

ORIGINAL

IN THE SUPREME COURT OF OHIO

Joseph J. Grant,	:	Ohio Supreme Court Case No. 2014-1198
	:	
Appellant,	:	Appeal from the Ohio Power Siting Board
	:	
v.	:	Ohio Power Siting Board
	:	Case No. 13-1177-EL-BGN
Ohio Power Siting Board,	:	
	:	
Appellee.	:	

APPENDIX TO MERIT BRIEF OF APPELLANT JOSEPH J. GRANT

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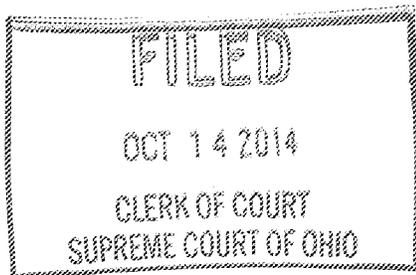
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IN THE SUPREME COURT OF OHIO **14-1198**

Joseph J. Grant,	:	Ohio Supreme Court Case No. _____
	:	
Appellant,	:	Appeal from the Ohio Power Siting Board
	:	
v.	:	Ohio Power Siting Board
	:	Case Nos. 13-1177-EL-BGN
Ohio Power Siting Board,	:	
	:	
Appellee.	:	

NOTICE OF APPEAL OF APPELLANT JOSEPH J. GRANT

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FILED
 JUL 15 2014
 CLERK OF COURT
 SUPREME COURT OF OHIO

31607443

NOTICE OF APPEAL OF APPELLANT JOSEPH J. GRANT

Appellant Joseph Grant (herein “Grant” or “Appellant”) hereby gives notice of his appeal as of right, pursuant to R.C. 4903.11 through 4903.13, R.C. 4906.12, and S.Ct.Prac.R. 3.11(A)(2), 10.02, and 10.03, to the Supreme Court of Ohio from the decisions issued in Case No. 13-1177-EL-BGN of the Ohio Power Siting Board (herein “Board” or “Appellee”). The decisions being appealed are the Board’s Opinion, Order and Certificate entered in its Journal on March 17, 2014 and the Board’s Entry on Rehearing entered in its Journal on May 19, 2014.¹

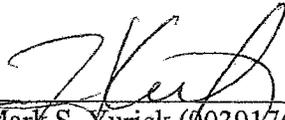
On April 16, 2014, Appellant, in accordance with R.C. 4903.10, filed a timely Application for Rehearing from the March 17, 2014 Opinion, Order and Certificate. The Board issued an Entry on Rehearing on May 12, 2014, to further consider, *inter alia*, the matters specified in Appellant’s Application for Rehearing. Appellant’s Application was subsequently denied in the May 19, 2014 Entry on Rehearing.

Appellant files this Notice of Appeal complaining of errors in the Board’s Opinion, Order and Certificate and Entry on Rehearing. Appellant alleges that the Board’s decisions are unlawful and unreasonable. Specifically, the Board’s March 17, 2014 Opinion, Order and Certificate and May 19, 2014 Entry on Rehearing are unlawful and unreasonable for the following reason, which reason was raised in Appellant’s Application for Rehearing:

The Ohio Power Siting Board erred by issuing the certificate to construct a wind-powered generation facility to Hardin Wind, LCC because the proposed setbacks of the wind turbines from non-participating land owners’ property lines are inadequate to ensure the health, safety, and well-being of the public, in violation of R.C. 4906.10.

¹ Per S.Ct.Prac. R. 10.02(A)(2), the Opinion, Order and Certificate and Entry on Rehearing are attached as Exhibits A and B, respectively.

WHEREFORE, Appellant respectfully submits that the Board's Opinion, Order and Certificate and Entry on Rehearing are unreasonable and unlawful, and should be reversed or modified with instructions to the Board to correct the errors complained of herein.



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CERTIFICATE OF SERVICE

The undersigned hereby certifies the a copy of the foregoing **Notice of Appeal of Appellant Joseph Grant** was served by hand-delivery on the Chairman of the Ohio Power Siting Board, or by leaving a copy at the offices of the Public Utilities Commission of Ohio on July 15, 2014, and served by regular U.S. Mail, postage prepaid on this 14th day of July, 2014 on the following, which are all of the parties to the proceedings before the Board:

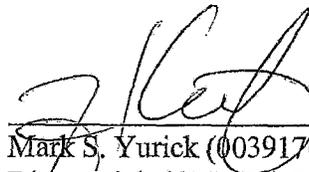
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Counsel for Appellant Joseph J. Grant

CERTIFICATE OF FILING

The undersigned hereby certifies that, in accordance with S.Ct.Prac.R. 3.11(A)(2), a copy of the foregoing **Notice of Appeal of Joseph J. Grant** has been filed with the docketing division of the Public Utilities Commission in accordance sections § 4901-1-02(A) and § 4901-1-36 of the Ohio Administrative Code this 15th day of July, 2014.



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Counsel for Appellant Joseph J. Grant.

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BEFORE

THE OHIO POWER SITING BOARD

In the Matter of the Application of Hardin)
Wind LLC for a Certificate to Construct a) Case No. 13-1177-EL-BGN
Wind-Powered Electric Generation Facility)
in Hardin and Logan Counties, Ohio.)

In the Matter of the Application of Hardin)
Wind LLC for a Certificate of)
Environmental Compatibility and Public) Case No. 13-1767-EL-BSB
Need for a Substation Project in Hardin)
County, Ohio.)

In the Matter of the Application of Hardin)
Wind LLC for a Certificate of)
Environmental Compatibility and Public) Case No. 13-1768-EL-BTX
Need for a 345 kV Transmission Line in)
Hardin County, Ohio.)

OPINION, ORDER, AND CERTIFICATES

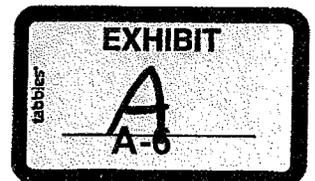
The Board, coming now to consider the above-entitled matters, having appointed its administrative law judge (ALJ) to conduct a public hearing, having reviewed the exhibits introduced into evidence at the adjudicatory hearing held in these matters, including the joint stipulation and recommendation (Stipulation), and being otherwise fully advised, issues its Opinion, Order, and Certificates in these cases, as required by R.C. Chapter 4906.

APPEARANCES:

Vorys, Sater, Seymour and Pease LLP, by M. Howard Petricoff, Michael J. Settineri, and Miranda R. Leppla, 52 East Gay Street, P.O. Box 1008, Columbus, Ohio 43216, on behalf of Hardin Wind, LLC.

Mike DeWine, Ohio Attorney General, Steven L. Beeler and Thomas G. Lindgren, Assistant Attorneys General, Public Utilities Section, 180 East Broad Street, Columbus, Ohio 43215, and Sarah Anderson and Summer Plantz, Assistant Attorneys General, Environmental Enforcement Section, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215, on behalf of Staff.

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



Joe Grant, 20616 State Route 68 North, Belle Center, Ohio 43310, on his own behalf.

OPINION:

I. Summary of the Proceedings

All proceedings before the Board are conducted according to the provisions of R.C. Chapter 4906 and Ohio Adm.Code Chapter 4906.

On May 10, 2013, Hardin Wind LLC (Hardin Wind or Applicant) filed a preapplication notification letter regarding its proposal in Case No 13-1177-EL-BGN to construct a wind-powered electric generating facility in Hardin and Logan counties (Wind Turbine Application). On August 27, 2013, Hardin Wind filed preapplication notification letters regarding its applications in Case Nos. 13-1767-EL-BSB and 13-1768-EL-BTX to construct a point of interconnect (POI) substation to interconnect to the East Lima-Marysville 345 kilovolt (kV) circuit, and its application to construct a 345 kV transmission line to interconnect its wind generating facility to the East Lima-Marysville 345 kV circuit (collectively referred to as the Subst./Transm. Applications). On June 7, 2013, and September 30, 2013, Hardin Wind filed proof that legal notices were published in the *Bellefontaine Examiner* and in *The Kenton Times*, newspapers of general circulation in Logan and Hardin counties, respectively, for the informational public meetings on its applications in these cases held on May 29, 2013, and September 11, 2013, at the American Legion Building, 615 North Center Street, Belle Center, Ohio 43310.

