees using the facility, but Staff believes the amount of water consumed for these purposes would be minimal. (Staff Ex. 2 at 52.)

Based on its review, the Staff recommends that the Board find that the proposed facility would incorporate maximum feasible water conservation practices, and, therefore, it complies with the requirements specified in Section 4906.10(A)(8), Revised Code. (Staff Ex. 2 at 52.)

VI. STIPULATION'S RECOMMENDED CONDITIONS ON THE CERTIFICATE

As stated previously, the parties to the Stipulation recommend that the Board issue the certificate requested by applicant, subject to certain conditions, as spelled out in the Stipulation. The following is a summary of the conditions agreed to by the stipulating parties and is not intended to replace or supersede the Stipulation. The stipulating parties agree that:

- (1) The facility shall be installed at applicant's proposed site presented in the March 10, 2011, application, as modified or clarified by applicant's supplemental filings and by recommendations in the Staff Report. Acceptable turbine types shall be limited to the Vestas V100, the General Electric 1.6-100, or the Siemens SWT 2.3-101 models.
- (2) The applicant shall utilize the equipment and construction practices described in the application, as modified or clarified in supplemental filings, replies to data requests, and recommendations in the Staff Report, as modified by the Stipulation.

- (3) The applicant shall implement the mitigation measures described in the application, as modified and/or clarified in supplemental filings, replies to data requests and recommendations in the Staff Report, as modified by the Stipulation.
- (4) Any new transmission line proposed for construction in order to deliver electricity from the wind farm shall be presented to the Board in a filing submitted by the transmission line owner, and must be approved by the Board prior to construction of the wind farm.
- (5) Any wind turbine site proposed by applicant, but not built as part of this project, shall be available for Staff review in a future case.
- (6) If, once construction has commenced at a turbine location, it is determined that the location is not a viable turbine site, that site shall, within 30 days, be restored to its original condition.
- (7) Prior to the commencement of construction, the applicant shall obtain and comply with all applicable permits and authorizations required under federal and state law. Within seven days of issuance, copies of permits and authorizations, including all supporting documentation, shall be provided to Staff.
- (8) The applicant shall conduct a preconstruction conference prior to the start of any construction activities. The preconstruction conference shall be attended by Staff, applicant, and representatives from the prime contractor and all subcontractors for the project. The conference shall include a presentation of the measures to be taken by the applicant and contractors to ensure compliance with all conditions of the certificate, and discussion of the procedures for on-site investigations by Staff during construction. Prior to the conference, the applicant shall provide a proposed conference agenda for Staff review.
- (9) At least 60 days before the preconstruction conference, the applicant shall file a letter with the Board that identifies which of the three acceptable turbine models has been selected.

- (10) At least 30 days before the preconstruction conference, the applicant shall submit to Staff, for review and approval, the final turbine engineering drawings for each turbine location.
- (11) The applicant shall not commence construction of the facility until it has a signed interconnection service agreement with PJM. The agreement shall address 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 to Staff either a copy of the signed agreement or a letter stating that the agreement has been signed.
- (12) The applicant shall redesign the collection line system connecting turbines 30 and 44 to turbine 57. Better utilization of disturbed areas of this project shall be among the factors considered by the applicant in such redesign. Any redesign will be subject to Staff approval prior to commencement of construction.
- (13) At least 30 days prior to the preconstruction conference and subject to Staff review and approval, the applicant shall have in place a complaint resolution procedure in order to address potential operational concerns experienced by the public. Any complaint submitted must be immediately forwarded to Staff. The applicant shall, to the satisfaction of Staff, investigate and resolve any issues complained of.
- (14) The applicant shall develop a screening plan for the site containing the substation, laydown yard, O&M building, and temporary concrete batch plant. Such screening plan shall reduce visual and noise effects to surrounding residences and shall be subject to Staff review and approval prior to construction.
- (15) The applicant shall prepare, subject to review and approval by Staff prior to construction, a Phase I cultural resources survey program for archaeological work at turbine locations, access roads, construction staging areas, and collection lines. If the resulting survey work discloses a finding of cultural or archaeological significance, or a site that could be eligible for inclusion on the NRHP, then the applicant shall submit for Staff's acceptance, an amendment, modification, or mitigation

plan. Any such mitigation effort shall be developed in coordination with the Ohio Historic Preservation Office (OHPO) and be submitted to Staff for review and acceptance.

- (16) Prior to the commencement of construction, the applicant shall conduct an architectural survey of the project area. The applicant shall submit to Staff a work program that outlines areas to be studied. If the architectural survey discloses a find of cultural or architectural significance, or a structure that could be eligible for inclusion on the NPHP, then the applicant shall submit for Staff's review and acceptance, an amendment, modification, or mitigation plan. Any such mitigation effort shall be developed in coordination with the OHPO and be submitted to Staff for review and acceptance.
- (17) No commercial signage or advertisements shall be located on any turbine, tower, or related infrastructure. If vandalism occurs, the applicant 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 project. Any abatement other than the restoration to prevandalism condition is subject to approval by Staff.
- (18) The applicant 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 decompacted, if necessary, to restore them to original conditions, unless otherwise agreed to by the landowner.
- (19) The applicant shall provide a copy of the Floodplain Development Permit to Staff within seven days of issuance or receipt by the applicant, whichever is sooner, for turbines 25, 30, 42, 43, and 83.

- (20) At least seven days before the preconstruction conference, the applicant shall submit to Staff for review and acceptance a copy of all national pollutant discharge elimination system (NPDES) permits including its approved: stormwater pollution prevention plans (SWPPP); spill prevention, containment, and countermeasure (SPCC) procedures; and erosion and sediment control plan. Any soil issues must be addressed through proper design and adherence to the OEPA's BMPs related to erosion and sedimentation control.
- (21) The applicant shall employ 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 permits and SWPPP obtained for the project.
- (22) The applicant 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 NPDES permits obtained for the project and the approved SWPPP created for this project.
- (23) 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.
- (24) The applicant shall assure compliance with fugitive dust rules by the use of water spray or other appropriate dust suppressant measures whenever necessary.
- (25) The applicant shall have a Staff-approved 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 plan, including vegetation clearing, areas such as a designated wetland or stream, and threatened or endangered species or their identified habitat.

- (26) The applicant shall not work Class 3 primary headwater streams, exceptional warm water habitat, coldwater habitat, warm water habitat, or streams supporting threatened or endangered species during fish spawning restricted periods (April 15 to June 30), unless a waiver is sought from and issued by the ODNR and approved by Staff releasing the applicant from a portion of or the entire restriction period.
- (27) Sixty days prior to the first turbine becoming commercially operational, the applicant shall submit a post-construction avian and bat monitoring plan for ODNR-DOW and Staff review and approval. This plan will be based on the turbine layout in conjunction with Condition 1 of the Staff Report. The applicant's plan shall be consistent with the ODNR-approved protocol, as outlined 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 amended. If it is determined that significant mortality, as defined in ODNR's Protocol has occurred to birds and/or bats, then ODNR-DOW and Staff will require the applicant to develop a mitigation plan. If required, the applicant shall submit a mitigation plan to ODNR-DOW and Staff for review and approval within 30 days from the date reflected on ODNR's letterhead, in coordination with Staff, in which ODNR-DOW is requiring the applicant to mitigate for significant mortality to birds and/or bats. Mitigation initiation time frames shall be outlined in the ODNR-DOW approval letter and the Board concurrence letter.
- (28) The applicant shall contact an ODNR approved herpetologist prior to any construction in Auburn Township (Crawford County) and Plymouth Township (Richland County) to assess potential habitat for the Eastern Mississauga rattlesnake. If it is determined that potential habitat exists, Staff, ODNR-DOW, and the USFWS shall be contacted to discuss avoidance and minimization measures.
- (29) The applicant shall adhere to seasonal cutting dates of September 30 through April 1 for removal of suitable Indiana bat habitat trees, if avoidance measures cannot be achieved.
- (30) The applicant shall reroute the underground electric collection lines proposed between turbine sites 16 and 90, to avoid

impacts to the woodlot located between these turbine sites or utilize HDD or another avoidance measure acceptable to Staff.

- (31) Staff, ODNR-DOW, and the USFWS shall be immediately contacted if state or federal threatened or endangered species are encountered during construction 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 the applicant, Staff, and ODNR-DOW in coordination with the USFWS. If threatened or endangered species are encountered during operation activities, then the above referenced notification is required within 24 hours.
- (32) The 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.
- (33) The applicant shall complete a full detailed geotechnical exploration and evaluation at each turbine site to confirm that there are no issues to preclude development of the wind farm. The geotechnical exploration and evaluation shall include borings at each turbine location. The applicant must fill all boreholes, and borehole abandonment must comply with state and local regulations. The applicant shall provide copies of all geotechnical boring logs to Staff and to the ODNR Division of Geological Survey prior to construction.
- (34) Should site-specific conditions warrant blasting, the applicant shall submit a blasting plan, at least 60 days prior to blasting, to Staff for review and acceptance.
- (35) Prior to the use of explosives, the applicant or explosive contractor shall obtain any required license or temporary permit from the local county authority or county sheriff. The applicant shall submit a copy of the license or permit to Staff within seven days of obtaining it from the local authority.
- (36) The blasting contractor shall utilize two blasting seismographs that measure ground vibration and air blast for each blast. One seismograph should be placed at the nearest dwelling and the other placed at the discretion of the blasting contractor.

- (37) At least 30 days prior to the initiation of blasting operations, the applicant must notify, in writing, all residents or owners of dwellings or other structures within 1,000 feet of the blasting site. The applicant or explosive contractor shall offer and conduct a preblast survey of each dwelling or structure within 1,000 feet of each blasting site, unless waived by the resident or property owner. The survey must be completed and submitted to Staff at least 10 days before blasting begins.
- (38) The applicant shall comply with the turbine manufacturer's most current safety manual and shall maintain a copy of that safety manual in the operation and maintenance O&M building of the facility.
- (39) The applicant shall become a member of the OUPS prior to commencement of operation of the facility. Notification of membership shall be provided to Staff and the applicable board of county commissioners.
- (40) The applicant shall adhere to a setback distance of at least one and one-tenth times the total height of the turbine structure, as measured from the tower's base, excluding the subsurface foundation, to the tip of its highest blade, from any natural gas pipeline in the ground at the time of commencement of facility construction specifically to conform to this setback distance. At least 30 days before the preconstruction conference, the applicant shall submit to Staff, for review and acceptance, any required studies that changed due to resized and/or relocated turbines.
- (41) At least 30 days before the preconstruction conference, the applicant shall submit to Staff, for review, a proposed emergency and safety plan to be used during construction, to be 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 and that addresses training of emergency responders, which shall be developed in consultation with the first responders having jurisdiction over the area.

- (42) The applicant shall restrict public access to the site at all times with appropriately placed warning signs or other necessary measures.
- (43) The applicant shall instruct workers on the potential hazards of ice conditions on wind turbines.
- (44) The applicant shall install and utilize an ice warning system that may include an ice detector installed on the roof of the nacelle, ice detection software for the wind turbine controller, automatic vibration monitoring software, or an ice sensor alarm that triggers an automatic shutdown.
- (45) The applicant shall relocate and/or resize turbines 44 and 51 to conform to a setback distance that equals 150 percent of the sum of the hub height and rotor diameter from occupied structures, including businesses. At least 30 days before the preconstruction conference, applicant shall submit to Staff, for review and acceptance, any required studies that changed due to resized turbines and/or relocated turbines.
- (46) The applicant shall provide the final delivery route plan and the results of any traffic studies to Staff, the Crawford County Engineer, and the Richland County Engineer 30 days prior to the preconstruction conference. The applicant shall complete a study on the final equipment delivery route to determine what improvements will be needed in order to transport equipment to the wind turbine construction sites. The applicant shall make all improvements outlined in the final delivery route plan prior to equipment and wind turbine delivery. The applicant may deviate from the final delivery route as necessary, provided the deviation from the final delivery route is submitted to and approved by Staff, ODOT, the applicable board of county commissioners, and the applicable county engineer prior to the use of the alternative delivery route.
- (47) The applicant shall repair damage to government-maintained, public roads and bridges caused by construction activity. Any damaged public roads and bridges shall be repaired promptly to their preconstruction state by the applicant under the guidance of the appropriate regulatory agency. Any temporary improvements shall be removed unless the applicable board of county commissioners request that they remain. The applicant

shall provide financial assurance to the counties that it will restore the public roads it uses to their preconstruction condition. The applicant shall also enter into a road use agreement with the applicable boards of county commissioners prior to construction and subject to Staff review.

- (48) The facility owner and/or operator repair damage to government-maintained, public roads and bridges caused by decommissioning activity. Any damaged public roads and bridges shall be repaired promptly to their predecommissioning state by the facility owner and/or operator under the guidance of the appropriate regulatory agency having jurisdictional authority. 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 shall be defined in a road use agreement between the applicant and the applicable board of county commissioners prior to construction.
- (49) The applicant 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 Crawford County Engineer, the Richland County Engineer, ODOT, local law enforcement, and health and safety officials.
- (50) At least 30 days prior to the preconstruction conference and upon selection of the turbine model to be developed, the applicant shall provide the following to Staff for review and approval to the extent such information exists and is released to the applicant by the turbine manufacturer:
  - (a) The low frequency sound values [sound pressure level (SPL), dB, Hz] expected to be produced.
  - (b) The A-weighted and C-weighted sound power levels, as well as one-third octave band measurements for the 20 and 25 Hz bands, and a separate evaluation of the data for low frequency and impulsivity in accordance with the

methodologies set forth within IEC 61400-11, Annex A, A.3, *Low Frequency Noise*, and A.4, *Impulsivity*.

- (c) The tonal audibility.
- (51) If preconstruction acoustic modeling indicates a facility contribution that exceeds the project ambient nighttime  $L_{EQ}$  (43 dBA) plus 5 dBA at the exterior of any nonparticipating residences within one mile of the facility boundary, the facility shall be subject to further study of the potential impact and possible mitigation prior to construction.
- (52) After commencement of commercial operation, the applicant shall conduct further review of the impact and possible mitigation of all project noise complaints. Mitigation shall be required if the project contribution at the exterior of any nonparticipating residence within one mile of the project boundary exceeds the greater of: (a) the project ambient nighttime  $L_{EQ}$  (43 dBA) plus 5 dBA; (b) the validly measured ambient  $L_{EQ}$  plus five dBA at the location of the complaint and during the same time of day or night as that identified in the complaint; or (c) other means of mitigation approved by Staff in coordination with the affected receptors.
- (53) 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 pm. 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 required, 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 of 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.
- (54) At least 30 days prior to the preconstruction conference, the applicant shall complete a realistic shadow flicker analysis for

all inhabited nonparticipating receptors already modeled to be in excess of 30 hours per year of shadow flicker and provide the results to Staff for review and acceptance. This analysis shall incorporate reductions for trees, vegetation, buildings, obstructions, turbine line of sight, operational hours, wind direction, and sunshine probabilities.

- (55) Any turbine forecasted prior to construction to create in excess of 30 hours per year of shadow flicker at a nonparticipating habitable 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 approved by Staff in consultation with the affected receptor(s).
- (56) Prior to construction, the applicant 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 acceptance prior to construction.
- (57) The applicant 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 degradation of TV and cell phone reception due to the facility operation, the applicant shall provide, at its own expense, cable or direct broadcast satellite TV service and/or cell phone service.
- (58) At least 30 days prior to the preconstruction conference, the applicant shall complete a baseline TV reception and signal strength study and provide the results to Staff for review and acceptance.
- (59) All licensed microwave paths and communication systems, as identified within the application and all other communications studies performed for this project, shall be subject to avoidance or mitigation. The applicant shall complete avoidance or mitigation measures prior to construction for impacts that can be predicted in sufficient detail to implement appropriate and

reasonable avoidance and mitigation measures. After construction, the applicant shall mitigate all observed impacts of the project to microwave paths and systems existing or planned prior to construction within seven days or within a longer time period approved by Staff.

- (60) The applicant 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 or any federal agency.
- (61) If any turbine is determined to cause next-generation radar (NEXRAD) interference, the applicant shall propose a technical or administrative work plan, protecting proprietary interests in wind speed data, which 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, the applicant shall exert reasonable effort to restore connectivity in a timely manner.
- (62) The applicant must meet all recommended and prescribed FAA and 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.
- (63) Thirty days prior to any construction, the applicant shall notify, in writing, any owner of an airport located within two miles of the project 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.
- (64) During construction and after operation, all applicable structures be lit in accordance with FAA circular 7017460-1 K Change 2, *Obstruction Marking and Lighting*; Chapters 4, 12, and 13 (Turbines); or as otherwise prescribed by the FAA.
- (65) The applicant shall file all 7460-2 forms with the FAA at least 42 days prior to construction and provide such to Staff for review and acceptance.

- (66) The applicant, facility owner, and/or facility operator shall comply with the following conditions regarding decommissioning:
- (a) Provide the final decommissioning plan to Staff and the county engineers for review, and for Staff approval, at least 30 days prior to the preconstruction conference.
  - (b) Provide a revised decommissioning plan to Staff and the county engineers every five years from the commencement of construction. The revised plan shall reflect advancements in engineering techniques and reclamation equipment and standards. The revised plan shall be applied to each five-year decommissioning cost estimate. The plan and any revisions shall be reviewed and approved by Staff prior to 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 and transportation of the wind turbines off site. Decommissioning shall also include the removal of buildings, cabling, electrical components, access roads, and any other associated facilities, unless otherwise mutually agreed upon by the facility owner and/or facility operator and the landowner. All physical material pertaining to the facility and associated equipment shall be

removed to a depth of at least 36 inches beneath the soil surface and transported off site. The disturbed area shall be restored to the same physical condition that existed before erection of the facility. Damaged field tile systems shall be repaired to the satisfaction of the property owner.

- (e) During decommissioning, all recyclable materials, salvaged and nonsalvaged, shall be recycled to the furthest extent practicable. All other nonrecyclable waste materials shall be disposed of in accordance with state and federal law.
- (f) Improvements made to the electrical infrastructure shall not be removed if doing so would disrupt the electric grid, unless otherwise approved by the applicable RTO and interconnection utility.
- (g) Subject to approval by Staff, and seven days prior to the preconstruction conference, an independent, registered professional engineer, licensed to practice engineering in the state of Ohio, shall be retained by the applicant, facility owner, and/or facility operator to estimate the total cost of decommissioning in current dollars, without regard to salvage value of the equipment.
- (h) Post and maintain for decommissioning, at its election, funds, a surety bond, or similar financial assurance in an amount equal to the per-turbine decommissioning costs multiplied by the sum of the number of turbines constructed and under construction. The funds, surety bond, or financial assurance need not be posted separately for each turbine so long as the total amount reflects the aggregate of the decommissioning costs for all turbines constructed or under construction. Prior to commencement of construction, the applicant, the facility owner, and/or the facility operator shall provide a statement from the holder of the financial assurance demonstrating that adequate funds have been posted for the scheduled

construction. Once the financial assurance is provided, the applicant, facility owner and/or facility operator shall maintain such funds or assurance 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.

- (i) 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 and/or facility operator has demonstrated, and the Staff concurs, that decommissioning has been satisfactorily completed, or upon written approval of the Board, in order to implement the decommissioning plan.
- (67) At least 30 days before the preconstruction conference, the applicant shall submit to Staff, for review and acceptance, the following documents:
- (a) One set of detailed engineering drawings of the final project 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 project design is in compliance with the terms of the certificate.
  - (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.
  - (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 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.
- (68) If any changes are made to the project layout after the submission of final engineering drawings, all changes shall be provided to Staff in hard copy and as geographically referenced electronic data. All changes outside the environmental survey areas and any changes within environmentally-sensitive areas will be subject to Staff review and approval prior to construction.
- (69) Within 60 days after the commencement of commercial operation, the applicant shall submit to 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.
- (70) 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.
- (71) The applicant shall provide to Staff the following information 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.
- (72) The applicant shall comply with Crawford County's rules regarding the issuance of permit for movement of overweight

and over-dimension vehicles as existing or as may be modified or amended in the future.

- (73) The applicant shall enter into with the appropriate county officials a written road use agreement supported by adequate financial assurances. The agreement must be subject to approval by the board of county commissioners. Further, unless otherwise approved by the board of county commissioners, the agreement must not supplant the county's rules regarding issuance of permits for movement of overweight and over dimension vehicles which are independently enforceable by the county.
- (74) Where improvements or repairs are necessary, the applicant shall, during the construction, maintenance and decommissioning phases, comply with all applicable statutory requirements for the engineering, design, construction, improvement or repair of roads and bridges necessitated by the project. All work must be completed in accordance with the applicable statutory requirements and, as required, under the jurisdiction of the local governmental authorities. This would include compliance with all applicable statutes addressing engineering and design, construction, competitive bid requirements and prevailing wage and other statutory requirements, as well as a signed road use agreement between the applicant and the board of county commissioners. All work must be completed at the applicant's cost, including engineering review and design work, preparation of plans and specifications, preparation of construction bid documents and contracts, preparation of bond and surety obligations, supervision and inspection costs, attorneys fees, and other professional costs.
- (75) The applicant shall finalize, and provide to the county engineer, the final delivery route plan and the required traffic and roadway improvement structures at least 60 days prior to the preconstruction conference.
- (76) The applicant shall repair, at its cost, or reimburse the county or township, for any damage to public roadways, bridges and other transportation improvements to restore the improvement to at least original condition and to reimburse the county or

township for any other costs incurred. Any repair work must comply with all applicable statutory requirements.

- (77) The applicant shall coordinate with, and obtain all approvals from, local authorities for all temporary or permanent road closures, road restoration or road improvements necessary for construction and operation.
- (78) The applicant shall post a bond, escrow, or other financial assurance acceptable to the county and sufficient to provide adequate assurance for any damage to the public roadways and to cover all costs incurred during the construction, maintenance, and decommissioning phases.
- (79) The applicant shall avoid, where possible, or minimize any damage to field tile drainage systems and make proper repair for any damage to field tile in coordination with the county soil and water conservation district or other local authority.
- (80) Without compliance with all safety requirements and subject to the county approval, the collection systems should not be permitted in the public right-of-way.

(Jt. Ex. 1 at 2-17; Jt. Ex. 2 at 1-3)

## VII. EVIDENCE PRESENTED BY NONSIGNATORY PARTIES TO THE STIPULATION

At the evidentiary hearing held on October 11 through 13, 2011, the intervenors who were not parties to the Stipulation engaged in cross examination of company witnesses, Staff's witness, and presented their own testimony which, purported to challenge and/or provide clarification regarding the testimony presented by the applicant's witnesses, and the information contained in the applicant's hearing exhibits, the Staff Report, and/or the Stipulation. These challenges and/or clarifications addressed, primarily, 14 areas. The Board will consider each of the 14 areas individually below.

### A. Impact on Property Values

#### (1) Hearing Testimony

Several of the intervenors raised a concern about the potential for the project to negatively impact the property values of the community (Rietschlin Ex. 1, at 2; Warrington Ex. 1 at 1-2, 5). Further, Mr. Warrington requested that the Board require that the applicant provide a property value guaranty that would protect homeowners from the

possibility of a reduction in property values as a result of the project (Warrington Ex. 1 at 7).

Two Black Fork witnesses, David Stoner and Scott Hawken, were questioned on this topic. Mr. Stoner is a Senior Vice President for Element Power, LLC, and, as such, is responsible for the development of the company's renewable energy projects in the eastern U.S, including Ohio, and the project in this case. He has 25 years experience in the electric utility and independent power business, primarily in project development, including specifically overseeing the development of wind energy projects for the last eight years (Applicant Ex. 7 at 1). Mr. Hawken is the Senior Project Manager for the Black Fork wind project. His duties, in this capacity, include initial site selection, land acquisition, land negotiation, land owner relations, public relations, outreach to local officials, preliminary design and layout, environmental impacts and assessment, environmental permitting, local zoning, and land use permitting. (Applicant Ex. 9 at 1.)

Mr. Stoner testified that, based on his experience, the proposed Black Fork facility would likely have no negative impact on property values in the area (Tr. at 36). He notes that, while clearly the project would positively and directly impact both Black Fork and those who have signed leases, the broader community could also expect to gain in terms of tax revenue and economic development (Tr. at 44). Black Fork witness Hawken testified that the project is projected to create, during construction, an estimated full-time equivalent of 70 to 95 workers and an estimated eight to 10 full-time jobs during the project's operational stage. In some cases, these jobs will require specialized skills or training. (Tr. at 192.)

While questioned on the issue of a property value guaranty, both company witnesses Stoner and Hawken indicated that Black Fork does not support a property value guaranty. Mr. Stoner explained that no property value guaranty is necessary for two reasons: first, there will likely be no negative impact from the project on property values in the area; and second, providing a property value guaranty is both unworkable and not a standard practice within the wind power industry specifically, or within other business sectors more generally. (Tr. at 40, 133.)

## (2) Board Analysis and Conclusion

Upon review of the record, the Board finds that there is no substantive evidence that supports a finding that the proposed Black Fork facility would have a negative impact on property values in the area or that a property value guaranty would be appropriate. The Board believes that the numerous conditions set forth in the Stipulation provide the framework necessary to mitigate the effect of the project on the community. Therefore, the Board finds that the request for a property guaranty should be denied.

B. Use and Storage of Hazardous Materials, and Impact on Water Wells and Groundwater Resources

(1) Hearing Testimony

Black Fork witness Courtney Dohoney is a senior environmental scientist, whose duties include overseeing preconstruction biological surveys, reviewing and preparing comprehensive environmental reports, and obtaining applicable environmental permits. For the project, she oversaw the design, management, and implementation of studies and field activities (regarding wetlands, vegetation, wildlife, and threatened and endangered species, land use, soils, and water impacts) conducted to determine the impact of the proposed project on the environment. (Applicant Ex. 13 at 1-2.)

Ms. Dohoney stated that the project is not expected to impact potable water wells in the project area (Applicant Ex. 13 at 5). On cross examination, Ms. Dohoney testified that, during the construction phase of the project, certain types of hazardous materials, such as diesel fuel in storage tanks and small quantities of hydraulic fluids would be on site, because they are necessary during construction to maintain and operate the construction equipment (Tr. at 269). She also indicated that small quantities of some hydraulic fluids used for turbine maintenance are typically stored on site during the operational phase. She noted that, frequently, it is the turbine manufacturer, rather than the operator of the turbine, who is responsible for turbine maintenance. Thus, whether, after construction is complete, there will be hydraulic fluids on site used for turbine maintenance largely depends on which turbine manufacturer is selected. (Tr. at 269.) She submitted that, overall, given the localized impact that is expected to result from excavation and dewatering of turbine foundations along with the implementation of a SPCC plan designed to minimize the potential release of hazardous substances, impacts to potable water in the project area are not expected to occur (Applicant Ex. 13 at 5).

(2) Board Analysis and Conclusion

The Board notes that, as provided for in the Stipulation, the applicant will implement an SPCC plan designed to minimize the potential release of hazardous substances. Moreover, under the Stipulation, the applicant is, among other things, also mandated to: have, on site, an environmental specialist familiar with water quality protection issues, during construction activities that may affect sensitive areas; 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; promptly remove and properly dispose of all construction debris and all contaminated soil, in accordance with OEPA regulations; obtain and comply with all permits and authorizations required under federal and state law; recycle to the furthest extent practicable, during decommissioning, all recyclable materials, whether salvaged or

nonsalvaged; and have in place a complaint resolution procedure for addressing any potential operational concerns experienced by the public. The Board finds that all of these conditions, considered together, support a finding that the applicant has taken sound and sufficient measures to minimize the environmental impact posed by its use of hazardous materials in constructing and operating its proposed wind farm.

C. Impact on Bird Breeding

(1) Hearing Testimony

Brett Heffner, testifying on his own behalf, explained his concerns that the project would negatively impact birds and bird habitat in the project area. He claimed that the area is not considered suitable nesting habitat and that birds and that bats would be killed as a result of the wind turbines. (Heffner Ex. 1 at 2, 5.) Karel Davis also expressed concerns that the project would affect bald eagles that lived in the project area (Davis Ex. 1 at 2).

The Staff Report indicated that breeding bird surveys were not conducted because agricultural land is not considered to be suitable nesting habit for most species of birds (Staff Ex. 2 at 22). On cross examination, Black Fork witness Mahoney was questioned whether this premise for avoiding bird breeding surveys was faulty if, in fact, much of the nonleased land within the project area is not primarily agricultural and, as such, might be suitable nesting habitat for most species of birds. Ms. Mahoney indicated that the conclusion that the project area is primarily agricultural is based on the location of the turbines. The relevant concern, according to Ms. Mahoney, is whether, by clearing the land for turbines, the applicant would be destroying habitat where birds breed. The witness admitted that there is certainly breeding habitat within the project area, but the project is not impacting those areas, and, in building the turbines, Black Fork will not disturb breeding habitat land. (Tr. at 283-286.) Ms. Mahoney also noted that, subsequent to doing surveys in the project area, Black Fork was notified by ODNR-DOW, as well as USFWS, that two active bald eagle nests exist within three miles of the project boundary. As a result, Black Fork has engaged in nest monitoring according to protocols established in consultation with ODNR-DOW and USFWS. (Tr. at 272- 273.)

(2) Board Analysis and Conclusion

Upon review, the Board finds that the evidence of record supports the conclusion that the project will not cause a destruction of the habitat where birds breed. Furthermore, the record reflects that Black Fork took the appropriate actions to protect the bald eagles that are known to exist in proximity to its project. We also note that Conditions 25 through 28 reasonably address issues related to threatened and endangered species and that Condition 29 will ensure that the applicant adheres to seasonal cutting dates for

removal of suitable Indiana bat habitat trees. Accordingly, we find that the concern about the impact of the project on bird breeding has been sufficiently addressed by the applicant and the stipulating parties.

D. Shadow Flicker

(1) Hearing Testimony

Jay Haley, P.E., was the Black Fork witness who presented testimony describing shadow flicker studies that he and his firm, EAPC Wind Energy (EAPC) performed on behalf of the applicant, as well as testimony regarding shadow flicker issues generally (Applicant Ex. 15 at 2-4). Mr. Haley indicated that his firm performed visual simulations and calculations to determine the shadow flicker impacts on 604 residences near the wind farm for three different wind turbine models. More detailed studies were conducted on the 17 nonparticipating residences<sup>9</sup> that were predicted, based on the initial study results, to experience more than 30 hours of flicker per year if the Vestas V100 turbine was used for the project. On cross examination, Mr. Haley testified that this further analysis shows that only 11 of the 17 nonparticipating residences are predicted to exceed the 30 hours per year threshold. The reduction in anticipated impact is due to the use during the detailed analysis of more accurate directional flicker sensors, rather than the omnidirectional sensors used in the preliminary study. Steps that could be taken to reduce the impact of shadow flicker at these 11 residences would include planting trees or adding window blinds, or, as a last resort, curtailing the wind turbine causing the flicker during the times of flicker. (Applicant Ex. 15 at 2-3.) Mr. Haley conceded that, in order to be an effective method of mitigation, a tree would have to be at least as high as the window or other location where the shadow flicker was occurring (Tr. at 364).

(2) Board Analysis and Conclusion

Upon review, the Board believes that, as reflected in the record, the preliminary and follow-up shadow flicker studies conducted by the applicant appear to have been appropriately conducted. Moreover, we find that the Stipulation appears to adequately address the shadow flicker issues identified in those studies. Therefore, we conclude that, while the applicant should continue to work with Staff and any affected receptor to mitigate any potential affects of shadow flicker, at this time, there are no further conditions, other than those espoused in the Stipulation that should be imposed.

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<sup>9</sup> In this context, a nonparticipating residence refers to a residence owned by someone who does not have a lease allowing Black Fork to make use of the resident's property in developing the proposed facility.