On June 28, 2013, as supplemented on July 1, 2013, Hardin Wind filed its Wind Turbine Application. By Entry of September 17, 2013, the ALJ granted the motion of the Applicant to consolidate the applications in the above-captioned cases for purposes of all public hearings, evidentiary hearings, and public notices. On September 30, 2013, as supplemented on October 1, 2013, Hardin Wind filed the Subst./Transm. Applications, pursuant to Ohio Adm.Code Chapter 4906-17. By letters filed on September 25, 2013, and October 17, 2013, the Board notified Hardin Wind that its applications had been found to be sufficiently complete pursuant to Ohio Adm.Code 4906-1, et seq. On October 25, 2013, Hardin Wind filed certificates of service of its accepted and compete applications in accordance with the requirements of Ohio Adm.Code 4906-5-07.

By Entry issued October 30, 2013, the ALJ scheduled both a local public hearing for January 8, 2014, at the Hardin County Courthouse, Kenton, Ohio and an adjudicatory hearing for January 22, 2014, at the offices of the Public Utilities Commission of Ohio (Commission) in Columbus, Ohio. The October 30, 2013 Entry

also directed Hardin Wind to publish notice of the hearings in accordance with Ohio Adm.Code 4906-5-08.

On various dates, the ALJ granted motions to intervene filed by the Ohio Farm Bureau Federation (Farm Bureau), Joe and Deb Grant, Michael and Diana Shepherd, and Marilyn and Kent Hampton. Subsequent to being granted intervention, Deb Grant, Michael Shepherd, and Diana Shepherd indicated that they no longer wanted to participate as parties in these cases and elected to provide public testimony at the local public hearing. In addition, on January 6, 2014, Marilyn and Kent Hampton filed a notice of withdrawal of their intervention in these cases.

By Entry issued November 8, 2013, the ALJ granted Hardin Wind's motions for waivers of Ohio Adm.Code 4906-15-04(A) to provide fully-developed information on an alternate location for the substation and an alternate route for the transmission line. The Entry also granted a waiver of Ohio Adm.Code 4906-15-04(B)(2)(a)(i), requiring the applicant to identify grade elevations where modified during construction on a map of the proposed facility layout for associated facilities. In addition, the November 8, 2013 Entry granted Hardin Wind's motion for a protective order for certain financial information contained in the Subst./Transm. Applications.

On December 5, 2013, and December 9, 2013, Hardin Wind filed proof of publication of the legal notices of the hearings that appeared in the *Bellefontaine Examiner* and *The Kenton Times*. On December 24, 2013, pursuant to R.C. 4906.07(C), Staff filed reports of its investigations of the Wind Turbine Application and the Subst./Transm. Applications (hereinafter referred to as the Staff Reports). On January 13, 2014, the Applicant filed the second set of proofs of publication indicating that notice was published in the *Bellefontaine Examiner* and *The Kenton Times* on December 27, 2013, describing the applications and listing the hearing dates, in accordance with Ohio Adm.Code 4906-5-08(C)(2).

On January 15, 2014, Hardin Wind filed a notice that it was not developing Turbine No. 16 or the associated access roads and collection lines and that it was proposing a minor shift in the current location for Turbine No. 169 by approximately 399 feet. In addition, Hardin Wind noted that it was proposing to relocate approximately 300 feet of underground collection line between Turbine No. 169 and the substation to accommodate the request of the same property owner that will not be participating in the project. On January 16, 2014, Kent and Marilyn Hampton filed a notice of withdrawal of their intervention. On January 17, 2014, Hardin Wind filed a notice that it was dropping Turbine Nos. 21, 125, and 138 and the collection lines and access roads proposed on the parcels where Turbine Nos. 21 and 138 were proposed. Hardin Wind was also proposing a minor shift in a portion of the access road and collection line from Township Highway 200 to Turbine No. 129.

The local public hearing was held on January 8, 2014, where 23 public witnesses testified. On January 21, 2014, Hardin Wind, Staff, and the Farm Bureau filed a Stipulation. The adjudicatory hearing was held on January 22, 2014. At the adjudicatory hearing, Hardin Wind presented the testimony of Michael Speerschneider, Kenneth Kaliski, and Ryan Rupprecht; Staff presented the testimony of Donald E. Rostofer; the Farm Bureau presented the testimony of Dale R. Arnold; and Mr. Grant testified on his own behalf. At the conclusion of the adjudicatory hearing, Hardin Wind, the Farm Bureau, Staff, and Mr. Grant made closing statements in lieu of briefs.

II. Proposed Facilities and Siting

The wind turbine project will consist of a wind-powered electric generating facility constructed in Hardin and Logan counties, Ohio. The proposed facility will include up to 176 wind turbines and the total generating capacity of the facility will not exceed 300 megawatts (MW) of capacity. Each wind turbine structure will consist of a three-bladed horizontal axis turbine and nacelle on top of a monopole tubular steel tower. Tower height ranges from 479 feet to 492 feet, depending on turbine model, and rotor diameter is between 318 feet to 400 feet. The project will also include a 345 kV electric collection system to transfer electricity from each wind turbine to a collection substation. The collection substation would be enclosed by chain linked fence and would contain a main step-up transformer, control house, and interconnection switchgear and have a footprint of approximately three acres. (Staff Ex. 1 at 7.) The electricity would then be transferred through a 6.3 mile 345 kV transmission line to a newly constructed point of interconnection and then into American Electric Power's (AEP) existing East Lima-Marysville 345 kV electric transmission line and are the subjects of the Subst./Transm. Applications. (App. Ex. 1 at 2; Staff Ex. 2 at 6-7.) The wind turbine project also includes an operations and maintenance building for storing equipment and materials, permanent meteorological towers to collect wind resource data and support performance testing during operation of the wind turbine project, up to 60.5 miles of new or improved access roads to support the facility, and construction of laydown areas to accommodate equipment and material storage construction trailers and construction worker parking during turbine construction. (Staff Ex. 1 at 7-8.)

As discussed in the Staff Report for the Subst./Transm. Applications, the Applicant is proposing to construct a 345 kV transmission line and POI substation, which would connect Hardin Wind's proposed wind turbine project to the existing AEP East Lima-Marysville 345kV transmission line. The preferred transmission line route is approximately 4.8 miles long, traversing through leased land within McDonald Township. The route crosses County Road (CR) 65, Township Road (TR) 210, CR 75, and CR 180 east and northeast of the substation. The route heads northeast through

McDonald Township to the preferred substation site, crossing North Fork Miami River. (Staff Ex. 2 at 6.)

The preferred substation site is located at the POI between the preferred transmission line route and the existing AEP East Lima-Marysville 345 kV transmission line. The site is approximately 5.0 acres, and would be enclosed by a chain link fence. This site is situated along the southeast side of the existing AEP East Lima-Marysville 345 kV transmission line approximately 700 feet north of the intersection of CRs 180 and 85, McDonald Township, Hardin County. (Staff Ex. 2 at 6.)

The alternate transmission line route is approximately 5.3 miles long, traversing through partially leased land within McDonald and Taylor Creek townships. This route heads in an eastward direction cross-country, crossing CR 65, TR 210, and CRs 106, 85, 102, and 200 to the alternate substation site. The alternate substation site is located at the point of interconnection between the alternate transmission line route and the existing AEP East Lima-Marysville 345 kV transmission line. This site is situated along the southeast side of the existing AEP East Lima-Marysville 345 kV transmission line approximately 1200 feet north of CR 200, Taylor Creek Township, Hardin County. (Staff Ex. 2 at 6.)

III. Certification Criteria

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

- (1) The basis of the need for the facility if the facility is an electric transmission line or gas or natural gas transmission line.
- (2) The nature of the probable environmental impact.
- (3) The facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations.
- (4) In the case of an electric transmission line or generating facility, such facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility system and that the facility will serve the interests of electric system economy and reliability.