E. Ice Throw

(1) Hearing Testimony

Karel Davis, testifying on her own behalf, expressed her view that wind energy is not appropriate for Ohio, based on her conclusion that Ohio is too heavily populated to allow for setback distances that she considers to be necessary (Davis Ex. 1 at 5).

Black Fork witness Haley cited an ice throw risk assessment that was performed for the Colebrook South Phase of a wind project in Litchfield County, Connecticut, which estimated the probability of being struck by a one kilogram ice fragment at a distance of 280 meters from a GE 1.6 – 100 wind turbine to be less than once in 100,000 years. Mr. Haley believed that the probability of an ice throw for the project would be even lower than for the Colebrook South project based on the fact that Black Fork experiences approximately four fewer icing days per year. (Tr. at 373-374, 387-388.) Mr. Haley testified that, despite his extensive research and experience in the area, he is not personally aware, nor does he know anyone else that is aware of even a single incidence of an ice strike ever happening (Tr. at 380). Mr. Haley explained that most ice throw risk assessment studies do not factor into consideration the manner in which ice detection software functions to even further reduce the risk of an ice throw by shutting down a turbine during an icing event (Tr. at 396-397). Mr. Haley testified that there are at least 30 different types of ice detection sensors; however, he acknowledges that no ice detection sensor is 100 percent reliable. According to Mr. Haley, this is why wind farm owners commonly deploy more than one type of sensor on their turbines (Tr. 366). He stated that, because multiple types of ice detection sensors are installed on every turbine, the likelihood is extremely remote that every sensor on every turbine will fail to detect icing conditions (Tr. at 211, 400-402).

Condition 45 of the Stipulation provides that Black Fork should relocate or resize two particular turbines to conform to a setback distance that equals 150 percent of the sum of the hub height and rotor diameter from occupied structures, including businesses. Mr. Haley, along with Mr. Hawken, testified that Condition 45 of the Stipulation is acceptable to applicant. However, Mr. Haley further explained that the setback formula presented in Condition 45 of the Stipulation, should not be applied on a general basis, considering the extremely low risk for this project of ice throw to individuals, buildings, and automobiles. (Tr. at 377.) In Mr. Haley's opinion, it is the right decision to apply the setback formula referenced in Condition 45 of the Stipulation to occupied residences, but, given the fact that ice detection systems will be used on all turbines, he does not believe it should apply globally across the entire project as regards roads (Tr. at 398). The Stipulation establishes ice throw setback requirements that apply to occupied structures, rather than to individuals who may be moving about upon a given property. The probability that an individual would be hit by an ice throw is practically nil, according to

Black Fork witness Hawken, who joined another Black Fork witness in testifying that they are unaware of anyone ever being injured by an ice throw. (Tr. at 186, 380.)

(2) Board Analysis and Conclusion

Upon consideration of the record, the Board finds that the risk of ice throw has been adequately addressed by the Stipulation. Specifically, it appears that safeguards, both automatic and manual will be sufficient to protect those residing in the surrounding area from the risk of ice throw. Additionally, Conditions 43 and 44 that will provide instruction to workers on the potential hazards of ice conditions on wind turbines and the use of an ice warning system will provide additional safeguards. Therefore, the Board finds that, with the conditions of the Stipulation, at this time, the risk of ice throw has been adequately addressed.

F. Setback

(1) Hearing Testimony

There were questions raised by the nonstipulating parties regarding the minimum setbacks that will be utilized for the project. Some of these parties believe that, while the setback distances are based from inhabited residences, they should be based on the distance to property lines and public roadways because property owners are able to use any part of their property or develop their property. (Tr. at 750, 803.) Gary Biglin testified regarding his concern that the setbacks followed for this application were insufficient for residences and roadways (Biglin Ex. 1 at 2).

As noted by Staff witness Pawley, the setbacks recommended in the Staff Report follow the Ohio Revised Code; therefore, if the Stipulation is adopted, the project must comply with those setback standards (Tr. at 670-672.) Dale Arnold, Director of Energy, Utility, and Local Government Policy for the OFBF, stated that the setback requirements for this project are the minimum setbacks created by state law and House Bill 562, as well as the rules promulgated by the Board, given the current technology. He also explained that the OFBF believes that those particular rules and regulations set very good minimum standards and that the current setback requirements create no disincentive to property owners because they do not preclude a property owner who signs a lease from subdividing his property or selling it to new landowners. (Tr. at 300-302, 326.) Black Fork witness Hawken also testified that, while there was some concern raised regarding how close the collection lines will be to property lines, all collection lines will be underground and this should alleviate those concerns (Tr. at 160).

(2) Board Analysis and Conclusion

Upon consideration of the record, the Board finds that the conditions addressing the requisite setback in the Stipulation comply with the mandates established in the statute and promulgated in the rules. Furthermore, we find that no evidence has been presented on the record which would lead us to believe that additional measures should be taken, at this time. We believe that the stipulated conditions appropriately address the concerns raised by the nonstipulating parties. Therefore, we find that no additional measures should be imposed through this order regarding setback requirements.

G. Noise

(1) Hearing Testimony

Catherine Price, testifying on her own behalf, raised the concern that the noise impacts noted by the applicant and Staff would adversely impact her and her husband. She noted that her family spends a lot of time working inside and outside of their property and the opportunity to open the windows of their home would be diminished as a result of the noise cause by the wind turbines. (Price Ex. 2 at 2.)

Kenneth Kaliski, an employee of Resource System Group, Inc. (RSG), was the Black Fork witness who presented testimony describing noise impact studies that he and his firm performed on behalf of the applicant, as well as testimony regarding operational noise issues generally. Mr. Kaliski noted that, to determine what is the preconstruction background level for the Black Fork area, his firm set up sound level meters at eight monitoring sites to record background sound levels over an eight-day period. Subsequently, the firm modeled sound levels from construction and operation of the project wind turbines and prepared a noise impact study. Daytime and nighttime sound levels were calculated. While there was variation hour-to-hour and between the monitoring locations, according to the witness, the overall average nighttime sound level was 43 dBA and the average daytime sound level was 53 dBA. Based on the formula of nighttime noise level plus 5 dBA, which was established in prior cases before the Board, Mr. Kaliski stated that the design standard noise level for the project was established at 48 dBA. (Applicant Ex. 17 at 3-9.)

Mr. Kaliski admitted that, in 2009, when the sound monitoring that was conducted to determine the baseline background sound level for the project, certain sound monitoring locations were chosen that are no longer within the project's current boundaries. This is so due to the fact that the project's footprint has evolved since 2009, and certain turbine locations that, in 2009, were part of the proposed project have since that time been removed. In Mr. Kaliski's view, the chosen monitoring locations that are

located beyond the project's current boundaries consist of rural farmland that have soundscapes which are representative of areas within the project area. (Tr. at 442- 447.)

When asked if the applicant could install permanent noise monitoring fixtures at, for example, each of the noise monitoring locations from which its initial noise monitoring studies were conducted, Mr. Kaliski stated that continuous sound monitoring, all day, everyday, over the life of the project, is possible, but that to do so would be very costly. He estimated that it would cost roughly \$40,000 to \$50,000 to set up each sound monitoring site, with annual operating costs applying on top of that amount. However, the costs of doing temporary monitoring at a particular location in response to individual complaints concerning noise would be considerably less. (Tr. at 428-431.)

When asked whether, in conducting his noise studies, he factored into consideration the possibility that the age of a turbine, due to wear and tear over time, might cause it to be noisier than when it was new, Mr. Kaliski responded that his studies were based on the manufacturer's guarantee, with a margin of error provided by the manufacturer. Mr. Kaliski stated that he has never been called upon to conduct any noise level measurements in response to complaints that are related to the deterioration of wind turbines due to age and/or wear and tear. He noted that issues that increase sound levels from a wind turbine over time, such as blade wear and gearbox deterioration, are things that also affect the power output for a wind turbine and, as such, are the types of things that are addressed in the normal maintenance of wind turbines. (Tr. at 424.)

Black Fork witness Kaliski testified that, if the Vesta V100 turbine model is used to complete the project, the project should meet the established design standard of 48 dBA. If the project is designed with either of the other two turbine models under consideration, then additional mitigation may be needed in order to achieve the established designed standard. (Applicant Ex. 17 at 4.) Mr. Kaliski indicated that a noise complaint resolution protocol will be developed prior to operating the project (Tr. at 413). He explained that the most common method of noise mitigation is putting select turbines into a noise-reduced operating (NRO) mode. The side effect of NRO is that it reduces the electric output from the turbine, which reduces the amount of renewable energy generated by the project. (Applicant Ex. 17 at 5.)

## (2) Board Analysis and Conclusion

Upon review, we find no evidence of record to support a finding that the applicant should have acted differently than it did in identifying and taking sufficient and adequate steps, including those called for in the Stipulation, to address noise issues. The Board believes that, with continued monitoring and an appropriate complaint resolution process, as called for by the Stipulation, any concerns raised during the operation of the facility should be appropriately addressed on a case-by-case basis. Accordingly, the Board

concludes that no additional conditions, beyond those set forth in the Stipulation, should be imposed, at this time.

H. Impact on Farm Families in Ohio.

(1) Hearing Testimony

Margaret Rietschlin, testifying on her own behalf, raised concerns that the project would negatively impact farm families and farm life. She also claimed that the OFBF had not sent any information to her address with respect to the project. (Rietschlin Ex. 1 at 3.)

OFBF witness Dale Arnold, explained that the OFBF is a nonprofit educational and service organization made up of over 200,000 members, including members in each of Ohio's 88 counties. The OFBF is concerned with the quality of life for those engaged in agriculture and the protection of natural resources necessary to preserve the long-term capability of Ohio farmers to produce food, fiber, and energy. Mr. Arnold's duties with the OFBF are to oversee and implement the energy-related services the OFBF provides for its members. The stated purpose of Mr. Arnold's testimony was to explain how the proposed Black Fork wind project will impact farm families in Ohio. According to Mr. Arnold, assuming the Board adopts all of the conditions set forth in the Stipulation, the OFBF supports the Black Fork wind project, because it enhances farm income, protects natural resources, preserves open farm ground, permits Ohio agriculture to contribute to achieving the renewable goals establish in Ohio law, and helps meet the national energy goal of less dependence on foreign oil. (Applicant Ex. 14 at 1-3, 6.)

Mr. Arnold testified that, in his opinion, the Black Fork wind project will promote farmland preservation, in that it does allow the area to remain open and rural for farming development (Tr. 293). According to Mr. Arnold, a farmer who signs a lease allowing a turbine to be built on his land still has the ability to subdivide and sell his land to others; however, he still has the ability to use his property and sell it for commercial property (Tr. at 300, 302). By attending meetings with OFBF meetings, Mr. Arnold has heard that many farmers appreciate the idea that this particular project provides the community with an opportunity to generate taxes and provide community resources for the benefit of schools and county townships. Also, the project will reduce the pressure on farmers to sell some of their property for other types of development. (Tr. at 314.)

Mr. Arnold testified concerning his support for some of the specific conditions set forth in the Stipulation. For example, he stated that Condition 18 imposes soil separation and maintenance of field tile drainage systems, in a manner consistent with longstanding policies of both OFBF and the Ohio Land Improvement Contractors Association (OLICA). Mr. Arnold observed that it is the policy and recommendation of OFBF and OLICA that the machine to be used for trenching in installing and repairing field tile should be a wheel

or cable machine, and not a plow. The wheel or cable machine actually creates a trench where, as you cut a tile, it is readily seen and can be easily identified and easily repaired. Also, using a wheel or cable machine, there is less stress, less compaction, and less problem with regard to the ground. (Tr. at 295.) The OFBF similarly supports Condition 20 of the Stipulation which will require adoption of a plan to address erosion, sediment control, and disturbed soil issues. Finally, Condition 21 will adopt the watercourse protection program steps advocated by the OFBF and OLICA. (Applicant Ex. 14 at 4.) Mr. Arnold testified that the OFBF is comfortable with the standard setback requirements being applied in this matter, noting that they are established by statute and the Board's administrative rules (Tr. at 4-5).

When asked what advice the OFBF gives to nonparticipating residents who are concerned about whether the project will affect their wells, Mr. Arnold stated that they should establish a baseline now before construction of the project begins. In doing so, they should work with their local water, soil, and conservation district, and have the performance of their wells with regard to gallons per minute measured by a certified hydrologist. Having a baseline will enable them to use processes already established in law pertaining to repair, and through complaint, compensation and remediation. (Tr. at 329-330.)

Barry Yurtis, Vice President of Domestic Operations with Williams Aviation Consultants, Inc., testifying on behalf of Black Fork, was asked about whether the existence of wind turbines would result in the cessation of crop dusting and he indicated that aircraft used in crop dusting is no different than any other aircraft operating under visual flight rules and that all of these aircraft are required to separate themselves from any other aircraft or obstructions including terrain, weather, and other things. He also indicated that pilots who engage in crop dusting have experience operating aircraft around structures, including low hanging wires, when dropping their chemicals, and they are required to operate under the see-and-avoid principal. (Tr. at 251-253.)

(2) Board Analysis and Conclusion

The Board appreciates that questions were posed regarding the impact of the facility on the community. Based upon the evidence of record, it is evident that there are numerous benefits associated with the project that will advantage both the community and the local farmers. Therefore, we find that the conditions set forth in the Stipulation, and the supporting testimony by the stipulating parties, adequately address any concerns raised with regard to the alleged negative impact on the farm families.

I. Effects on Human Health, If Any, Associated With Living Near Wind Turbines.

(1) Hearing Testimony

Several of the nonstipulating intervenors, in their direct testimony, sought to explore whether living wind turbines can have a negative impact on human health. Karel Davis claimed that living next to turbines is distracting, annoying, and causes nausea. She also claimed that the sleep deprivation caused by wind turbines was used by law-enforcement and the military to "push someone to the brink or crack." (Davis Ex. 1 at 3-4.)

Dr. Diane J. Mundt, an epidemiologist and Senior Manager at ENVIRON International Corporation, testified as a witness on behalf of the applicant. Dr. Mundt indicated that she comprehensively searched, evaluated, and summarized the published, peer-reviewed, epidemiological literature on the human health effects, if any, associated with living in proximity to industrial wind turbines. In addition to searching relevant databases, she searched the World Wide Web to identify any credible, well conducted reports of harm to human health associated with industrial wind turbines. (Applicant Ex. 20 at 2.) Dr. Mundt explained that, in her opinion, a credible report is a properly conducted epidemiological study that generally meets certain key study conditions, including having an appropriate study population of sufficient and appropriate size, having a control population, and a methodology that reduces bias to the extent possible (Tr. at 462-463). Dr. Mundt claimed that her testimony is based on a critical review and synthesis of the available epidemiological literature, as well as her professional training and experience in applying epidemiological concepts and methods to diverse human health issues (Applicant Ex. 20 at 2-3).

With regard to whether the operation of utility-scale wind turbines causes adverse health effects, Dr. Mundt indicated that there have been six peer-reviewed cross-sectional studies of populations residing near utility-scale turbines and that the outcome of interest in these studies was primarily annoyance. The key point of Dr. Mundt's testimony was her statement that, based on her review of the relevant published peer-reviewed scientific literature, she found no consistent or well-substantiated causal connection between residential proximity to industrial wind turbines and health effects. She observed that some degree of noise is consistently perceived by residents living near wind turbines depending on the number of turbines, time of day, season, and level of background noise. She noted that, to a lesser degree, some level of shadow flicker is also perceived by such residents, again, depending on time of day, season, and position of the turbine blades. However, exposure to turbine noise or shadows, while potentially annoying or distracting to some people, are not known to harm human health. (Applicant Ex. 20 at 6-7; Tr. at 492.)

(2) Board Analysis and Conclusion

Upon review of the evidence submitted on the record, the Board finds that there is no credible support for a determination that there are negative health consequences associated with living near wind turbines. Accordingly, we concluded that no issue has been raised in this regard that would lead us to conclude that approval of the Stipulation and the conditions set forth therein, is not in the public interest.

J. Emergency Responder Training and Equipment

(1) Hearing Testimony

Several intervenors who were not parties to the Stipulation questioned whether local emergency responders would be called upon, and if so, would they be prepared, to respond to any incidents that might occur at the proposed wind farm. In his prefiled testimony, Mr. Heffner expressed concern that the Staff Report does not provide enough detail regarding the subject of equipment and training of emergency responders (Heffner Ex. 2 at 3).

Condition 41 in the Stipulation provides that, before the first turbine is operational, the applicant must submit to Staff, for review, a fire protection and medical emergency plan to be used during operation of the facility and that addresses training of emergency responders, which shall be developed in consultation with the first responders having jurisdiction over the area (Tr. at 165, 198). Black Fork witness Scott Hawken testified that, in developing the emergency plan, it was the applicant's understanding that the applicant would provide any special emergency equipment that is not otherwise locally available (Tr. at 201).

In addition, some of the nonstipulating intervenors expressed concern in their direct testimony and during cross-examination of the company's witnesses, that turbines might impact the operation of helicopters that participate in Life Flight operations (Heffner Ex. 2 at 2). Black Fork witness Yurtis testified that there would be no impact. He indicated that helicopters operate every day of the year around obstructions and wires, and a turbine of the size that will be erected in this project will be obviously visible. He also noted that helicopter pilots are well versed in operating around such objects. (Tr. 256.)

(2) Board Analysis and Conclusion

Upon review, we find no evidence of record to support a finding that the applicant should now be directed to act in anyway differently than it already has in identifying and taking sufficient and adequate steps, including those called for in the Stipulation, to address issues relating to the manner in which local emergency responders will be

provided with training and equipment needed to respond to any incidents that may occur at the proposed wind farm. In addition, based on the evidence, we are satisfied that the operation of the project will not negatively impact helicopter, Life Flight operations if they occur in the vicinity of the project. Accordingly, we find that no additional conditions are necessary to address the issue raised by the intervenors who were not parties to the Stipulation.

K. Collection Line System

(1) Hearing Testimony

Black Fork witness Hawken responded to concerns raised on cross-examination about the applicant's proposed collection line system, which is addressed in Condition 12 of the Stipulation. According to the witness, in routing the system, the applicant intends to avoid crossing county or township roads and will use predominantly private easements. However, there may be some cross-over and some short sections that involve the public right-of-way. Where this occurs, Mr. Hawken stated the applicant is committed to obtaining all necessary approvals from the county and complying with all applicable safety standards. (Tr. at 122-126.) He further noted that there is no standard currently in place that controls how close to the edge of a nonparticipating property the collection line may run (Tr. at 160). According to Mr. Hawken, the applicant is proposing to place all collection lines underground, which will necessitate burying conduit cable or lines, and will require field tile repair crews (Tr. at 82). Mr. Hawken indicated that the Stipulation sets forth minimum depth standards for laying the cable and for repairing any resulting damage to field tile. Mr. Hawken clarified that, if an affected landowner has a separate agreement with the applicant, calling for an even greater depth, then the language of that separate agreement controls. (Tr. at 178, 194.)

(2) Board Analysis and Conclusion

The Board finds that the provisions set forth in the Stipulation call for the cooperation and coordination with all necessary and applicable rules and regulations, both state and local, regarding the applicant's proposed collection line system. No evidence has been presented that would lead us to conclude that the conditions set forth in the Stipulation are not reasonable or sufficient in this regard.

L. Transportation Concerns and Road Use Agreement

(1) Hearing Testimony

Several nonstipulating parties expressed concerns regarding the impact of the project on county and township roads. Catherine Price noted that the very roads she

traveled daily will be impacted and she wondered why the applicant is not required to build up the roads before the start of the project (Price Ex. 2 at 1-2). Brett Heffner claimed that the applicant was seeking to bypass general road agreements despite Staff recommendations (Heffner Ex. 2 at 3). Karel Davis questioned whether bridge problems, curve deficiencies and profile deficiencies, would be worked out satisfactorily (Davis Ex. 1 at 2).

James Mawhorr, a registered professional engineer and registered professional surveyor in Ohio, and Vice President of K.E. McCartney & Associated, Inc., testified as a witness on behalf of the applicant. Mr. Mawhorr described the transportation studies that were performed on the applicant's behalf and testified on what road improvements the applicant may have to undertake prior to construction. Finally, he expressed support for each the conditions of the Stipulation pertaining to transportation, routing, road usage and all related issues. (Applicant Exs. 11 and 12.)

Thomas E. Beck, P.E, P.S., the Richland County Engineer, testified on behalf of the Board of Richland County Commissioners; the Richland County Engineer; and the Board of Township Trustees of the Plymouth, Sandusky, and Sharon Townships (hereinafter the Richland County Intervenors) (Tr. at 520). Also testifying on behalf of the Richland County Intervenors were Richland County Commissioners Edward W. Olson and Timothy A. Wert (Tr. at 546, 574). The essential purpose of the testimony of the Richland County Intervenors was to indicate the reasons why the Richland County Intervenors chose not to become parties to the Stipulation. All three witnesses testified that the Stipulation does not fully address their concerns relating to the potential impact of the Black Fork Wind Project on transportation infrastructure within Richland County, traffic control, and financial assurance issues. (Richland County Ex. 2 at 1; Richland County Ex. 1 at 2; Richland County Ex. 4 at 1, Richland County Ex. 3 at 2; Richland County Ex. 6 at 1, Richland County Ex. 5 at 2). According to Mr. Beck, the Stipulation does not fully address mandatory statutory requirements which provide that any new roadway engineering, construction, or repair work necessitated by the wind project must be subject to the authority and control of the board of county commissioners and the county engineer, and is subject to competitive bidding and prevailing wage requirements. Mr. Beck emphasized that the county needs to retain control and responsibility over public transportation facilities to ensure that they are properly designed, engineered, constructed, and maintained to protect the public safety. An additional concern is financial assurance to ensure that any work required by the project is paid for by the applicant and does not become a liability for the county or its taxpayers. (Richland County Ex. 2 at 3-4.)

All three witnesses for the Richland County Intervenors observed that, to date, the applicant has submitted neither a final route plan, nor a road use agreement that is acceptable to the Richland County Intervenors. The Richland County Intervenors recommended that the Board attach nine specific conditions to Black Fork's certificate.

Described generally, these include that the applicant must: (1) comply with Richland County's rules regarding overweight or oversized vehicle permits; (2) enter a road use agreement approved by the appropriate county officials and supported by adequate financial assurances; (3) comply with all statutory requirements for engineering, design, construction, repair, and improvement of roads and bridges necessary to the project prior to and during the construction, maintenance, and decommissioning phases; (4) complete all work at applicant's cost; (5) provide the county engineer with the final delivery route plan and other information 30 days before bidding begins; (6) repair, at its cost, or reimburse the county or township for any damage to public roadways, bridges, or other transportation improvements, and restore them to, at least, original condition; (7) obtain all necessary approvals from local authorities for road restorations or improvements; (8) post a bond, escrow, irrevocable letter of credit, or other financial assurance acceptable to the county sufficient to provide adequate assurance for any damage to the public roadways and to cover all costs during construction, maintenance, and decommissioning phases; (9) avoid and minimize damage to field tiles and repair such where damage occurs; and (10) comply with all safety and statutory requirements, and obtain County authorization to the extent the public right-of-way is used to design and maintain the collection system. (Richland County Ex. 2 at 4-6; Richland County Ex. 4 at 4-6; Richland County Ex. 6 at 4-6.)

(2) Board Analysis and Conclusion

Initially, the Board notes that Conditions 47, 48, and 49 of the Stipulation provide, among other things, that the applicant shall: (1) repair damage to government-maintained roads and bridges caused by construction activity or by decommissioning activity, to their preconstruction or predecommissioning state; (2) remove any temporary improvements made during construction, unless the applicable board of county commissioners request that they remain; (3) provide financial assurances to the counties that it will restore the public roads it uses during construction to their preconstruction condition; (4) provide financial assurances to the counties that, as part of decommissioning, it will restore the public roads it uses during to their predecommissioning condition; (5) obtain all required county and township transportation permits and all necessary permits from ODOT and coordinate any temporary or permanent road closures necessary for construction and operation of the proposed facility with the appropriate entities including the Richland County Engineer; and, (6) prior to construction, enter into a road use agreement with the applicable boards of county commissioners.

The Board understands that the nonstipulating parties have concerns pertaining to the process that will be followed in carrying out the provisions of the Stipulation concerning transportation and road use in the county. However, we are confident that, with the conditions established in the Stipulation, including the fact that the applicant must work with the county in arriving at a road use agreement prior to construction, and

the monitoring provided by our Staff, the required process will be followed and the applicant will appropriately discharge its responsibilities as outlined in the Stipulation. Therefore, we conclude that no additional conditions are required, at this time, regarding transportation and road use.

M. Tests in the Event of Significant Changes (Noise, Shadow Flicker, Etc.)

(1) Hearing Testimony

Karel Davis noted that the studies that were performed for the project were based on a 3 MW turbine depending on the final turbine model selected. She questioned whether the studies that were performed for the selected turbines would have to be performed again if another turbine type was selected. (Davis Ex. 1 at 1-2.)

Some of the applicant's witnesses agreed that, if a significant change were to be made with regard to the location of a turbine or the type of turbine used, beyond the three types under current consideration, then it might be necessary to redo testing with regard to, for example, noise or shadow flicker impact (Tr. at 45, 49, 148, 361-362, 426). However, Black Fork witness Stoner pointed out that Staff would need to be consulted with regard to anything amounting to more than making small micro-siting adjustments (Tr. at 60).

(2) Board Analysis and Conclusion

The Board notes that the statute and our rules provide for the eventuality of material and significant changes which may occur during the course of the construction or operation of the facility. Thus, any such changes would need to be presented to Staff and, ultimately, approved by the board, before they could proceed. These provisions coupled with the provisions set forth in the Stipulation, which provide for the involvement of Staff throughout the course of the project, gives that Board assurance that changes will be process properly. Accordingly, the Board concludes that no additional conditions are required, at this time.

N. Process for Complaints on the Project after Certification and Operation

1. Hearing Testimony

At hearing, several nonstipulating intervenors questioned the applicant regarding the potential for problems with the operation of the project after certification. Applicant witness Stoner testified that the Stipulation provides that a resolution procedure must be in place in order to address potential operational concerns experienced by the public. He also indicated that the applicant would abide by all applicable statutory requirements. (Tr. at 79-80.) Staff witness Pawley also indicated that, if someone had a complaint, the

Staff must be contacted and the Stipulation requires a complaint resolution process be established (Tr. at 638-639).

## 2. Board Analysis and Conclusion

Upon review, we find that the Stipulation satisfies the concerns related to a complaint resolution procedure. Stipulation Condition 13 provides that, at least 30 days prior to the preconstruction conference and subject to Staff review and approval, the applicant shall have in place a complaint resolution procedure in order to address potential operational concerns experienced by the public and that any complaint submitted must be immediately forwarded to Staff. Further the Stipulation provides that the applicant shall, to the satisfaction of Staff, investigate and resolve any issues complained of. Further, the Board notes that, if informal resolution of a complaint is not attained, then, pursuant to Section 4906.97, Revised Code, a formal complaint may be filed with the Board. Accordingly, we find that no additional conditions regarding complaint resolution are necessary, at this time.

## VIII. CONCLUSION

According to the Stipulation and the testimony of Black Fork witness Hawken, all of the parties to the Stipulation agree that the Stipulation is a product of serious bargaining among capable, knowledgeable parties within an open process in which the parties were represented by able counsel and technical consultants (Applicant Ex. 10 at 3). The intervenors who were not parties to the Stipulation have not presented evidence sufficient to persuade the Board to find otherwise.

In addition, as attested to in Black Fork witness Hawken's testimony, the parties to the Stipulation agree that the settlement, as a package, promotes the public interest as it will benefit the local economy through additional jobs and payroll and tax revenue (Applicant Ex. 10 at 3-4). As detailed above, the Board has thoroughly reviewed and considered all of the assertions raised by the intervenors who were not parties to the Stipulation and we find that the conditions set forth in the Stipulation sufficiently address the issues of concern. Thus, the Board concludes that the evidence of record supports our conclusion that the Stipulation promotes the public interest and necessity.

The stipulating parties further agree that the Stipulation does not violate any important regulatory principle or practice and, therefore, 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 25, 2010, as supplemented on August 26 and 27, 2010, February 10, 2011, and March 24, 2011, subject to the provisions of the Stipulation (Applicant Ex. 10 at 3-4). Upon review of the record, as a whole, we find that intervenors

who were not parties to the Stipulation have not presented evidence sufficient to persuade the Board to reach a contrary finding. Any allegation presented in opposition to the Stipulation is hereby considered denied.

Although not binding upon the Board, stipulations are given careful scrutiny and consideration. The Board finds that the Stipulation is the product of serious bargaining among knowledgeable parties, will promote the public interest, benefit the local economy, and create new, in-state renewable energy supply, and also does not violate any important regulatory principle or practice. In addition, we believe that the provisions in the Stipulation related to the road use agreement between Black Fork and both Crawford and Richland Counties will alleviate the concerns raised at the local hearing regarding the facility's impact on the roads and bridges impacted by the project area. 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 25, 2010, as supplemented on August 26 and 27, 2010, February 10, 2011, and March 24, 2011, subject to the provisions of the Stipulation. Accordingly, based upon all of the above, the Board approves and adopts the Stipulation, as amended, and hereby approves the issuance of a certificate to Black Fork pursuant to Chapter 4906, Revised Code.

Lastly, we would note that, during the hearing, concerns were raised regarding who the applicant is and what is the applicant's relationship to other corporate entities. We further note that, most often, the conditions of the Stipulation apply, on their face, to "the applicant." However, several conditions of the Stipulation, e.g., Conditions 48 and 66, make reference to and, on their face, appear to impose certain obligations on, in some instances, "the facility owner and/or operator" and on, in other instances, "the applicant, the facility owner and/or facility operator." We clarify that all conditions of the Stipulation that we are approving in this order apply to any entity that, at the time of each of these phases in the life of the project, is the entity ultimately responsible for the construction, operation, maintenance, or decommissioning of the project.

#### FINDINGS OF FACT AND CONCLUSIONS OF LAW:

- (1) Black Fork is a corporation and a person under Section 4906.01(A), Revised Code.
- (2) The proposed Black Fork wind-powered electric generation facility is a major utility facility under Section 4906.01(B)(1), Revised Code.
- (3) On December 1, 2010, Black Fork filed its preapplication notice of its application.

- (4) On January 11, 2011, Black Fork filed proof that legal notice was published for the informational public meeting held on December 16, 2010, at Shelby High School, in Shelby, Ohio.
- (5) On March 9, 2011, Black Fork filed a motion for waivers under Rule 4906-7-07, O.A.C.
- (6) On March 10, 2011, Black Fork filed an application with the Board for a certificate to site a wind-powered electric generation facility in Crawford and Richland counties.
- (7) On March 10, 2011, Black Fork filed a motion for a protective order for certain documents as part of its application.
- (8) On April 28, 2011, Black Fork and Staff filed a joint motion to extend the time of the completeness review period pursuant to Rule 4906-7-12, O.A.C.
- (9) By entry of May 3, 2011, the OFBF's motion to intervene was granted; the applicant's requests for waiver of Section 4906.06(A)(6), Revised Code, and for waiver of Rules 4906-17-05(A)(4), 4906-17-05(B)(2)(h), and 4906-17-08(C)(2)(c), O.A.C., were granted; the applicant's request for a waiver of Rule 4906-17-04, O.A.C., was denied; the motion for protective order was granted; and the parties' joint motion for an extension of time was granted.
- (10) On June 10, 2011, the Board notified Black Fork that, pursuant to Rule 4906-1-14, O.A.C., the application had been found to be complete.
- (11) By entry of June 22, 2011, a local public hearing was scheduled on September 15, 2011, at the Shelby Senior High School, in Shelby, Ohio and an adjudicatory hearing was scheduled for September 19, 2011, in Columbus, Ohio.
- (12) In accordance with Rule 4906-5-08, O.A.C., public notice of the hearings was published in the Mansfield News-Journal and in the Bucyrus Telegraph Forum on June 30, 2011. Proof of publication was filed with the Board on July 19, 2011, and September 12, 2011.
- (13) By entry of August 30, 2011, the following jurisdictions and individuals were granted intervention in this case: Crawford

County, Richland County, the Richland County Engineer, the Plymouth Township Trustees, the Sharon Township Trustees, the Sandusky Township Trustees, John Warrington, Loren Gledhill, Carol Gledhill, Mary Studer, Alan Price, Catherine Price, Nick Rietschlin, Margaret Rietschlin, Bradley Bauer, Debra Bauer, Grover Reynolds, Brett A. Heffner, Gary Biglin, and Karel Davis. Thomas Karbula was granted intervention as a party, but on October 21, 2011, withdrew as a party to the case. The motion to intervene filed by William Alt was denied.