- (5) The facility will comply with R.C. Chapters 3704, 3734, and 6111 and all rules and standards adopted under those chapters and under R.C. 1501.33, 1501.34, and 4561.32.
- (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 R.C. Chapter 929 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 these cases addresses all of the above-required criteria. In accordance with R.C. Chapter 4906, the Board promulgated rules which are set forth in Ohio Adm.Code Chapter 4906-17 prescribing regulations regarding wind-powered electric generation facilities and associated facilities.

IV. Summary of the Evidence

The Board will review the evidence presented with regard to each of the eight criteria by which we are required to evaluate these applications. Any evidence not specifically addressed herein has nevertheless been considered and weighed by the Board in reaching its final determination.

A. Local Public Hearing

At the local hearing held on October 22, 2013, 21 members of the public testified in opposition to the projects and four members of the public indicated support for the projects. A number of witnesses objected to the placement of any wind turbines in populated areas of Ohio. Multiple witnesses expressed the belief that the decision whether to allow the projects be determined by a secret ballot of registered voters who live within the defined limits of the wind turbine project area. (Tr. I at 12-13, 98, 133, 136.) Several of the witnesses claimed that they had received inadequate notice of the projects (Tr. I at 21 56, 74). Numerous witnesses voiced concerns that the wind turbines would generate unacceptable noise, have maintenance problems, and create risks to human health and life which could result from blade shear and turbine fires (Tr. I at 24, 47, 50-51, 62, 66, 95, 112). Others who testified raised concerns that the projects would decrease the property values of homes in the project areas, have a negative effect on

wildlife, and could impact aircraft operating in the area (Tr. I at 79, 85, 99). Several witnesses believed that the setback requirements were inadequate because they did not require the minimum distances between the wind turbines and residences be measured from property lines, rather than from residences (Tr. I at 55, 58, 76). Other witnesses requested that the tax incentives and the payment in lieu of tax (PILOT) programs for wind projects be eliminated (Tr. I at 65, 67, 72, 128). Several witnesses voiced concern that the parent company of the Applicant was foreign-owned and was attempting to influence the rights of United States (U.S.) citizens and a few witnesses encouraged landowners to attempt to withdraw from their leases (Tr. I at 24, 34, 45, 66, 70, 74, 109, 130).

Those witnesses who expressed support for the projects indicated that they would generate clean renewable electric energy, increase tax revenue for schools and local governments, create construction and manufacturing jobs, and assist economic development efforts in the counties (Tr. I at 15-16, 19, 114, 120, 122). At the conclusion of the hearing, 22 individuals who did not testify, indicated their opposition to the projects, while two others indicated their support for the projects.

In addition to the testimony at the public hearing, the Board received public comments which were docketed in the "public comments" section of the docket card for these case. The public comments raised similar arguments to those expressed at the public hearing, both in favor of and in opposition to the projects. Also, several resolutions opposing the projects were filed in the dockets.

B. Basis of Need - R.C. 4906.10(A)(1)

Staff submits that the basis of need criterion specified under R.C. 4906.10(A)(1) is not applicable to the Wind Turbine Application (Staff Ex. 1 at 20). With respect to the Subst./Transm. Applications, Staff notes that, because the Applicant is not an electric distribution utility in Ohio, it is not required to submit a long-term forecast report (Staff Ex. 2 at 16).

PJM Interconnection LLC (PJM) is the regional transmission organization charged with managing the regional transmission system and the wholesale electricity market and 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 system impacts. PJM has completed feasibility and system impact studies, which show no adverse effects by adding the substation or the transmission line projects to the regional bulk electric system. Without the proposed transmission line and substation, the wind turbine project would be unable to supply energy to the bulk electric system. Staff also determined that the substation and transmission line projects are not being

constructed to relieve congestion or improve the electric grid, but these projects are an integral part of the wind turbine project, as the wind turbine project would be unable to carry the generation output to the local and regional grid without the substation and transmission line projects. Staff concludes that the basis of need has been demonstrated. (Staff Ex. 2 at 16-17.)

Staff recommends that the Board find that the basis of need for the facilities in the Subst./Transm. Applications has been demonstrated and, therefore, complies with the requirements specified in R.C. 4906.10(A)(1), provided that any certificates issued by the Board for the proposed facilities include Staff's recommended conditions.

C. Nature of Probable Environmental Impact - R.C. 4906.10(A)(2)

Pursuant to R.C. 4906.10(A)(2), the Board must determine the nature of the probable environmental impact of the proposed facilities. The following is a summary of the findings of the Staff Reports, regarding the nature of the probable environmental impacts of the wind turbine, substation, and transmission line projects:

- (1) The substation and transmission line projects are located in Hardin County, and the wind turbine project area is located in Hardin and Logan counties, with reported 2010 populations of 32,058 and 45,858, respectively. The projects are not expected to limit the future population growth or have a measurable impact on the demographics of the region.
- (2) Land use in the vicinity of the projects is primarily agricultural and cultivated fields account for approximately 98 percent of all land that would be impacted by construction of the proposed facilities. With regard to the preferred and alternate transmission routes, 15 and 25 residences, respectively, are located within 1,000 feet of those routes. With regard to the preferred and alternate substation site, 2 and 0 residences, respectively, are within 1,000 feet of those sites. There are no residential structures within 100 feet of either the transmission line route or the substation site. The installation of wind turbines, access roads, underground collection facilities, and other ancillary structures would convert 48.7 acres of land from its current use to permanent facility use.

- (3) Logan County does not have any formally adopted, comprehensive land use plans. The Hardin County Comprehensive Economic Development Strategy was completed in 2012 and identifies regional wind resources as a key asset for economic development initiatives and wind energy development as a likely growth sector. The construction of the wind turbine project would not require the removal or relocation of any existing structures.
- (4) The Applicant conducted a cultural resources records review and assessment for the area within a five-mile radius of the wind turbine project and 1,000 feet on each side of the transmission line routes and substation sites. The records review revealed no properties within the study area of the substation and transmission routes but four National Register of Historic Places (NRHP) listed properties, 209 Ohio Historic Inventory Resources structures, 248 Ohio Archaeological Inventory Resources, and 40 cemeteries identified by the Ohio Genealogical Society, within a five-mile radius of the wind turbine project.
- (5) Two recreational areas are located within three miles of the wind turbine project area, both located in Logan County: Indian Lake State Park, which is approximately 0.5 miles from the nearest turbine and is the largest recreational area in the vicinity; and the Classic Swing Driving Range. Four additional recreational areas are located between 3 and 5 miles from the facility. While visual impacts would be reduced to varying degrees by topographical and vegetative screening, the size of the turbines limits the extent to which they can be obscured from view.
- (6) The addition of a new transmission line and substation would change the appearance of the rural setting and the new facility would be visible from roads and nearby residences. The wind turbine project's visual and aesthetic impacts will vary depending on the distance between the viewer and the turbines, the number of turbines visible, the amount of screening, atmospheric conditions, and the presence of other vertical elements, such as utility poles and communication towers.

- (7) Based on the Job and Economic Development Impact model computations, the construction of the proposed wind turbine facility would directly generate employment of 149 on-site construction and facility development personnel. The model suggests another 131 construction and interconnection labor jobs, 19 related service jobs, 884 turbine and supply chain impact jobs, and 266 induced impact jobs for a possible total impact of 1,300 new jobs. These jobs could result in up to \$65,000,000 in total construction wages. The estimate of applicable intangible and capital costs for the substation and transmission line projects has been filed under seal, but is anticipated to increase tax revenue between \$1,800,000 and \$2,700,000.
- (8) The wind turbine project will impact approximately 36 streams and two wetlands primarily due to installation of access roads and crane paths. For the substation and transmission line projects, the preferred study area contains four streams, including approximately 1,693 linear feet of stream within the study area. The preferred route right-of-way contains three streams, including approximately 454 linear feet of stream within the identified 120-foot wide right-of-way. The alternate study area includes three streams, with 1,565 linear feet within the 400-foot wide study area. No wetlands occur within 400 feet of the preferred study area, and two wetlands were identified in the alternate study area.
- (9) The Applicant is currently coordinating with the U.S. Army Corps of Engineers on which a nationwide permit is most preferable, but anticipates coverage by the Nationwide Permit 51 for impacts to water resources. Additional measures to reduce water quality impacts would be taken through the development of a Stormwater Pollution Prevention Plan, as part of the Ohio Environmental Protection Agency's National Pollution Discharge Elimination System (NPDES) permit, to help control potential sedimentation, siltation, and run-off. No ponds or lakes would be impacted by these projects during construction or operation.
- (10) Construction of the wind turbine project would include 0.087 acres of temporary stream impacts and 0.047 acres of

permanent stream impacts. Impacts to wetlands have been completely avoided for the proposed facility. The majority of water resource impacts would be limited to man-made agricultural or roadside ditches. To minimize surface water impacts, the Applicant will bury the majority of the collection lines by horizontal directional drilling (HDD). Due to the use of HDD, Staff would require the Applicant to submit a detailed frac-out contingency plan for Staff review and approval.

- (11) No proposed turbine locations are within the 100-year floodplain. Access roads and collection lines would impact approximately 11.48 acres within the 100-year floodplain, including approximately 8.74 acres of temporary impacts and approximately 2.74 acres of permanent impacts. The Applicant will provide a copy of any floodplain permit required for construction of the substation or transmission line project.
- (12) The Applicant will use best management practices (BMPs) to minimize impacts to surface waters. Wetlands would be designated as "no equipment access areas." A 50-foot buffer would be designated as a "restricted activity area" wherever facility construction traverses or comes in proximity to wetlands and streams. Restricted activities include: no deposition of woody debris; no accumulation of construction debris; no herbicide applications; no degradation of stream banks; no equipment washing or refueling; and no storage of any petroleum or chemical material.
- (13) No significant impacts to any specific plant species are anticipated as a result of these projects. Any impacts to vegetation will be minimized and mitigation measures would be taken to reestablish vegetative cover in disturbed areas, except in active agricultural fields.
- (14) Review of information from the Ohio Department of Natural Resources (ODNR) and the U.S. Fish and Wildlife Service, regarding state and federally listed threatened and endangered plant and animal species, found that the wind turbine project is within the range of four federally-listed species. In addition, one candidate species for federal

listing is known to be present within the facility boundaries. The wind turbine project is also within the range of several state-listed species. ODNR has reviewed the wind turbine project with the understanding that all permanent impacts to identified wetlands would be avoided as stated in the application.

- (15) The primary threat to the Indiana bat would be during operation of the wind turbine facility due to the risk of collision and barotrauma from coming in close proximity to an operational wind turbine. As tree-roosting species, during the non-winter months, this bat species could be negatively impacted by tree clearing associated with construction and maintenance of the facility. In order to reduce potential negative impacts to the Indiana bat, the Applicant will commit to seasonal cutting dates of September 30 through April 1 for removal of suitable Indiana bat habitat trees, if avoidance measures cannot be achieved.
- (16) Assuming a maximum turbine height of 492 feet as proposed in the application, this minimum property line setback equates to a distance of 541 feet. The distance between the nearest nonparticipating property lines varies from 549 to 2,637 feet, averaging 1,198 feet. Using maximum blade lengths assumed in the application, this minimum setback calculates to 950 feet from the turbine base to the exterior of the nearest habitable residential structure. The distances between the nearest nonparticipating residential structures and the turbines ranges between 1,335 to 4,047 feet and average 1,989 feet.
- (17) There will be some modifications to local roads, including the expansion of intersection turns to accommodate specialized turbine component delivery vehicles and conventional construction trucks. Other transportation infrastructure improvements include temporary road gravel fills, pipe to maintain drainage in the ditched areas, and relocation of poles, street signs and other appurtenances. Upon completion of the wind turbine project, the Applicant would return all roadways to their preconstruction conditions or better. The Applicant will obtain all necessary transmission permits and will coordinate with the county

engineer, Ohio Department of Transportation (ODOT), local law enforcement and health and safety officials.

- (18) Both the preferred and alternate routes for the transmission line project cross county roads and township highways, but neither transmission line route crosses state or U.S. highways. The alternate route would cross an abandoned railroad right-of-way in Taylor Creek Township. Both substation sites would be accessed by new gravel-surfaced roads. Access to either transmission line right-of-way would be through the use of existing farm lanes and paths already in place and in use today. Additional stabilization of existing field roads with gravel may be required in order to improve the all-weather accessibility.
- (19) The Applicant has committed to repairing damage to public roads and bridges caused by construction or maintenance activities. Any damaged public roads and bridges would be repaired promptly to their previous condition by the Applicant under the guidance of the appropriate regulatory agency. Any temporary improvements would be removed, unless the county engineer(s) request that they remain. The Applicant would provide financial assurance to the counties that it will restore the public roads it uses to their condition prior to construction or maintenance.
- (20) Staff found no history of seismic activity within the project areas. The Applicant has committed to completing a full detailed geotechnical exploration and evaluation at each turbine site to confirm that there are no issues to preclude development of the projects.
- (21) No impact is expected on public or private water supplies as neither construction nor operation of the proposed facilities would require the use of measurable amounts of water. The Applicant has concluded that the construction of the projects would not have any effect on the groundwater or surface water protected by the source water supply.
- (22) Staff recommends a minimum setback distance from 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. Based on the tallest turbine model proposed for this project, the recommended pipeline setback is 541 feet. Turbine Nos. 7, 8, 10, 13, 14, 15, 25, 52, 55, and 108 are located 541 feet or less from natural gas or hazardous liquid pipelines.

- (23) More recent turbine design, coupled with use of setbacks, has significantly minimized the potential for blade shear impacts. The Applicant has incorporated a wind turbine layout with a residential setback of 950 feet and a property line setback of 541 feet.
- (24) The turbines under consideration by the Applicant have a cut-out speed between 55.9 miles per hour (mph) or less, and have been designed to withstand extreme 10-minute average wind speeds of 95 mph.
- (25) A German Wind Energy Institute consulting company study on ice throw recommends locating turbines a distance of at least 150 percent of the sum of the hub height and rotor diameter from occupied structures. The turbines under consideration would need to be located approximately 1,092 feet from any occupied structure or heavily traveled road. Based on the proposed turbine locations, no turbines under consideration would need to be relocated to satisfy the aforementioned ice throw standard.
- (26) The Applicant recorded average baseline ambient noise levels ranging from 38 to 53 decibels (dBA).
- (27) Most noise impacts associated with the substation and transmission facilities would be confined to the 18-month construction period. The Applicant proposes to mitigate noise impacts by ensuring that construct equipment is properly maintained with installed mufflers. Noise impacts from construction activities associated with the wind turbines will include the operation of various trucking and heavy equipment. Construction noise will be temporary and restricted primarily to daytime working hours.
- (28) Shadow flicker was simulated from the proposed turbines out to 1,220 meters. The analysis identified 48 nonparticipating receptors would be exposed to more than

30 hours of shadow flicker per year by the wind turbine facility, 23 of whom are subject to pending participation agreements. The Applicant also studied the cumulative impact of shadow flicker of both the wind turbine project and an adjacent wind turbine project. The results of this modeling revealed that two nonparticipating receptors would be exposed to more than 30 hours of shadow flicker per year by the combined facilities.

- (29) The National Telecommunications and Information Administration has not identified any concerns regarding blockage of radio frequency transmission systems for these projects.
- (30) No impacts to AM radio or radar systems are expected from operation of the projects. Further study is necessary to ensure that there are no impacts to microwave communication systems and mobile phones. The Applicant must mitigate any impacts to communication systems from operation of the facilities.
- (31) The Applicant has proposed, upon termination of a lease, to dismantle and remove facility improvements and other above-ground property owned or installed by Hardin Wind. Below-ground structures, such as turbine foundations/footings and buried interconnect lines, would be removed to a minimum depth of 36 inches. The Applicant has proposed posting and maintaining financial assurance in an amount of \$5,000 per turbine prior to construction, until such time that the facility has been operational for one year. The Applicant would retain an independent professional engineer licensed to practice in Ohio to develop the estimate of the total cost of decommissioning.