- (14) The Staff Report was filed on August 31, 2011.
- (15) The local public hearing was held on September 15, 2011 in Shelby, Ohio. At the hearing, 25 witnesses gave public testimony.
- (16) The adjudicatory hearing commenced in Columbus, Ohio, on September 19, 2011, and was recessed in order to allow the parties to conduct settlement negotiations.
- (17) On September 28, 2011, the applicant, Staff, and the OFBF filed a Stipulation.
- (18) On October 5, 2011, an amendment of the Stipulation was filed by the parties to the Stipulation and Crawford County.
- (19) The evidentiary hearing reconvened and was held on October 11, 12, and 13, 2011.
- (20) Adequate data on the Black Fork 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.
- (21) Black Fork's application, as supplemented, complies with the requirements of Chapter 4906-17, O.A.C.
- (22) The record establishes that the basis of need, under Section 4906.10(A)(1), Revised Code, is not applicable.
- (23) 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.

- (24) 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.
- (25) 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.
- (26) 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.
- (27) The record establishes that the facility will serve the public interest, convenience, and necessity, as required under Section 4906.10(A)(6), Revised Code, subject to the conditions of the Stipulation.
- (28) 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.
- (29) The record establishes that the facility will comply with water conservation practice under Section 4906.10(A)(8), Revised Code.
- (30) Based on the record, the Board shall issue a certificate pursuant to Chapter 4906, Revised Code, for construction, operation, and maintenance of the Black Fork wind-powered electric generation facility, subject to the conditions set forth in the Stipulation, as amended.

ORDER:

It is, therefore,

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

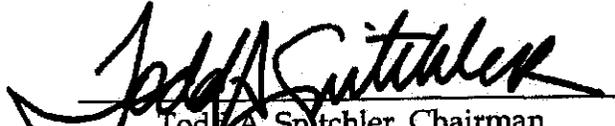
ORDERED, That a certificate be issued to Black Fork pursuant to Chapter 4906, Revised Code, for the construction, operation, and maintenance of the wind-powered electric generation facility, subject to the conditions set forth in the Stipulation, as amended. It is, further,

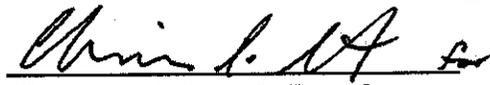
ORDERED, That the certificate contain the conditions set forth in the Stipulation, as amended. It is, further,

ORDERED, That Black Fork take all necessary steps to carry out the terms of the Stipulation, as amended and this Order. It is, further,

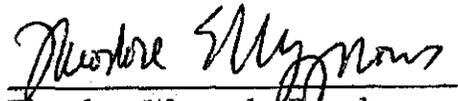
ORDERED, That a copy of this Opinion, Order, and Certificate be served upon each party of record and any other interested person.

THE OHIO POWER SITING BOARD

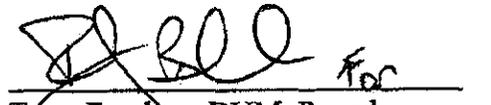
  
Todd A. Snitchler, Chairman  
Public Utilities Commission of Ohio

  
Christiane Schmenk, Board  
Member and Director of the Ohio  
Department of Development

  
James Zehringer, Board Member  
and Director of the Ohio  
Department of Natural Resources

  
Theodore Wymyslo, Board  
Member and Director of the  
Ohio Department of Health

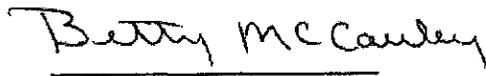
  
Scott Nally, Board Member  
and Director of the Ohio  
Environmental Protection Agency

  
Tony Forshey, DVM, Board  
Member and Interim Director of the  
Ohio Department of Agriculture

\_\_\_\_\_  
Board Member  
and Public Member

SEF/sc

Entered in the Journal  
**JAN 23 2012**

  
Betty McCauley  
Secretary

BEFORE

THE OHIO POWER SITING BOARD

In the Matter of the Application of Black )  
Fork Wind Energy, L.L.C. for a Certificate )  
to Site a Wind-Powered Electric Generating ) Case No. 10-2865-EL-BGN  
Facility in Crawford and Richland )  
Counties, Ohio. )

ENTRY ON REHEARING

The Ohio Power Siting Board finds:

- (1) On March 10, 2011, Black Fork Wind Energy, LLC (Black Fork or the Applicant) filed an application for a certificate of environmental compatibility and public need (certificate) to construct a wind-powered electric generating facility in Crawford and Richland counties, Ohio.
- (2) On January 23, 2012, Ohio Power Siting Board (Board) issued its opinion, order, and certificate (order) approving and adopting the Stipulation, as amended, entered into by the Applicant, the Board's Staff, the Ohio Farm Bureau Federation (OFBF), and the Board of Crawford County Commissioners, which provided that a certificate should be issued, subject to the 80 conditions set forth in the Stipulation.
- (3) Section 4906.12, Revised Code, states, in relevant part, that Sections 4903.02 to 4903.16 and 4903.20 to 4903.23, Revised Code, apply to a proceeding or order of the Board as if the Board were the Public Utilities Commission of Ohio (Commission).
- (4) Section 4903.10, Revised Code, provides that any party who has entered an appearance in a Commission proceeding may apply for rehearing with respect to any matters determined by the Commission within 30 days after the entry of the order upon the journal of the Commission.
- (5) Rule 4906-7-17(D), Ohio Administrative Code (O.A.C.), states, in relevant part, that any party or affected person may file an application for rehearing within 30 days after the issuance of a Board order in the manner and form and circumstances set forth in Section 4903.10, Revised Code.

- (6) On February 17, 2012, intervenors Alan Price, Catherine Price, and Gary Biglin filed applications for rehearing of the order. On February 21, 2012, intervenors Brett Heffner and John Warrington filed applications for rehearing of the order. Mr. Heffner's rehearing application included a request that an audio recording he alleges was made of the teleconference which occurred on September 9, 2011, be entered into the evidentiary record in this case. On February 22, 2012, intervenors Carol Gledhill and Loren Gledhill separately filed applications for rehearing of the order that, in terms of all the arguments they raise, mirror each other, as well as the rehearing application of Gary Biglin.
- (7) On February 27, 2012, Black Fork filed memoranda contra the rehearing applications of Alan Price, Catherine Price, and Gary Biglin. On March 2, 2012, Black Fork filed memoranda contra the rehearing applications of Brett Heffner and John Warrington. Also on March 2, 2012, Black Fork filed a motion to strike portions of Mr. Heffner's rehearing application, accompanied by a memorandum contra Mr. Heffner's request to have the audio recording admitted into the evidentiary record. On March 5, 2012, Black Fork filed memoranda contra the rehearing applications of Carol Gledhill and Loren Gledhill. On March 9, 2012, Mr. Heffner filed a pleading which, in essence, served both as a reply to the memorandum contra that Black Fork filed in response to Mr. Heffner's request to have the audio recording admitted into evidence, and also as a memorandum contra Black Fork's motion to strike portions of Mr. Heffner's rehearing application. On March 12, 2012, Black Fork filed a reply to Mr. Heffner's memorandum contra Black Fork's motion to strike portions of Mr. Heffner's rehearing application.<sup>1</sup>
- (8) On February 28, 2012, the administrative law judge (ALJ) issued, pursuant to Rule 4906-7-17(I), O.A.C., an entry ordering that the applications for rehearing filed by Alan Price, Catherine Price, Gary Biglin, Brett Heffner, John Warrington, Carol Gledhill, and Loren Gledhill should be granted for the purpose of affording the Board more time to consider the issues raised in those rehearing applications.

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<sup>1</sup> On March 9, 2012, Mr. Biglin filed a reply to Black Fork's memorandum contra, entitled "In Reference to the Memorandum Contra of Black Fork Wind Energy, LLC to The Application for Rehearing by Gary J. Biglin." Because there is no provision in either the statute or the Board's rules to file replies to memoranda contra applications for rehearing, Mr. Biglin's March 9, 2012, filing cannot be considered.

Rehearing Arguments Raised By Alan Price

- (9) Mr. Price raises seven grounds for rehearing. As the first of his grounds for rehearing, Mr. Price alleges that, before their offices were asked to work on a road agreement, those township and county employees who signed leases with Black Fork or Element Power should have been replaced. Additionally, Mr. Price alleges that it was unethical for the Applicant to tell lease signers who had questions about their lease to go to attorney Jim Prye because Mr. Price claims that Black Fork both paid Mr. Prye for such work and also paid Mr. and Mrs. Prye for using their title company for work.

In its memorandum contra, Black Fork asserts that Mr. Price has not provided a legal basis for concluding that any of the conduct he alleges to have occurred is illegal or unethical and that the Board has no jurisdiction over the allegations of unethical behavior cited to by Mr. Price.

- (10) Upon review, we find that no basis exists of record to substantiate either that the factual allegations made on rehearing by Mr. Price actually occurred in the manner alleged, or that the conduct alleged, even if it did occur, was illegal. Most importantly, there has been no showing made of record that any illegal or unethical behavior by anyone factored, or should have factored, into the Board's decision, or that the Board is the appropriate tribunal to address purported unethical behavior of township and county employees. Accordingly, Mr. Price's first assignment of error should be denied.
- (11) In his second rehearing argument, Mr. Price alleges that the Applicant, the Commission, and the Board are "doing their best to bully" elected county officials "into signing agreements that they do not have enough time or resources to fully investigate."

In its memorandum contra, Black Fork asserts that there is no basis in law or in fact to support Mr. Price's claims that county officials are being "bullied" in this way.

- (12) Upon review, we find this second argument of Mr. Price is without merit. No basis exists in the record evidence to substantiate the allegations of "bullying" made on rehearing by Mr. Price, nor did Mr. Price present evidence of any such conduct at the hearing. In addition, both Crawford County and Richland County were parties to this case and there was no evidence that anyone employed by

these counties was in any way unduly influenced by any party or the Board or that any such conduct occurred. Accordingly, Mr. Price's second assignment of error should be denied.

- (13) Mr. Price's third assignment of error on rehearing posits that the Applicant is being allowed to build a wind farm without having to post any kind of bond before starting construction.

In its memorandum contra, Black Fork states that this assertion is simply incorrect.

- (14) Upon review, we note that Condition 66(h) of the Stipulation, summarized at pages 48-49 of the order, clearly imposes an obligation on the Applicant to provide, prior to construction, a financial assurance instrument such as a surety bond, for purposes of demonstrating that adequate funds have been posted for the scheduled construction. Because this condition of the Stipulation imposes a bonding obligation on the Applicant prior to construction, Mr. Price's rehearing argument to the contrary is without merit, does not justify rehearing of the order, and should be denied.

- (15) In his fourth assignment of error, Mr. Price claims that the Applicant's study of background noise for the wind farm project was flawed. Mr. Price claims that four of the eight monitors used in the background noise study were located near heavy traffic and that two monitors were not within the project area.

In its memorandum contra, Black Fork notes that Mr. Price did not cite to any evidence that the monitors were placed in high traffic areas or that the monitoring sites were not adequate to provide a valid sampling of background noise levels. Additionally, Black Fork points out that its witness, Kenneth Kaliski, testified at length regarding the location of the monitors used for his background noise study and explained that the results of one monitor that recorded at a very high equivalent continuous noise level (LEQ) were not considered when determining the average nighttime sound level for the project.

- (16) The Board finds that Mr. Price's rehearing claim that the project's background noise study was flawed is simply not supported by the record and, as such, is without merit. Black Fork witness Kaliski provided expert testimony which supports a finding that the monitoring sites used in his noise study were satisfactory to

provide a valid sampling of noise levels in the project area. Mr. Price failed to cite to any evidence of record that would negate or even challenge Mr. Kaliski's expert opinion on this topic. Accordingly, Mr. Price's fourth assignment of error should be denied.

- (17) In his fifth assignment of error, Mr. Price claims that the application was not made available to him until the first day of the evidentiary hearing. Mr. Price also disputes the hearing testimony of the Applicant witness Hawkins, who indicated that a copy of the application was sent to the Crestline Public Library in September 2011. Mr. Price further asserts, without including any supporting documentation, that the Crestline Library "never received it until December 2011."

In its memorandum contra, Black Fork claims that it followed the Board's rules on whether and how libraries are to be furnished with the copies of the application, and that those rules do not require, under the facts of this case, that a copy of the application be furnished to the Crestline Public Library.

- (18) Upon review, we find no merit to Mr. Price's fifth assignment of error. We note that Rule 4906-5-06, O.A.C., governs service of an application for a wind-powered electric generating facility. This rule requires that the Applicant place either a copy of the application or notice of its availability "in the main public library of each political subdivision as referenced in Section 4906.06(B), Revised Code." That statutory provision, as applicable, also requires service of the application on the chief executive officer of each municipal corporation and county "in the area in which any portion of the proposed facility is to be located." We agree that, as pointed out by Black Fork in its memorandum contra, no part of the facility involved in this case is proposed to be located within the village of Crestline. The Board's rules, thus, do not require service of the application, or notice of its availability, on the Crestline Public Library. Moreover, in that copies of the application were served on the libraries serving the county seats of both Crawford and Richland counties where the project is to be located, as well as on three other libraries located within those two counties, the record reflects Black Fork's compliance with the Board's rules regarding service to libraries in the project area (Black Fork Ex. 2, June 17, 2011, Certificate of Service). Moreover, from the time the application was filed with the Board and throughout

the duration of this case, the application was available on the Board's website. Moreover, there is no requirement that the Applicant serve persons who intervene in the case subsequent to the filing of the application with a copy of the application. Accordingly, Mr. Price's fifth assignment of error should be denied.

- (19) In his sixth ground for rehearing, Mr. Price accuses the Board of failing to explain the difference between the terms "the applicant, the facility owner, and the facility operator" as those terms are used in the Board's decision.

Black Fork disagrees with Mr. Price's assertion.

- (20) This claim is without merit. A thorough explanation of the Board's interpretation of the manner in which these terms are used in the Stipulation and in the order is provided by the Board at page 70 of the order. Accordingly, Mr. Price's sixth assignment of error should be denied.
- (21) As his seventh ground for rehearing, Mr. Price questions how the Board could have approved the application when, in his view, many questions asked of witnesses during the evidentiary hearing were left either unanswered or not answered completely.
- (22) We find Mr. Price's final rehearing argument is without merit. First, Mr. Price has not cited to a single instance where a question was left unanswered at the hearing. More importantly, Mr. Price neither identifies any way in which the Board's decision was not supported by the record, nor does he explain how the record is so incomplete as to provide an improper and insufficient basis for the Board, in making its decision as reflected in the order, to fulfill all of its jurisdictional obligations in this case. Further, the Board notes that all parties had the opportunity to question witnesses at the hearing, either by subpoenaing them to testify or by cross-examining other parties' witnesses. Accordingly, the Board finds that Mr. Price's seventh assignment of error should be denied.