(Staff Ex. 1 at 21-45; Staff Ex. 2 at 18-27.)

In its report, Staff recommends the Board find that the nature of the probable environmental impact has been determined for the projects and that they comply with the requirements specified in R.C. 4906.10(A)(2), provided the certificates issued include Staff's recommendations (Staff Ex. 1 at 45; Staff Ex. 2 at 27).

D. Minimum Adverse Environmental Impact - R.C. 4906.10(A)(3)

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

The site for the wind turbine project was selected based on the quality of the wind resource, the ability to interconnect to the electric grid, available land and compatible land use, site accessibility, and the low risk of impacting sensitive ecological resources. Locations of individual turbines were based on maximizing energy yield, avoidance of sensitive ecological and cultural resources, limiting impacts to agriculture, noise and shadow flicker constraints, and residential and property setbacks. The Applicant's site selection criteria minimize the potential impact of the project while achieving the project's goal of generating renewable electricity. (Staff Ex. 1 at 46.)

Due to the practical necessity to locate the transmission facilities in proximity to the proposed wind turbine project and the limited interconnection points, the Applicant was granted a waiver of fully-developed information on the alternate route and the alternate substation site. Major shifts in the interconnection point would significantly delay and/or add excessive costs to facility construction. The Applicant engaged in a route selection process designed to minimize facility impacts by limiting: length, parcels crossed, sensitive ecological resources, proximity to residences, nearby sensitive land uses (i.e., churches, hospitals, cemeteries, historic sites, and parks), and vegetative clearing. (Staff Ex. 2 at 28.)

The Applicant has sited and designed the wind turbine project to minimize potential impacts while meeting the need for the project. Regional land use plans call for conservation of farmland and economic diversity and the development of a wind turbine, transmission, and substation projects in the region is consistent with those goals. (Staff Ex. 1 at 40; Staff Ex. 2 at 28.)

Agricultural land accounts for approximately 99 percent of all land that would be impacted by construction of the proposed substation and transmission facilities. Less than one percent of this land would be permanently converted into built facilities. The Applicant is committed to minimizing impacts to agricultural land by siting facility components along field edges, keeping agricultural tracts intact, and restoring temporarily-impacted farmland to its original condition, and intends to repair or replace all damaged subsurface drainage features, remove construction debris, and compensate farmers for lost crops. (Staff Ex. 1 at 46; Staff Ex. 2 at 28.)

The Applicant has sited and designed the substation and transmission line projects to minimize potential impacts while meeting the need for the facility. Agricultural land accounts for approximately 99 percent of all land that would be impacted by construction of the proposed facilities. Less than one percent (5.4 acres) of this land would be permanently converted into built facilities. (Staff Ex. 2 at 28.)

The wind turbine, substation, and transmission line projects would have an overall positive impact on the local economy because of the increase in construction spending, wages, purchasing of goods and services, annual lease payments to the local landowners, and local tax revenues. For the wind turbine project, the applicant would make annual payments in lieu of taxes in the amount of approximately \$2,700,000, and for the substation and transmission line projects, the increase in local tax revenues would be between \$1,800,000 and \$2,700,000 annually. (Staff Ex. 1 at 46; Staff Ex. 2 at 28.)

To minimize impacts to wetlands and streams associated with the projects, the Applicant has committed to avoiding in-water work in any primary headwater habitat streams, high quality habitat streams, or streams that support threatened or endangered aquatic species during the fish spawning restricted period of April 15 to June 30. The Applicant has also committed to seasonal tree cutting dates of September 30 through April 1 for suitable Indiana bat habitat. (Staff Ex. 1 at 47; Staff Ex. 2 at 29.)

All turbine locations meet the minimum setback requirements. The Applicant has incorporated a wind turbine layout with a minimum residential setback distance of 914 feet, and a property line setback of 541 feet. The Applicant has indicated that various safety control mechanisms would be utilized to minimize the potential for blade shear and ice throw impacts. During the construction period, local, state, and county roads would experience a temporary increase in truck traffic due to deliveries of equipment and materials. A final routing plan will be developed through discussions with the Hardin and Logan county engineers and performed in conjunction with the ODOT special hauling permit process. (Staff Ex. 1 at 47.)

The Applicant's proposed turbine layout, with the required turbines operating in noise reduction operation mode, is not likely to generate unacceptable levels of noise for nonparticipating residents. The Applicant modeled shadow flicker impacts with respect to the proposed facility and the existing adjacent facility. The model showed that no nonparticipating receptors would be exposed to more than 30 hours of shadow flicker per year by the facility. The proposed wind turbine layout, with the utilization of minimization measures for nonparticipating receptors modeled to receive no more than 30 hours of exposure to shadow flicker, presents the minimum adverse shadow flicker impact. (Staff Ex. 1 at 47.)

No impacts to AM/FM radio or radar systems are expected from the projects. The Applicant would mitigate television reception impacts to the satisfaction of the affected receptor. Further study is recommended for potential impacts to microwave communication systems and mobile phones. (Staff Ex. 1 at 47.)

Staff submits that, because the wind turbine project impacts such a large area, it is imperative that the Applicant secure a financial instrument that best reflects the ability to completely decommission the facility. Because the wind turbine project would not create revenue until it is operational, it is necessary that the decommissioning funds be available at the start of construction. The additional decommissioning requirements outlined in the conditions would ensure that the project meets the minimum adverse environmental impact. (Staff Ex. 1 at 47.)

In looking at the overall environmental impacts of the projects, Staff recommends the Board find that the projects represent the minimum adverse environmental impact and, therefore, comply with the requirements specified in R.C. 4906.10(A)(3), provided that any certificates issued by the Board for the projects include Staff's recommendations. (Staff Ex. 1 at 48; Staff Ex. 2 at 30.)

(E) Electric Power Grid - R.C. 4906.10(A)(4)

Pursuant to R.C. 4906.10(A)(4), the Board must determine that the proposed electric 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 facilities will serve the interests of electric system economy and reliability.

The Applicant plans to use a 34.5 kV underground collection system, which will gather the wind generators output at the collection station. The collection station would transform the voltage from 34.5 kV to 345kV, which would be delivered to the switching station and the proposed substation would be constructed to interconnect the wind turbine project to the regional bulk electric system. (Staff Ex. 1 at 48; Staff Ex. 2 at 16.)

PJM studied the interconnection as a new in-line switching station to be located between AEP's East Lima and Marysville stations. The project would be connected at 345 kV. The Applicant requested a maximum facility interconnection of 300 MW, of which 39 MW would be capacity. Capacity represents the need to have adequate generating resources to ensure that the demand for electricity can be met at all times. For new wind generators, PJM sets the capacity to 13 percent of the total energy output. This equates to a capacity of 39 MW for the wind turbine project. (Staff Ex. 1 at 49; Staff Ex. 2 at 16.)

As noted previously, PJM has completed the feasibility and system impact studies for the wind turbine project, which includes local and regional transmission system impacts. These studies summarized the impacts of adding the proposed wind project to the regional bulk electric system and identified any transmission system upgrades caused by the facility that would be required to maintain the reliability of the regional transmission system. The Applicant has not yet signed a construction service agreement or an interconnection service agreement with PJM for the proposed facility. Signatures on the interconnection service agreement would need to be obtained before PJM will allow the Applicant to interconnect the proposed facility to the bulk electric transmission system. (Staff Ex. 1 at 50.)

PJM also analyzed the bulk electric system, with the wind turbine project interconnected to the transmission grid, for compliance with AEP, North American Electric Reliability Corporation, and PJM reliability criteria. The PJM studies indicated no reliability problem on the local or regional bulk electric systems while operating at full output. The proposed facility is expected to provide reliable generation to the bulk electric transmission system, is consistent with plans for expansion of the regional power system, and would serve the interests of electric system economy and reliability. The facility would serve the public interest, convenience, and necessity by providing additional electrical generation to the regional transmission grid. (Staff Ex. 1 at 53; Staff Ex. 2 at 33.)