#### Rehearing Arguments Raised By Catherine Price

- (23) In her rehearing application, Ms. Price raises 12 arguments that, broadly, appear to critique either the application, the terms of the Stipulation, and/or the testimony of various hearing witnesses. In her first assignment of error, Ms. Price disputes whether the

application properly identifies the generation capacity of the turbine models under consideration.

In response, Black Fork asserts that the application properly identifies the generation capacity of each of the turbine models under consideration.

- (24) Ms. Price has raised no issue in her first assignment of error that warrants reconsideration, in that the record clearly sets forth the capacity ratings of the turbine models. Accordingly, her request for rehearing should be denied.
- (25) In her second assignment of error, Ms. Price submits that the study of historic properties undertaken in this case is incomplete, based on her belief that it failed to include Ms. Price's own residence, allegedly built in 1836.

In response, Black Fork points out that Ms. Price presented no evidence at hearing showing either that her residence qualifies for registration in any of the registries that Rule 4906-17-08(D), O.A.C., requires the Applicant to consult, or whether or how the project would have any impact on the cultural or historical significance, if any, of her residence.

- (26) A review of the record indicates that Ms. Price's second assignment of error should be denied as there is no evidence of record to support her allegation that the Board's conclusions were in error.
- (27) In her third assignment of error, Ms. Price contends that, because road use agreements have yet to be finalized, the status of certain planned changes to affected roads remains in play, thereby jeopardizing her right to travel on safe roads.

Black Fork responds that the conditions of the Stipulation addressed transportation and road use agreements, and require the Applicant to develop route plans, make road improvements outlined in the route plans, repair damage to bridges and roads caused by construction activity, and obtain all required county and township transportation permits.

- (28) The Board finds Ms. Price's third assignment of error to be without merit, as the record supports the finding that the Stipulation clearly provides for the necessary and appropriate road use agreements. Accordingly, this request for rehearing should be denied.

- (29) Ms. Price, in her fourth assignment of error, contends that the Applicant's study of water wells is incomplete, based on her belief that multiple wells were not included in it, including three wells that allegedly exist on Ms. Price's property.

In response, Black Fork points out that Ms. Price has cited no record support for her allegations questioning the reliability of Black Fork's water well study based on an alleged failure to include Ms. Price's own wells. Also, the Applicant notes that she ignored the hearing testimony of Black Fork witness Dohoney, which supports the Board's decision even in the event that Ms. Price's wells were not included in the study.

- (30) Upon review, the Board finds no merit in Ms. Price's fourth assignment of error. The record supports the Board's finding in this regard; therefore, this request for rehearing should be denied.
- (31) In her fifth assignment of error, Ms. Price contends both that no baseline study on television and cell phone signal strength was done and, also, that the Applicant's mitigation process, to be applied in the event that such signal strength is lost, has not been fully explained.

In response, Black Fork states that testimony exists indicating that wind turbines do not cause telephone and cell phone degradation and, in any event, two conditions of the Stipulation address Ms. Price's television and cell phone reception concerns.

- (32) Contrary to Ms. Price's fifth assertion on rehearing, the Board finds that the record does address and alleviate concerns about telephone and cell phone degradation. Accordingly, this request for rehearing should be denied.
- (33) In her sixth assignment of error, Ms. Price accuses the Applicant of not wanting to insure the funding for decommissioning, she questions whether such funding exists, who, if anyone, would provide it, if, for example, weather would damage the turbines beyond repair and she asks what would happen if the party responsible goes bankrupt before the decommissioning funds are in place.

In response, the Applicant states that the issues regarding financial assurance/bonding, were addressed by the Board at pages 48-49 of the order, inasmuch as the Board has adopted condition 66(h) to

the Stipulation, which requires the posting of decommissioning funds, a surety bond or assurance before the scheduled construction of each turbine.

- (34) Upon consideration the Board finds no merit in Ms. Price's sixth assignment of error, in that the issue of decommissioning was fully addressed and resolved in the Stipulation and on the record in this case. Therefore, this assignment of error should be denied.
- (35) In her seventh assignment of error, Ms. Price, critiques various parts of the testimony of Black Fork witness Kaliski, who testified concerning background noise studies he conducted, as well as issues relating to turbine operational noise.

Black Fork responds that Ms. Price's critique of the evidence relating to noise issues fails to present any grounds for concluding that the Board's analysis and conclusions on that topic, in the order, are unreasonable, unlawful, or unsupported by the record.

- (36) With regard to Ms. Price's seventh assignment of error, the Board agrees that the record supports the finding that the noise level is appropriate in this case. No evidence was presented on the record to the contrary. Accordingly, this assignment of error should be denied.
- (37) Ms. Price, in her eighth assignment of error, questions whether the turbine manufacturer, who the record shows is the party who will maintain the turbines, will answer to anyone if large parts must be trucked in for repairs.

In response, Black Fork notes that all of the duties and obligations pertaining to turbine maintenance that are imposed on the Applicant through conditions of the Stipulation are adequately explained and addressed in the order.

- (38) Upon review of Ms. Price's eighth assignment of error, the Board notes that it appears that Ms. Price would have the Board now consider and answer the question of whether any of these same duties and obligations imposed on the Applicant (for example, the duty to comply with all local county or township permitting requirements) should apply to other entities besides the Applicant, such as the turbine manufacturers. On this issue, the Board notes that our jurisdiction extends to the Applicant and the Applicant is and will be held accountable for any necessary maintenance on the

facility, whether or not the Applicant chooses to contract with another entity to provide such maintenance. With this in mind, the Board finds that it is not necessary to further address this issue and that this assignment of error should be denied.

- (39) In her ninth assignment of error, Ms. Price lists several criticisms of the testimony of Black Fork witness Mundt, an epidemiologist whose purpose in testifying was to indicate, based on Dr. Mundt's review of the relevant, published, peer-reviewed scientific literature, as well as the professional training and experience in applying epidemiological concepts and methods to diverse human health issues, whether she had found any consistent or well-substantiated causal connection between residential proximity to industrial wind turbines and health effects.

In response, Black Fork states that none of the criticisms that Ms. Price has raised on rehearing with regard to Dr. Mundt's testimony, pertain to the actual purpose served by her testimony. Nor do any of her criticisms present valid reasons for the Board to depart from its reliance on that testimony, based on its own judgment that Dr. Mundt's testimony competently served its intended purpose.

- (40) The Board finds that Ms. Price's ninth assignment of error is without merit. There was sufficient expert testimony presented in this matter that supports the Board's reliance on Dr. Mundt's testimony in this regard. No evidence was presented on the record to the contrary. Accordingly, this assignment of error should be denied.
- (41) In her tenth through twelfth assignments of error, Ms. Price raises the same concerns as Mr. Price regarding: whether and when a copy of the application was placed at the Crestline Public Library; how the Board has interpreted the terms "applicant", "facility owner", and "facility operator"; and whether, at the close of the hearing, too many questions of record were left unanswered for the Board, in making its decision, to have carried out its proper statutory jurisdiction.
- (42) The Board has already fully addressed these issues in Findings (18), (20), and (22) above, and her tenth through twelfth assignments of error should, therefore, be denied.

Rehearing Arguments Raised by Gary Biglin

- (43) In the first of his four rehearing arguments, Mr. Biglin contends that the Board's decision is unreasonable and unlawful because it fails to require the Applicant to maintain an adequate turbine setback distance from nonparticipating property lines and public roadways, thus violating Section 4906.10(A)(2), (3), and (6), Revised Code.

In its memorandum contra Mr. Biglin's rehearing application, Black Fork asserts that in issuing its order, the Board acted lawfully and reasonably in approving the turbine setbacks proposed for the project.

- (44) We find no merit in Mr. Biglin's first assignment of error. Mr. Biglin believes that, because Ohio's existing setback standards are based on the distance from the turbine base to the exterior of the nearest habitable residential structure of an adjacent property, they "show disregard for" and fail to "respect" the interests of Ohio property owners in being able to "enjoy every inch" of their property "without concern for the happiness and safety of themselves and their family." Mr. Biglin contends that it was error for the Board to apply a setback standard other than one based only "on distance from property lines and the public roadways." In essence, Mr. Biglin's argument is that the Board erred in applying the actual setback standards that are supported in Ohio law. We disagree. Setback distances have been determined by the Ohio General Assembly and the Board has complied with the distances as established. In fact, it would have been contrary to the statutory formula on the part of the Board had it approved setback distance less than setback distances established by the Ohio General Assembly. In this case, the Board approved a stipulation that provides setback distances that exceed the statutory requirements. Accordingly, Mr. Biglin's first assignment of error should be denied.
- (45) In his second rehearing argument, Mr. Biglin continues, in another way, to question the setback requirements the Board applied in this case and sets forth three reasons to support his claim. First, he contends that the Board's decision is unreasonable and unlawful because it applies setback requirements that "are inadequate to

ensure the rights of health, safety, and well being" to persons who are nonparticipating property owners and to persons using the public roadway. According to Mr. Biglin, the setback requirements imposed through the order, in this regard, violate such persons' constitutional rights under both the United States and the Ohio Constitution, as well as their statutory rights under Section 4939.02(A)(1), Revised Code. Second, Mr. Biglin avers that "the only way" to ensure the complete safety of persons on property adjacent to a wind farm and on public roadways in a wind project area is to impose a setback formula known as "the GE setback formula," which was referenced in the staff report. Third, Mr. Biglin asserts that the order deprives property owners of their constitutional rights to the protection of private property and to procedural due process.

In its memorandum contra, Black Fork maintains that the setbacks imposed under the order adequately protect property owners and users of the public highway and do not violate any of their constitutional or statutory rights.

- (46) Initially, the Board finds that Mr. Biglin has provided no evidentiary support for his second assignment of error; therefore, we find it to be without merit. The Board's decision to reject use of the GE setback formula is supported by the record. Black Fork witness Haley testified concerning the GE setback formula, indicating that it originated from a 2003 published risk analysis study on ice throw from wind turbines, referred to as the Seifert study. Mr. Haley's expert opinion is that the risk of ice throw on the Black Fork project does not warrant the application of the GE setback formula. His testimony supports a finding that, even the authors of the Siefert study have admitted the formula they studied was intended only for use as "rough guide" in making initial siting determinations. Moreover, as Black Fork points out in its memorandum contra, even Mr. Biglin admitted that the GE setback formula has enjoyed limited application, agreeing on cross-examination that GE, itself, only recommended application of the setback if an ice detector is not used on the turbine. For this project, Condition 44 of the Stipulation provides that ice detection systems will be used on all turbines that cause the turbines to automatically shutdown. The Board's decision to reject use of the GE setback formula is also supported by the Board's finding that no evidence was presented of record that warranted additional measures beyond the setback distances prescribed under the Board's rules.

With regard to Mr. Biglin's overall contention regarding the setback issue, the Board notes that, contrary to his assertion, nothing prohibits adjoining landowners from developing their properties or constructing residences after a wind farm has been constructed. Our decision in this case is fully supported by Ohio case law, which holds that established setbacks do not constitute unconstitutional takings if enacted as a result of a proper exercise of the police power and are reasonably necessary for the "preservation of the public health, safety and morals." See *Andres v. City of Perrysburg*, 47 Ohio App. 3d 51, 54 (Wood County, 1988), citing *Pritz v. Messer*, 112 Ohio St. 628 (1925). The setbacks imposed under the order were established by the General Assembly to safeguard the public from potential harm, including, noise, shadow flicker, blade throw or ice throw, which may result from construction of the wind turbines. Such action is within the police power to protect the public health, safety, and morals, and, therefore, does not constitute an unconstitutional taking of private property. Thus, we find that Mr. Biglin's constitutional arguments have no merit and do not justify a grant of rehearing on the order. Accordingly, Mr. Biglin's second assignment of error should be denied in its entirety.

- (47) In his third assignment of error, Mr. Biglin contends that the Board improperly delegated too much authority to the ALJs. He contends that the Board relied upon the ALJs to reach a final decision that was merely rubber-stamped by the Board. In this regard, Mr. Biglin argues that the Board failed to meet its statutory obligation to carefully weigh the issues and evidence and failed to reach an independent determination whether the project should be constructed as proposed.
- (48) The Ohio Supreme Court has held<sup>2</sup> that "drafting an order and deciding an order are not the same, and nothing in the Revised Code prohibits the Board from delegating the drafting of an order to an ALJ." Moreover, in the same decision, the Ohio Supreme Court "relied on a long-standing presumption of regularity, wherein, in the absence of evidence to the contrary, a public board is presumed to have properly performed its duties" (*Id.*). We find that Mr. Biglin's third argument on rehearing is without merit and should be denied.

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<sup>2</sup> *In re the Application of Am. Transm. Sys., Inc.* 125 Ohio St. 3d 333 (May 4, 2010).

- (49) In his fourth and final rehearing argument, Mr. Biglin offers four criticisms of the procedural process. First, he complains that there was a compressed schedule between the dates when intervention was granted and the initially scheduled dates for both the public hearing and the adjudicatory hearing. Mr. Biglin believes that, in other wind project cases, a window of about two weeks between the public and adjudicatory hearings is customary. Second, Mr. Biglin complains that he did not receive a copy of the application until October 11, 2011. Mr. Biglin's third criticism of the procedural process is that, during a September 9, 2011, prehearing procedural teleconference, the ALJs referred to a settlement conference as a settlement meeting and at other times as a stipulation meeting. Mr. Biglin claims this was very confusing. Mr. Biglin's fourth criticism is that John Pawley was the only Staff witness made available for cross-examination.
- (50) Upon consideration, the Board notes that, Rule 4906-7-07(A)(1)(8), O.A.C., provides that, for purposes of the Board's discovery rules, the term "party" includes any person who has filed a notice or petition to intervene which is pending at the time a discovery request or motion is to be served or filed. Rule 4906-7-07(B)(1) O.A.C., also provides that discovery may begin immediately after an application is filed or a proceeding is commenced. Thus, because Black Fork filed its application on March 10, 2011, and Mr. Biglin had filed a motion to intervene on August 1, 2011, nothing prohibited Mr. Biglin from seeking any and all discovery of Black Fork once he filed for intervention. With respect to Mr. Biglin's claims regarding the time period between the hearings, we find no merit. Although the two hearings were initially scheduled to occur more closely together, in this case, there was actually a window of about four weeks between the date of the public hearing on September 15, 2011, and the October 11, 2011, date on which commenced the presentation of live hearing testimony in the adjudicatory hearing. Mr. Biglin also has not provided any explanation regarding how he was prejudiced by the schedule that was actually followed.

As for his issue regarding the application, a review of Mr. Biglin's testimony filed on September 19, 2011, indicates that he had access to the application as he made specific references to it. (September 19, 2011, Testimony of Gary J. Biglin, at 2-4). Moreover, under Section 4906.06, Revised Code, the Applicant was required to serve a copy of the application on the chief executive officer of each

municipal corporation and county, and the head of each public agency charged with the duty of protecting the environment or of planning land use, in the area in which any portion of such facility is to be located; however, the Applicant was under no legal obligation to serve Mr. Biglin with a copy of the application, as Mr. Biglin intervened well after the date that the Applicant filed and served copies of the complete application. Even if Mr. Biglin did not have access to the application, which he clearly did have, he has made no showing of prejudice. The application was also available on the Board's website from the time the application was filed.

The Board also notes that Mr. Biglin fails to explain whether any confusion on his part lingered after September 12, 2011, the date on which an entry was issued that summarized the scheduling decisions that were made during the September 9, 2011, procedural teleconference. In any event, he has not shown how any confusion he still had, by that point, affected his ability to participate in the evidentiary hearing. Indeed, the record shows that Mr. Biglin fully participated in the evidentiary hearing, by presenting testimony and cross-examining witnesses.

Finally, we note that there is nothing unreasonable or unlawful about any party having a single witness testify to support its position. Once the Stipulation was entered, it was Staff's decision as to who it presented at hearing to testify in support of the Stipulation and the staff report. Clearly the Board did not commit error because the Staff chose Mr. Pawley to testify. Further, Mr. Biglin was never denied the opportunity to cross-examine any witness appearing at hearing. Therefore, Mr. Biglin's final argument fails to present reasonable grounds for granting rehearing of the order and should be denied.