Staff recommends the Board find the proposed facilities are 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 facilities would serve the interests of electric system economy and reliability. Therefore, the facilities comply with the requirements specified in R.C. 4906.10(A)(4), provided that any certificates issued by the Board include Staff's recommendations. (Staff Ex. 1 at 53; Staff Ex. 2 at 54.)

(F) Air, Water, Solid Waste, and Aviation - R.C. 4906.10(A)(5)

Pursuant to R.C. 4906.10(A)(5), 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.

Staff states that, since the operation of the facilities will not produce air pollution, there are no applicable air quality limitations, National Ambient Air Quality Standards, prevention of significant deterioration increments, or the need for permits to install and operate an air pollution source. The Applicant intends to minimize emissions during the site clearing and construction by using BMPs, such as applying water or other dust suppressants to prevent emissions. (Staff Ex. 1 at 54; Staff Ex. 2 at 34.)

Hardin Wind indicates that the requirements of R.C. 1501.33 and 1501.34 are not applicable to these projects, since neither construction nor operation of the proposed facilities will require the use of significant amounts of water. Hardin Wind indicates that it would apply for the following permits: an Ohio NPDES construction storm water general permit, a Nationwide Permit 51 under Section 404 of the Clean Water Act, and an Ohio Permit to Install on-site sewage treatment, if necessary. (Staff Ex. 1 at 54-55; Staff Ex. 2 at 34.)

Approximately 8.5 acres of temporary impacts to land use (primarily agriculture) is anticipated during construction of the preferred transmission line route and substation site. The facilities would not significantly alter flow patterns or erosion and, given the small increase in impervious surface within leased land, no significant modifications in the direction, quality, or flow patterns of storm water run-off are anticipated. (Staff Ex. 2 at 35.)

Relative to solid waste, the Staff Reports reflect that the Applicant is not aware of preconstruction solid waste in the proposed areas. Waste generated during construction would consist of a limited amount of plastic, wood, cardboard, metal packing/packaging materials, construction debris, and general refuse. The solid waste generated during the construction or operation of the facilities would be secured and removed from the projects area and disposed of at a licensed disposal facility. The operations and maintenance facility would utilize local solid waste recycling and disposal services. (Staff Ex. 1 at 55; Staff Ex. 2 at 35.)

With regard to aviation, there are two airports located in the vicinity of the proposed facilities. Hardin County Airport, located south of the city of Kenton, and Bellefontaine Regional Airport, located north of the city of Bellefontaine. There are also many smaller municipal or private airfields in proximity to the project area, used primarily for recreational purposes. (Staff Ex. 1 at 55; Staff Ex. 2 at 35.)

For the transmission line structures, the pole heights would range from 107.5 feet to 116.5 feet. The A-frame would be the tallest structure associated with the substation, which would not exceed 100 feet in height. No structures associated with the facility are anticipated to exceed 120 feet in above ground height; therefore, Federal Aviation Administration (FAA)/ODOT jurisdiction would not apply. According to Staff, all turbine locations were submitted to the FAA for review and the FAA has determined that there is no hazard to air navigation. In addition, consistent with R.C. 4561.32, Staff contacted ODOT Office of Aviation (ODOT-OA) in order to coordinate review of potential impacts that the facility might have on local airports. (Staff Ex. 1 at 56; Staff Ex. 2 at 35.)

According to Staff, the Applicant's description of the construction and operation of the facilities would be in compliance with the rules and regulations adopted in conformance with the air and emission requirements in R.C. Chapter 3704, the requirements under R.C. Chapter 6111, and the solid waste disposal requirements of R.C. Chapter 3734. Additionally, Staff implemented FAA and/or ODOT-OA recommendations where deemed justified. Therefore, Staff believes the proposed facilities comply with the requirements specified in R.C. 4906.10(A)(5), provided the certificates issued include Staff's recommendations. (Staff Ex. 1 at 52; Staff Ex. 2 at 36.)

G. Public Interest, Convenience, and Necessity - R.C. 4906.10(A)(6)

Hardin Wind recognizes that the application for a certificate of environmental compatibility and public need must include a description of the Applicant's public interaction programs. The Staff Report for the Wind Turbine Application reflects that Hardin Wind has endeavored to provide general information about wind power, and made specific information about the proposed facility available to the local communities, the media, elected officials, and local civic organizations. The Applicant has shared information through a public informational meeting held in May 2013; official Board of Trustee and Planning Board meetings and presentations to various schools, churches, and clubs; as well as through the Applicant's website. Further, the Applicant maintained a booth at local fairs and festivals to maintain a presence in the communities and hired qualified local residents as project developers to assist in the development of this and other facilities in Ohio. (Staff Ex. 1 at 57.)

According to the Staff Reports, Hardin Wind will maintain, through the term of the projects, an umbrella insurance policy to insure itself and all lessors against loss or liability in an amount no less than \$1 million per occurrence and \$2 million in the aggregate. In addition, the Applicant expects to maintain, throughout the construction and operation phases, umbrella coverage that would, at a minimum, insure against claims of \$10 million per occurrence and \$10 million in the aggregate. This policy will cover any potential personal injury, death, and property damage associated with the operation of the proposed facility. (Staff Ex. 1 at 57.)

The wind turbine project would be placed on private property in accordance with a lease agreement with the property owner. In exchange for allowing the siting of turbines, access roads, and/or other facility components on their land, property owners would be compensated with annual lease payments totaling approximately \$2 million for the entire facility each year it is in operation. Assuming an aggregate nameplate capacity of 300 MW, the increase in local tax revenues would be between \$1,800,000 and \$2,700,000 for the substation and transmission facilities. (Staff Ex. 1 at 57; Staff Ex. 2 at 37.)

The Applicant has committed to complying with safety standards set by the Occupational Safety and Health Administration, the Commission, and equipment specifications. The Applicant has designed the facility to meet or exceed the requirements of the National Electric Safety Code. (Staff Ex. 2 at 37.)

According to Staff, the alternative energy portfolio standard (AEPS), contained within R.C. 4928.64 requires a portion of the electricity sold to retail customers in Ohio to come from renewable energy resources. This requirement, which began in 2009, includes annually increasing renewable benchmarks through 2024. Renewable energy resources, as defined by statute, include wind generating technologies. At least 50 percent of the annual renewable energy requirement must be satisfied with resources located within the state of Ohio. Electric distribution utilities or electric service companies have several options for demonstrating compliance with the AEPS, including entering into a renewable power supply agreement or through the use of renewable energy credits (RECs). To be eligible for use towards a renewable benchmark, RECs must originate from a renewable energy resource facility certified by the Commission as an eligible renewable energy generating facility. Staff believes the proposed facility would likely qualify as an in-state renewable energy resource under the AEPS and, therefore, it could contribute to helping affected entities comply with their statutory requirements under the AEPS. (Staff Ex. 1 at 58.)

Ohio Senate Bill 232, effective June 17, 2010, provides adjustments for the tax structure of qualified energy projects in Ohio. Subject to certain requirements, qualifying wind energy projects are exempt from real and personal property taxation. Owners and lessees of such projects are instead required to make annual PILOT of up to \$9,000/MW of installed capacity. If the Applicant pays the maximum PILOT of \$9,000/MW, the annual payment amount would be approximately \$2,700,000. (Staff Ex. 1 at 58.)

With respect to the substation and transmission line projects, Staff reviewed the electromagnetic fields (EMF) generated by the transmission lines. There have been concerns that EMF may have impacts on human health; however, Staff notes the laboratory studies have failed to establish a strong correlation between exposure to EMF and effects on human health. Nonetheless, because these concerns exist, the Applicant is required to compute the EMF associated with the new circuits. The fields were computed based on the maximum loadings of the transmission lines, which would lead to the highest EMF values that might exist at the proposed substation sites and along the transmission line routes. Staff also determined that the magnetic fields generated by the facility are attenuated very rapidly as the distance from them increases. Past experience has shown that, within 100 feet of the fence line of the substation, the magnetic field is not of sufficient strength to be measureable because the background effects overwhelm the measurements. The Applicant will use a compact

design (mono-pole tangent structures) that reduces EMF in comparison to other installations. (Staff Ex 2 at 37-38.)

Staff recommends the Board find the proposed facilities will serve the public interest, convenience, and necessity. Staff believes the proposed facilities comply with the requirements specified in R.C. 4906.10(A)(6), provided the certificates issued include Staff's recommendations. (Staff Ex. 1 at 59; Staff Ex. 2 at 38.)

H. Agricultural Districts - R.C. 4906.10(A)(7)

Pursuant to R.C. 4906.10(A)(7), the Board must determine the facility's impact on the agricultural viability of any land in an existing agricultural district within the project area of the proposed utility facility.

Within the project area, 15 agricultural district parcels would be permanently impacted by the construction of the proposed facility. There are eight parcels that contain a wind turbine site(s), and 12 parcels that contain collection lines. Approximately 11.9 acres of permanent impacts would occur to agricultural district land. Additionally, the construction of the proposed wind turbine facility would also result in the temporary loss of approximately 185 acres from the Current Agricultural Use Value Program. The Staff Reports indicate that, because of the minimal impact to agricultural land associated with these projects, agricultural district land would not be adversely affected. (Staff Ex. 1 at 55.)

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. 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. 1 at 60.) Along the preferred route, two poles would be placed within one agricultural district parcel. Construction of the preferred substation site would also not affect any agricultural district parcel. (Staff Ex. 2 at 39.)

Therefore, Staff recommends the Board find the impact of the projects on the viability of existing agricultural land in an agricultural district has been determined and that the projects comply with the requirements specified in R.C. 4906.10(A)(7), provided

the certificates issued include Staff's recommendations. (Staff Ex. 1 at 60; Staff Ex. 2 at 39.)

I. Water Conservation Practice - R.C. 4906.10(A)(8)

Pursuant to R.C. 4906.10(A)(8), the proposed facilities must incorporate maximum feasible water conservation practices, considering available technology and the nature and economics of the various alternatives.

According to the Staff Reports, the wind turbine project and the substation and transmission line projects will not require the use of water for operations. Therefore, water consumption associated with the proposed electric generation equipment does not warrant specific conservation efforts. While potable water will be used by the facility's operations and maintenance building employees, the amount of water consumed for these purposes would be immeasurable. Therefore, Staff recommends the Board find the requirements specified in R.C. 4906.10(A)(8) are not applicable to these projects. (Staff Ex. 1 at 57; Staff Ex. 2 at 40.)

V. Stipulation

At the January 22, 2014 adjudicatory hearing, counsel for the Applicant presented a Stipulation for all three applications in these cases, which was docketed on January 21, 2014, and signed by Hardin Wind, Staff, and the Farm Bureau (collectively, stipulating parties). The stipulating parties recommend the Board issue the certificates requested by the Applicant, subject to certain conditions. The following is a summary of the conditions agreed to by the stipulating parties and is not intended to replace or supersede the Stipulation:

Conditions Related to the Wind Turbine Project:

- (1) The facility shall be installed as presented in the applications, and as modified and/or clarified by the Applicant's supplemental filings and further clarified by recommendations in the Staff Report.
- (2) The Applicant shall utilize the equipment and construction practices as described in the applications and as modified and/or clarified in supplemental filings, replies to data requests, and recommendations in the Staff Report.
- (3) The Applicant shall implement the mitigation measures as described in the applications and as modified and/or

clarified in supplemental filings, replies to data requests, and recommendations in the Staff Report.

- (4) At least 30 days before the preconstruction conference the Applicant shall submit to Staff for review a complete copy of the manufacturer's safety manual for the turbine model selected.
- (5) Prior to construction of the wind turbine project, the Applicant shall finalize the Phase I cultural resources survey program for archeological work at turbine locations, access roads, substations, auxiliary lines and laydown areas acceptable to Staff. If the resulting survey work discloses a find of cultural or archaeological significance, or a site that could be eligible for inclusion on the NRHP, the Applicant shall consult with Staff and, if necessary, submit an amendment, modification, or mitigation plan for Staff's acceptance.
- (6) Prior to the commencement of construction, the Applicant shall conduct an architectural survey of the project area. The Applicant shall finalize the work program that outlines areas to be studied in both Hardin and Logan counties in coordination with Staff and the Ohio Historic Preservation Office. If the architectural survey discloses a find of cultural or architectural significance, or a structure that could be eligible for inclusion on the NRHP, the Applicant shall consult with Staff, and, if necessary, submit an amendment, modification, or mitigation plan for Staff's acceptance.
- (7) The Applicant shall have a vegetation management plan that addresses the concerns outlined in the Staff Report. Prior to commencement of construction, the Applicant shall submit this plan to Staff, for review and confirmation that it complies with this condition.
- (8) The Applicant shall provide to Staff and the Ohio Department of Natural Resources (ODNR) Division of Wildlife (DOW) information regarding stream crossing methods used during construction, any minimization efforts employed, and details of any potential impacts of

stream crossings to aquatic species. All minimization efforts to avoid impacts to streams shall occur.

- (9) The Applicant shall avoid Upland Sandpiper suitable nesting habitat during this species' nesting period of April 15 to July 31.
- (10) Sixty days prior to the first turbine becoming operational, the Applicant shall submit a post construction avian and bat monitoring plan for DOW and Staff review and confirmation that it complies with this condition. The Applicant's plan shall be consistent with ODNR-approved, standardized protocol, as outlined in ODNR's On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio. This includes having a sample of turbines that are searched daily. Mitigation initiation timeframes shall be outlined in the DOW approval letter and the Board concurrence letter.
- (11) Construction in Northern Harrier preferred nesting habitat shall be prohibited during the nesting period of May 15 to August 15.
- (12) The Applicant shall adhere to a setback distance 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, from any natural gas or hazardous liquid pipeline in the ground and active at the time of certificate issuance.
- (13) The facility shall be operated so that the facility noise contribution does not result in noise levels at the exterior of any currently existing nonparticipating sensitive receptor that exceed the project area ambient nighttime LEQ (42 dBA) by five dBA. During daytime operation only (7:00 a.m. to 10:00 p.m.), the facility may operate at the greater of: (a) the project area ambient nighttime LEQ (42 dBA) plus five dBA; or, (b) the validly measured ambient LEQ plus five dBA at the location of the sensitive receptor. After commencement of commercial operation, the Applicant shall conduct further review of the impact and possible mitigation of all facility-related noise complaints through its complaint resolution process.

- (14) The facility shall be operated so that the facility shadow flicker contribution does not result in shadow flicker levels that exceed 30 hours per year for any nonparticipating sensitive receptor. The Applicant shall complete a shadow flicker analysis for all inhabited nonparticipating sensitive receptors that have already been modeled to be in excess of 30 hours per year of shadow flicker. The analysis shall show how modeled shadow flicker impacts have been reduced to 30 or fewer hours per year for each such receptor. After commencement of commercial operation, the Applicant shall conduct further review of the impact and possible mitigation of all facility-related shadow flicker complaints through its complaint resolution process.
- (15) The Applicant shall develop a complaint resolution process that shall include procedures for responding to complaints about excessive noise during construction, and excessive noise and excessive shadow flicker caused by operation of the facility. The complaint resolution process shall include procedures by which complaints can be made by the public, how complaints will be tracked by the Applicant, steps that will be taken to interact with the complainant and respond to the complaint, steps that will be taken to verify the merits of the complaint, and steps that will be taken to mitigate valid complaints.
- (16) 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 engineer(s) for review and confirmation of compliance with this condition, at least 30 days prior to the preconstruction conference. The plan shall:
 - (i) Indicate the intended future use of the land following reclamation.
 - (ii) Describe the following: engineering techniques and major equipment to be used in decommissioning and reclamation; a surface water drainage

plan and any proposed impacts that would occur to surface and ground water resources and wetlands; and a plan for backfilling, soil stabilization, compacting, and grading.