#### Rehearing Applications Filed By Carol Gledhill And Loren Gledhill

- (51) As previously noted, on February 22, 2012, Carol Gledhill and Loren Gledhill separately filed applications for rehearing that, in terms of all the arguments they raise, essentially mirror each other and also the rehearing application of Gary Biglin. We find that, since their rehearing applications are, in all essential aspects, merely duplicative of the rehearing application of Gary Biglin, the Gledhills' applications for rehearing should be denied for all the same reasons, and in exactly the same manner, as we have denied,

within this entry on rehearing, the rehearing application of Gary Biglin.

Rehearing Arguments Raised By John Warrington

- (52) Mr. Warrington raises three arguments on rehearing. In his first and third assignments of error, Mr. Warrington contends that the Board lacks the ability to render an objective and nonbiased decision that would protect the public interest, well-being, and property of Ohio citizens. In Mr. Warrington's view, the Board "acts only as enablers of industrial wind installation in Ohio with complete disregard for testimony or criteria which disagrees with their industrial wind agenda." Mr. Warrington complains that: information that was stricken from his prefiled testimony, purporting to show that industrial wind projects have a negative impact on property values, should have been considered by the Board; his request to have a real estate expert testify via Skype, rather than to appear live at the hearing, should not have been denied; and the Board's decision in this case rests upon the expert opinion testimony from Black Fork witnesses that the 91 wind turbines proposed will have a neutral or, in fact, benign impact on real estate values. Furthermore, Mr. Warrington contends that the Board creates an evidentiary double standard that is a violation of due process. He claims that the Board has the ability, but refuses, to receive and review the voluminous credible data documenting the immense negative impact that an industrial wind installation will have upon a community. He accuses the Board of receiving all wind industry opinion as fact, while rejecting the credibility of virtually all opposing data.

In its memorandum contra, Black Fork points out that the opinion testimony of its expert witness, Mr. Stoner, was admitted based on his qualifications as an expert witness, under criteria established in Ohio's rules of evidence, rather than on any alleged inability of the Board to render an objective and nonbiased decision. Black Fork also points out that Mr. Warrington admitted that he, himself, was not qualified as an expert (Tr. 694-697).

- (53) We find that Mr. Warrington's first and third arguments on rehearing are without merit. It is not error nor improper for the Board to have expected and required Mr. Warrington, if he wished to present expert opinion testimony on real estate values in his own community, to produce a qualified expert to appear live and in

person at the adjudicatory hearing, to provide expert opinion testimony to that effect. Rather than do that, Mr. Warrington improperly sought to include in his own testimony verbatim phrases and conclusions that appear in the body of a consultant report on real estate valuations and sought the admission of various attachments, including an article on a study performed by a consulting firm and various other articles on real estate. Such improper evidence was properly excluded by the ALJs as there was no foundation or authentication presented at the hearing for the information; moreover, the authors of the report and studies were not presented for examination at the hearing. The Commission has broad discretion in the conduct of its hearings under Section 4901.13, Revised Code. *Weiss v. Public Utilities Commission* (Ohio 2000). The Board did not err either in allowing into evidence the expert opinion testimony of Black Fork's qualified expert witnesses, or in considering that specific evidence as part of its consideration of the whole evidentiary record, as reflected in the order. Accordingly, Mr. Warrington's first and third assignments of error should be denied.

- (54) In his second assignment of error, Mr. Warrington contends that the Board's approval of the project in this case amounts to an unconstitutional taking without compensation of the property of hundreds of Crawford and Richland county residents.
- (55) We have already fully addressed, and rejected, this argument in Finding (46) above. Therefore, as we found previously, the request for rehearing is without merit and should be denied.

Brett Heffner's Request For Admission Of Audio Recording Into Evidence:  
Consideration Of Rehearing Arguments That Reference That Audio Recording

- (56) Attached to Mr. Heffner's application for rehearing was a compact disc (CD) which he claims contains a recording that was made of a telephonic procedural conference held on September 9, 2011, conducted by the ALJs and participated in by several of the parties. Mr. Heffner requests that this CD be entered either as part of his memorandum in support of his application for rehearing, or, as necessary, separately into the evidence of record in this case. He further states that the conference was "recorded in its entirety from open to close, without edit and is a part of public records in Richland County, Ohio."

- (57) As to the admissibility of such recording, we find no merit. First, there is no basis on which to admit an exhibit outside of a hearing, after the close of the record of the case, and after the Board has issued an order. Mr. Heffner should have introduced, marked, and sought the admission of the recording as an exhibit at the hearing in the event he believed such a recording was relevant. Further, Mr. Heffner, or someone with knowledge of the recording, could have testified at hearing regarding the CD and its contents, where that person could have been cross-examined by all parties and the ALJs. Absent Mr. Heffner, or someone with knowledge about the recording, testifying at the hearing regarding the recording and chain of custody, there is no basis on which to make any finding regarding the contents of the CD or to demonstrate the veracity or efficacy of such a recording. We note that such recording was made without the knowledge of the ALJs, and it is unclear whether any other party had knowledge that such a recording was made. Notwithstanding any and all problems relating to verifying the CD's authenticity, and disregarding any concerns regarding whether there was a legal basis for making such a recording, Mr. Heffner's citations to voices on the CD do not demonstrate prejudice or show that the order was in any manner unlawful or unreasonable.
- (58) Accordingly, Mr. Heffner's request that the CD be admitted into the record is denied and all of the arguments in Mr. Heffner's application for rehearing that cite or reference the CD are denied. This decision renders moot three pleadings: (1) the March 2, 2012, pleading by which Black Fork sought to both oppose Mr. Heffner's request to have the audio recording admitted into the record and to strike those portions of Mr. Heffner's rehearing application which cite or reference that audio recording; (2) Mr. Heffner's March 9, 2012, pleading filed in response to Black Fork's March 2, 2012, pleading, and (3) Black Fork's reply filed March 12, 2012. We, therefore dismiss that pleading by Black Fork now, without need for further consideration.

#### Other Rehearing Arguments Raised By Brett Heffner

- (59) Mr. Heffner raises 18 assignments of error. The first argument made in Mr. Heffner's rehearing application is that "the focus of the adjudicatory hearing" was unreasonably and unlawfully shifted away from the application and the staff report, to the

Stipulation. Mr. Heffner claims that the Stipulation unreasonably and unlawfully affected the rights of parties that did not sign it.

Responding to this argument, Black Fork asserts that the focus of the evidentiary hearing was, appropriately, on both the application and the Stipulation. Black Fork notes that, since it had the burden of proof, it submitted into evidence the application, ten pieces of direct testimony and six pieces of additional testimony addressing all aspects of the application and the conditions proposed in the Stipulation. Moreover, according to Black Fork, the intervenors, including Mr. Heffner, submitted written testimony and engaged in robust cross-examination of the Applicant's witnesses, the OFBF's witness, and the Staff's witness.

- (60) Upon review, we find that Mr. Heffner has established no basis for his claim that the hearing was, in any way, unreasonably or unlawfully focused. Once a stipulation is submitted it is appropriate for the hearing to proceed allowing the stipulating parties to present the stipulation on the record and provide support for the stipulation. Those parties that do not support the stipulation are permitted to question witnesses on the stipulation and provide testimony in opposition to the stipulation. Such was the situation in this case wherein all parties were afforded due process and given an opportunity to address the proposed application and Stipulation. Consequently, we find that Mr. Heffner has established no basis for his claim that the Stipulation shifted the focus of the hearing, thus, unreasonably and unlawfully affecting the rights of parties that did not sign it. Accordingly, we find that the first assignment of error is without merit and should be denied.
- (61) In his second assignment of error, Mr. Heffner states that "the public was not made aware of the settlement conference before the public meeting" and that "significant and material changes were made without the opportunity of public inquiry."
- (62) In consideration of this claim, the Board notes Mr. Heffner fails to clearly state what set of facts he is referring to. The record demonstrates that, contrary to Mr. Heffner's assertion, several entries were issued in this docket setting forth the procedural schedule; these entries are public documents available through the Board's docketing system. In fact, the public generally was made

aware, by the September 12, 2011, entry, i.e., prior to the September 15, 2011, public hearing in Shelby, that the parties to the case, as opposed to members of the public who were not parties, would commence a settlement conference on September 19, 2011. In any event, there is no legal requirement that notice be given to the public that parties are engaged in private settlement discussions. Accordingly, we find that Mr. Heffner's second rehearing argument is without merit, presents no grounds for rehearing of the order, and should be denied.

- (63) In his third rehearing argument, Mr. Heffner alleges that it is "unreasonable and unlawful to conduct a procedure called a hearing, preside over it with persons called judges, and practice before them with entities called attorneys and parties, and under the rules of procedure include as a general provision the ability for the presiding officers to 'waive any requirement, standards, or rule set forth in this chapter or prescribe different practices or procedures to follow in this case.'" Mr. Heffner goes on to state that untranscribed or off-the-record conversations with the ALJs violated the rules and procedures which were laid down in front of all the parties with all having the opportunity to participate, but were then ignored and countermanded in subsequent process. Mr. Heffner provided no citations for these claims.

In its memorandum contra, Black Fork submits that the Board and the ALJs followed procedural rules and did not violate them.

- (64) To the extent there were off-the-record discussions, as there customarily are in most hearings, these discussions were held in front of all parties. In this case, there were off-the-record discussions in the form of prehearing conferences which are not transcribed, because all parties were notified of these conferences and Mr. Heffner was present during those conferences. Moreover, as the record reflects, Mr. Heffner fully participated in the evidentiary hearing by filing testimony, cross-examining witnesses, and giving closing statements. There is simply no basis for Mr. Heffner's third ground for rehearing and it should be denied.
- (65) In his fourth set of rehearing arguments, Mr. Heffner alleges that the order is unlawful on grounds that the staff report and "Staff Opinion" are used extensively in the Board's formation of findings of fact and conclusions of law, despite the fact that the staff report was not treated as evidence in the adjudicatory hearing; and

intervenors were not permitted to cross-examine the authors of the staff report, nor were intervenors permitted to cross-examine other signatories to the Stipulation.

- (66) We find no merit in Mr. Heffner's fourth set of rehearing arguments. The staff report became a part of the record in this case by operation of Section 4906.07(C), Revised Code. It was marked as an exhibit and it was treated accordingly. The record is clear that the intervenors were provided the opportunity to cross-examine all witnesses who testified at hearing on the staff report, the Stipulation, or both. The Staff provided the testimony of a witness, the team project leader, who was available for cross-examination on both the staff report and the Stipulation. The OFBF provided the testimony of a witness, as did Richland County. Likewise, the Applicant, as the party who has the burden of proof in this certificate application case, presented and made available for cross-examination, its witnesses who testified both as to the contents of the application and the conditions proposed in the Stipulation. Accordingly, rehearing on this issue should be denied.
- (67) In his fifth ground for rehearing, Mr. Heffner alleges that the certificate is unreasonable and unlawful as the Board did not review evidence and testimony.
- (68) The Board notes that Mr. Heffner provides no evidence that demonstrates that the Board did not review the evidence of record, when in fact, the Board thoroughly reviewed and considered the record in this case as evidenced by our comprehensive 75 page order. Mr. Heffner's argument is similar to the one raised by Mr. Biglin, who felt that the Board improperly delegated authority to the ALJs. We have already fully addressed this issue at Finding (48), and Mr. Heffner's argument should be denied on the same grounds as are set forth therein.
- (69) In his sixth ground for rehearing, Mr. Heffner challenges whether proper procedure was followed when, during the procedural teleconference that took place on September 9, 2011, the ALJ granted a request to convert the then-scheduled September 19, 2011, hearing into, instead, a settlement conference. Mr. Heffner believes that, in taking that course of action, the ALJ "unreasonably and unlawfully made a motion and subsequent expedited ruling without showing good cause." He further claims that this was

objectionable in that a ruling was made without notifying all parties.

In its memorandum contra, Black Fork, states that the ALJ did not make a motion or issue an expedited ruling pursuant to Rule 4906-7-12(C), O.A.C., but rather, simply ruled on a request for a procedural matter, as permitted under Rule 4906-7-10(A)(7), O.A.C., which governs prehearing conferences.

- (70) Upon review of the sixth ground for rehearing, we find that the ALJ's ruling, during the September 9, 2011, procedural teleconference, to permit conversion of the September 19, 2011, hearing into a settlement conference was appropriate. All parties were served with a copy of the entry scheduling the September 9, 2011, procedural teleconference. We find that, in making that decision, the ALJ was simply ruling on a request for a procedural matter, as permitted under our rule governing prehearing conferences. Moreover, pursuant to that same rule, on September 12, 2011, the ALJ issued an entry memorializing the request and the grant to convert the September 19 hearing into a settlement conference. If Mr. Heffner objected to the ruling, he should have challenged the September 12, 2011, entry. He did not do so and, moreover, even now, has failed to show any prejudice resulting from the ALJ's decision, as memorialized in that entry. For all of these reasons, we find no merit in Mr. Heffner's sixth ground for rehearing.
- (71) In his seventh ground for rehearing, Mr. Heffner alleges that Staff's counsel made a motion to have the September 19, 2011, hearing called and continued to a later date. Mr. Heffner submits that the motion made by Staff's counsel was invalid and, as a consequence, the subsequent ruling by the ALJ on that motion was also invalid. The motion was invalid, says Mr. Heffner, for its failure to comply with Rule 4906-7-12(A), O.A.C, which requires that all motions, unless made at a public hearing or transcribed prehearing conference, or otherwise ordered for good cause shown, shall be in writing and shall be accompanied by a memorandum in support.

In its memorandum contra, Black Fork contends that there is nothing unreasonable or unlawful about the ALJ's decision to call and continue the September 19, 2011, evidentiary hearing in order to allow the parties to hold a settlement conference. Further, the ALJ's ruling was made, not on a motion made under Rule 4906-7-

12, O.A.C., but rather on a request for a ruling on a procedural matter, under Rule 4906-7-10, O.A.C., and as such was not invalid.

(72) Upon review, we find that the ALJs did not err in making any of the rulings now being challenged by Mr. Heffner. Converting the scheduled adjudicatory hearing to a settlement conference is a procedural matter which the ALJ has the authority to rule on pursuant to Rules 4906-7-10 and 4906-7-14, O.A.C. In fact, the ALJ memorialized his decision by entry issued pursuant to Rule 4906-7-10(C), O.A.C., on September 12, 2011. Again, all parties were served a copy of the entry scheduling the conference and the conference was followed by a procedural entry that was also served on all parties. Parties have the responsibility to follow the rules and processes of the Board, all of which were appropriately documented in entries filed in the docket and served on the parties. Mr. Heffner did not challenge the entry. In addition, nowhere in his application for rehearing has he shown any prejudice resulted from the ruling. In point of fact, continuing the hearing gave the intervenors additional time to prepare for the hearing and there is no basis to find and no party has demonstrated that any party was disadvantaged by the ruling. We find no merit to Mr. Heffner's assignment of error and accordingly, this request for rehearing should be denied.

(73) In his eighth ground for rehearing, Mr. Heffner alleges that an "expedited ruling" was made with respect to this same request to convert the hearing into a settlement conference. He submits that granting such a ruling was unreasonable and unlawful, both because no party made a motion for an expedited ruling, pursuant to Rule 4906-7-12(C), O.A.C., and because all parties were not contacted.

In its memorandum contra, Black Fork contends that the ALJ did not make an expedited ruling, pursuant to Rule 4906-7-12(C), O.A.C., but did reasonably and lawfully resolve a procedural matter involving whether a scheduled hearing could be converted into a settlement conference.

(74) As explained above, the request made by Staff's counsel to convert the hearing to a settlement conference was a procedural matter which could be disposed of by way of a procedural ruling by the ALJ, pursuant to Rules 4906-7-10 and 4906-7-14, O.A.C. No motion was necessary in order for the ALJ to rule, in the manner he did,

upon such a procedural matter. Once more, Mr. Heffner has failed to show prejudice resulting from either the ruling in question, or from the manner in which the request was disposed of. We find no merit in Mr. Heffner's eighth rehearing argument; therefore, it should be denied.

- (75) In his ninth rehearing argument, Mr. Heffner alleges that the ALJ's ruling on Staff's counsel's request to convert the hearing into a settlement conference was not valid because, according to Mr. Heffner, Rule 4906-7-03(C), O.A.C., precludes the Staff from participating as a party to the prehearing teleconference.

In its memorandum contra, Black Fork explains its position that Mr. Heffner's ninth rehearing argument should be rejected because it hinges on his misinterpretation of Rule 4906-7-03(C), O.A.C.

- (76) We find no merit to this assignment of error. Rule 4906-7-03(C), O.A.C., provides that the Staff shall not be considered a party to any proceeding, except for purposes of certain named O.A.C. provisions including, as applicable here, Rule 4906-7-14, O.A.C. The fact that Rule 4906-7-14, O.A.C., is one of the listed exceptions means that the Staff is a party to a proceeding and can make a request for a procedural matter which the ALJ has the authority to address. Moreover, nothing in Rule 4906-7-10, O.A.C., precludes Staff's counsel from participating in a prehearing conference. The ALJ ruling which Mr. Heffner has challenged was appropriate. Again, Mr. Heffner has not cited any prejudice resulting from the ruling. Accordingly, Mr. Heffner's ninth assignment of error is denied.

- (77) In his tenth rehearing argument, Mr. Heffner complains that the hearing on October 11, 2011, gave the intervenors less than three days to react to a "completely novel agreement without time to secure witnesses to testify concerning such an agreement." He complains that all of the intervenors' prefiled testimony became inactive and they had to start from scratch on testimony regarding the Stipulation.

Black Fork, in its memorandum contra, points out that the intervenors knew as early as September 9, 2011, that there was a potential for a settlement agreement because that is when the September 19, 2011, hearing was converted to a settlement conference. Further, as noted by Black Fork, the Stipulation was

filed on September 28, 2011, and, according to Black Fork, was served via overnight, giving the intervenors seven calendar days to prepare any testimony concerning the Stipulation. Black Fork notes that, as evidenced by the ALJ's September 21, 2011, entry resetting the hearing date, it was the parties and not the ALJs that proposed the dates for the filing of any Stipulation and the dates for filing testimony. Further, says Black Fork, Mr. Heffner made no objection at the hearing to the introduction of the Stipulation, stating that "I have nothing to say about it."

- (78) Upon consideration of Mr. Heffner's tenth assignment of error, the Board finds that it is without merit. The Stipulation itself contains the proposed resolution of issues that were in contention since the filing of the application. As evidenced by the staff report and the Stipulation, these issues were the subject of this case. For Mr. Heffner to assert now that he was not aware of the issues contemplated for settlement and unable to prepare testimony on those issues is misleading. Accordingly, the Board finds that this request for rehearing should be denied.
- (79) As his eleventh rehearing argument, Mr. Heffner alleges that Staff and Staff's counsel unreasonably and unlawfully conducted numerous *ex parte* discussions with the Applicant.
- (80) The Board notes that Heffner's assertion of *ex parte* discussions is without merit in that Rule 4906-7-02, O.A.C., prohibits a Board member or ALJ assigned to a case from discussing the merits of the case with any party or intervenor to the proceeding; however, no prohibition is placed on the discussions that Staff or its counsel may have with parties. Accordingly, this ground for rehearing should be denied.
- (81) In his twelfth assignment of error, Mr. Heffner asserts that: the application was unreasonably and unlawfully deemed complete; the application must be considered incomplete and in contravention of Rule 4906-17-03, O.A.C., because no specific wind turbine model has yet been chosen; inasmuch as the project's wind turbine sites are moveable after certification, the application must be considered incomplete and in contravention of Rule 4906-17-03, O.A.C., because no final version of the project's layout or construction is available; it was error to deem the application complete because it did not contain, as required by Rule 4906-17-08(E)(1), O.A.C., a description of the Applicant's public interaction

program; and rehearing should be granted on grounds that the application both was and was not part of the adjudicatory hearing.

In its memorandum contra, Black Fork points out, among other things, that Mr. Heffner was present when the application was marked and introduced into evidence. It argues that, by failing to object to its admission at the hearing, Mr. Heffner waived any claim to raise the issue of completeness of the application. In addition, Black Fork contends that Rule 4906-17-03(A)(1), O.A.C., expressly contemplates that a specific model of turbine may not be chosen at the time the application is filed.

- (82) We find this claim by Mr. Heffner to be without merit. As approved, the Stipulation authorizes three possible turbine types. A situation in which the actual turbine model of the three authorized has not yet been selected is contemplated within Rule 4906-17-03, O.A.C., i.e., the rule that establishes what information must be included in the detailed description of the proposed facility included in an application before it may be deemed complete. Thus, notwithstanding Mr. Heffner's claim to the contrary, Rule 4906-17-03, O.A.C., is not violated, and an application is not considered incomplete, just because the specific turbine model has yet to be chosen, where the information called for in Rule 4906-17-03(1)(a), O.A.C., is included as part of the application at the time it is filed. In the case at hand, the case was appropriately deemed complete, in part because, in filing the application, Black Fork fulfilled the informational filing requirements of Rule 4906-17-03(1)(a), O.A.C. The fact that the Applicant is notified by the Board that the application is considered complete, does not mean the certificate is granted at that point. Rather, it means that sufficient information required by the rules has been provided to enable Staff to commence its formal investigation. Furthermore, Mr. Heffner's claim to the contrary notwithstanding, there are certain specific conditions of the Stipulation that, considered together, require that detailed engineering drawings of the final layout of the project be completed and submitted to Staff prior to construction.

Moreover, Rule 4906-17-08(E)(1), O.A.C., requires the Applicant to describe its program for public interaction for the siting, construction, and operation of the proposed facility, i.e. public information programs. Black Fork complied with this requirement by providing such information at pages 138-139 of its application.

The application was introduced and admitted into evidence as Company Exhibit 1 without objection from any party, including Mr. Heffner. In addition, we find that the record clearly reflects that the purpose of the adjudicatory hearing was to enable the Board to establish a full evidentiary record on which to base its decision in this matter on whether or not to grant the application submitted in this case contingent upon the conditions proposed in the Stipulation. In this sense, the application was, clearly and appropriately, the major focus and topic of the hearing. At the hearing, the Applicant, as the party having the burden of proof to prosecute the case that the application should be granted, introduced the application and testimony supporting it. Mr. Heffner was present but did not object to the admission into evidence of the application.

Furthermore, we note that the Ohio Supreme Court has recognized that the statutes governing these cases vest the Board with the authority to issue certificates upon such conditions as the Board considers appropriate; thus acknowledging that the construction of these projects necessitates a dynamic process that does not end with the issuance of a certificate. The Court concluded that the Board has the authority to allow Staff to monitor compliance with the conditions the Board has set. *In re Application of Buckeye Wind, L.L.C. for a Certificate to Construct Wind-Powered Electric Generation Facilities in Champaign County, Ohio, 2012-Ohio-878, ¶16-17, 30 (Buckeye)*. Such monitoring includes the convening of preconstruction conferences and the submission of follow-up studies and plans by the Applicant to, ensure compliance with Board-approved conditions. As recognized in *Buckeye*, any deviation from the certificate issued would require an Applicant to file an amendment. If an amendment is filed, in accordance with Section 4906.07, Revised Code, if such amendment involves any material increase in any environmental impact or substantial change in the location of all or a portion of the facility, the Board would be required to hold a hearing and to take further evidence. Accordingly, we find Mr. Heffner's twelfth assignment of error to be without merit and it should, therefore, be denied.

- (83) In his thirteenth argument on rehearing, Mr. Heffner claims that the order was unreasonable and unlawful because it reflects that the Board improperly relied, when it comes to its consideration of the potential impact of the project on property values, on the expert opinion testimony of Black Fork witness David Stoner. Mr. Heffner

claims that Mr. Stoner is not an expert in real estate and that the ALJs did not research into the actual work histories of the wind industry employees.

In its memorandum contra, Black Fork claims that it was not error for the Board to find Mr. Stoner qualified as an expert to provide the testimony he did and to rely on it in reaching the decision it made in the order. The Applicant notes the record evidence describing Mr. Stoner's background and professional experience, shows that he had the necessary qualifications to provide the expert testimony.

- (84) We find no merit in Mr. Heffner's thirteenth assignment of error. The evidence demonstrates that, given his professional experience and educational background, Black Fork witness Stoner was qualified to testify regarding his opinions on property values. The ALJ's ruling to allow him to testify as an expert, was, we find, correct. Mr. Stoner's testimony on the topic of wind energy projects related to matters beyond the knowledge or experience possessed by lay persons and also dispelled a misconception common among lay persons. Mr. Stoner was qualified as an expert by his specialized knowledge in the wind industry, his education, and his experience regarding the subject matter of his testimony. Mr. Stoner's testimony is based on specialized information that he possesses by reason of his experience with various wind industry projects. Thus, Mr. Stoner was qualified to offer an opinion as an expert on this topic. Accordingly, Mr. Heffner's thirteenth assignment of error is denied.
- (85) In his fourteenth argument on rehearing, Mr. Heffner claims that the order is unreasonable and unlawful as it does not adequately address, pursuant to Section 4906.10(A)(1), Revised Code, the basis of need.
- (86) Initially, the Board notes that Section 4906.10(A)(1), Revised Code, provides, in relevant part, that the Board shall not grant a certificate for the construction, operation, and maintenance of an electric transmission line or gas or natural gas transmission line, unless it finds and determines the basis of the need for the facility. In this case, the Applicant is proposing to construct and operate a wind-powered electric generation facility, not an electric transmission line, nor a gas or natural gas transmission line. In the order, we found that the basis of need, under Section 4906.10(A)(1), Revised

Code, is not applicable in this case (Order at 72). This finding is supported by the fact that the Applicant is proposing to construct and operate a wind-powered electric generation facility, not an electric transmission line, or a gas or natural gas transmission line. Accordingly, we find that Mr. Heffner's fourteenth rehearing argument is without merit and should be denied.

- (87) In his fifteenth rehearing argument, Mr. Heffner claims that it is unreasonable and unlawful for the Board to not be bound by the Stipulation, a circumstance which, Mr. Heffner complains, makes it possible for the Board to make "many substantial and material changes to the certificate without the opportunity for public review and involvement.

In response, Black Fork points out the Board's ability to impose terms and conditions is very important because the Board evaluates applications for proposed projects, not constructed projects.

- (88) Contrary to Mr. Heffner's assertions, the Applicant is bound by the conditions set forth in the Stipulation and approved by the Board in our order. However, as we mentioned above, the Ohio Supreme Court in *Buckeye* recognized that the construction of these projects necessitates a dynamic process that does not end with the issuance of a certificate. Once a certificate with conditions is granted, the Staff serves as the Board's eyes and ears in the field to ensure compliance with certificate condition approval. The Board has the authority to allow Staff to monitor compliance with the conditions the Board has set. As recognized in *Buckeye*, if the Applicant proposes a change to any of the conditions approved in the certificate, the Applicant is required to file an amendment. In accordance with Section 4906.07, Revised Code, the Board would be required to hold a hearing, in the same manner as on an application, where an amendment application involves any material increase in any environmental impact or substantial change in the location of all or a portion of the facility. Thus, the Board finds that Mr. Heffner's fifteenth assignment of error is without merit and should be denied.

- (89) In his sixteenth assignment of error, Mr. Heffner argues that the general public did not have an opportunity to comment on the Stipulation at the public hearing.

- (90) Upon consideration, the Board finds that this claim falls short of presenting reasonable grounds for granting rehearing of the order. There is no legal requirement that the Board hold a local public hearing on a stipulation, whether partial or full. Section 4906.07, Revised Code, controls when the public hearing is held, and provides that the Board must hold the public hearing on the application no later than 90 days after the filing of the complete application. In this case, the application was deemed filed on June 21, 2011, and the public hearing was set for Thursday, September 15, 2011. As a practical matter, the filing of stipulations after public hearings is not an unusual occurrence in proceedings before the Board. Moreover, the Board notes that the general public did have the ability to provide testimony on the proposed project at the hearing held in Shelby, Ohio. Accordingly, the Board finds that Mr. Heffner's sixteenth assignment of error is without merit and should be denied.
- (91) In his seventeenth assignment of error, Mr. Heffner argues that nonparticipating landowners will have no way of mitigating injuries.
- (92) We find no merit in this argument. The General Assembly, in Section 4906.98, Revised Code, has vested the Board with oversight over the construction, operation and maintenance of major utility facilities as approved in a certificate of environmental compatibility and need. In addition to the statutory complaint process, the order provides nonparticipating landowners the ability to submit complaints and to engage in a complaint resolution process should compliance issues arise. Accordingly, the Board finds that this assignment of error is without merit and should be denied.
- (93) In his eighteenth rehearing argument, Mr. Heffner alleges that the order is unlawful, as it violates the Valentine Anti-Trust Act of 1898, as codified in Ohio Revised Code 1331.

In response, Black Fork notes that the Valentine Act, as codified in Chapter 1331 of the Revised Code, was patterned after the federal Sherman Anti-Trust Act. Although he has quoted various sections contained within Chapter 1331 of the Ohio Revised Code, Black Fork points out that Mr. Heffner has failed to cite Section 1331.11, Revised Code, which provides that the Courts of Common Pleas, not the Board, are vested with jurisdiction to determine if violations

of the Valentine Anti-Trust Act of 1898 have occurred. Nor has the General Assembly vested the Board with the task of regulating competition among power plant developers. Furthermore, the Applicant states that, in this case, the Board approved the project as proposed in the application and the Stipulation, applying the applicable statutory criteria set forth by the General Assembly; those criteria do not include ensuring that landowners have the opportunity to select their preferred developer.

- (94) Upon review of Mr. Heffner's eighteenth assignment of error and the Applicant's response we find that the assignment is without merit and should, therefore, be denied.
- (95) As a final matter, the Board finds that rehearing should be denied with respect to any of the arguments made by any of the parties seeking rehearing that are not specifically addressed in this entry on rehearing.

It is, therefore,

ORDERED, That Mr. Heffner's request to have the CD admitted into the record be denied and all arguments in Mr. Heffner's application for rehearing that cite or reference the CD be denied, and the Applicant's motion to strike be dismissed as moot. It is, further,

ORDERED, That, in accordance with the above findings, the rehearing applications filed by Alan Price, Catherine Price, Gary Biglin, Brett Heffner, John Warrington, Carol Gledhill, and Loren Gledhill are all denied in their entirety and dismissed of record. It is, further,

ORDERED, That rehearing is hereby denied with respect to any of the arguments made by any of the parties seeking rehearing that are not specifically addressed in this entry on rehearing. It is, further,

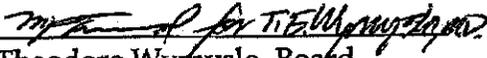
ORDERED, That a copy of this entry on rehearing be served upon each party of record and any other interested persons of record.

THE OHIO POWER SITING BOARD

  
Todd A. Snitchler, Chairman  
Public Utilities Commission of Ohio

\_\_\_\_\_  
Christiane Schmenk, Board  
Member and Director of the Ohio  
Department of Development

  
James Zehringer, Board Member  
and Director of the Ohio  
Department of Natural Resources

  
Theodore Wymyslo, Board  
Member and Director of the  
Ohio Department of Health

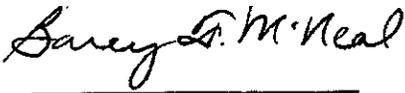
\_\_\_\_\_  
Scott Nally, Board Member  
and Director of the Ohio  
Environmental Protection Agency

  
David Daniels, Board Member  
and Director of the Ohio  
Department of Agriculture

\_\_\_\_\_  
Board Member  
and Public Member

DEF/SEF/dah

Entered in the Journal  
**MAR 26 2012**

  
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Barcy F. McNeal  
Secretary