- (iii) Provide a detailed timetable for the accomplishment of each major step in the decommissioning plan, including the steps to be taken to comply with applicable air, water, and solid waste laws and regulations and any applicable health and safety standards in effect as of the date of submittal.
- (b) Provide a revised decommissioning plan to the Staff and the county engineer(s) every five years from the commencement of construction. The revised plan shall be applied to each five-year decommissioning cost estimate. Prior to implementation, the decommissioning plan and any revisions shall be reviewed by Staff to confirm compliance with this condition.
- (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 Applicant, 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 Applicant, facility owner and/or facility operator. 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) Not remove any improvements made to the electrical infrastructure if doing so would disrupt the electric grid, unless otherwise approved by the applicable regional transmission organization and interconnection utility.
- (g) Subject to confirmation of compliance with this condition 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. This estimate shall be conducted every five years by the facility owner and/or facility operator.
- (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.

- (i) The decommissioning funds, surety bond, or financial assurance shall be released by the holder of the funds, bond, or financial assurance when the Applicant, facility owner and/or facility operator has demonstrated, and the Board concurs, that decommissioning has been satisfactorily completed, or upon written approval of the Board, in order to implement the decommissioning plan.
- (17) Turbine No. 169 shall be relocated to comply with the applicable setback requirement of 541 feet from all adjacent nonparticipating parcels, and shall remain located on the same parcel as currently proposed. The portion of the collection line system between Turbine No. 169 and the substation that is proposed to be routed on a parcel south of CR 180 and immediately adjacent to the substation parcel shall be relocated to the opposite side of CR 180 (the north side) and to the same parcel to which the preferred transmission line route was relocated as described in the Applicant's December 16, 2013 supplemental filing.
 - (18) The portion of the collection line system and access road from Township Highway 200 currently proposed to be located on the same parcel as Turbine No. 125 shall be relocated in its entirety to the same parcel upon which the access road and collection line system that continues to Turbine No. 129 from Turbine No. 125 is located.

Conditions Related to the Transmission Line and Substation Projects:

- (1) The transmission line shall be installed at the Applicant's preferred route and substation site as presented in the applications, and as modified and/or clarified by the Applicant's supplemental filings and further clarified by recommendations in the Staff Report.

- (2) The Applicant shall utilize the equipment and construction practices as described in the application and as modified and/or clarified in supplemental filings, replies to data requests, and recommendations in the Staff Report.
- (3) The Applicant shall implement the mitigation measures as described in the application and as modified and/or clarified in supplemental filings, replies to data requests, and recommendations in the Staff Report.
- (4) Prior to construction for the transmission facilities, the Applicant shall finalize a Phase I cultural resources survey program for archeological work at pole locations, access roads, substations, and guy-lines acceptable to Staff. If the resulting survey work discloses a find of cultural or archaeological significance, or a site that could be eligible for inclusion on the NRHP, the Applicant shall consult with Staff, and submit an amendment, modification, or mitigation plan for Staff's acceptance.
- (5) Prior to the commencement of construction, the Applicant shall finalize an architectural survey of the project area. This survey may be conducted in conjunction with the acceptable parameters of the wind turbine survey. The Applicant shall submit to Staff and the Ohio Historical Preservation Office a work program that outlines areas to be studied in both Hardin and Logan counties. If the architectural survey discloses a find of cultural or architectural significance, or a structure that could be eligible for inclusion on the NRHP, the Applicant shall consult with Staff, and, if necessary, submit an amendment, modification, or mitigation plan for Staff's acceptance.
- (6) Prior to the commencement of any construction, the Applicant shall prepare a landscape plan for Staff's review and approval that addresses the aesthetic impacts of the substation site, including screening types and locations. The Applicant shall consult with property owners adjacent to the substation parcel in the development of this plan.
- (7) Specific to the property identified as Hardin County, Ohio tax parcel 32-100012.0000 with a mailing address of 7810 CR 180, Kenton, Ohio 43326 (Parcel #2-100), the landscape plan

prepared by the Applicant shall include a screening landscape plan to be installed between the substation and the residence currently owned by Kent and Marilyn Hampton. The Applicant will use best efforts to install screening in such a manner so as to minimize the visibility to a pedestrian of the substation and any other project buildings constructed on the substation site at all points. The Applicant will maintain that screening in good condition for the life of the project.

- (8) The Applicant shall avoid Upland Sandpiper suitable nesting habitat during this species' nesting period of April 15 to July 31.
- (9) The Applicant shall not clear trees that occur within 660 feet of a bald eagle nest or within any woodlot supporting a nest tree. Work within 660 feet of a nest or within the direct line of-sight of a nest shall be restricted from January 15 through July 31.
- (10) The Applicant shall keep lighting at operation and maintenance facilities and substations to the minimum required. Additionally, the Applicant shall use lights with motion or heat sensors or switches to keep lights off when not required, lights should be hooded downward and directed to minimized horizontal and skyward illuminations, and the Applicant shall minimize the use of high-intensity lighting, steady-burning, or bright lights such as sodium vapor, quartz, halogen, or other bright spotlights.

(ft. Ex. 1 at 5-12.)

VI. Conclusion

Ohio Adm.Code 4906-7-09 authorizes parties to Board proceedings to enter into stipulations concerning issues of fact. Although not binding on the Board, pursuant to Ohio Adm.Code 4906-7-09(C), the terms of such an agreement are accorded substantial weight. The standard of review for considering the reasonableness of a stipulation has been discussed in a number of prior Board proceedings. *See, e.g., In re Northwest Ohio Wind Energy, LLC, Case No. 13-197-EL-BGN (Dec. 16, 2013); In re American Transm. Systems Inc., Case No. 12-1727-EL-BSB (Mar. 11, 2013); In re Rolling Hills Generating, LLC, Case No. 12-1669-EL-BGA (May 1, 2013); In re AEP Transm. Co., Inc., Case No. 12-1361-*

EL-BSB (Sept. 13, 2013). The ultimate issue for our consideration is whether the agreement, which embodies considerable time and effort by the signatory parties, is reasonable and should be adopted. In considering the reasonableness of a stipulation, the Board has used the following criteria:

- (1) Is the settlement a product of serious bargaining among capable, knowledgeable parties?
- (2) Does the settlement, as a package, benefit ratepayers and the public interest?
- (3) Does the settlement package violate any important regulatory principle or practice?

Is the settlement a product of serious bargaining among capable, knowledgeable Parties?

Hardin Wind contends that the Stipulation signed by Staff, the Farm Bureau, and Hardin Wind is the product of serious bargaining among capable, knowledgeable parties. Hardin Wind cites the testimony of its witness Michael Speerschneider to demonstrate that the multiple parties engaged in numerous discussions and revisions were made to conditions contained therein. As noted by Mr. Speerschneider, the Stipulation contains minor revisions to clarify certain conditions, addressing additional cultural resources and architectural surveys. In addition, a condition has been added placing limitation of the northern Harrier referred nesting habitat, and a condition requiring surveys for the presence of Eastern Massasauga Rattlesnake. Other conditions have been adopted, including conditions addressing facility decommissioning, operational noise, and tree clearing near Bald Eagle nests or within any wood lots supporting a nest tree. Further, the Stipulation addresses the shift of Turbine No. 169, the shift of collection lines and an access road, a minor relocation of the collection line and access road going to Turbine No. 129, relocation of the north end of the access road going to Turbine No. 12, and several provisions that reflect consideration and response to Staff's recommendations and conditions, as well as additional screening requirements for the projects and the substation. (Tr. II at 16-20, 22-23.) Dale Arnold testified that the Farm Bureau supports the Stipulation and recommends Board approval (Tr. II at 64). Donald Rostofer testified that Staff analyzed the projects and prepared reports of investigation of each project, including Staff Ex. 1, the Staff Report of the wind turbine project, and Staff Ex. 2, the Staff Report of the substation and transmission line projects. Mr. Rostofer also testified that the settlement is the product of serious bargaining among capable knowledgeable parties (Tr. II at 73-75). While not supporting the Stipulation, Mr. Grant acknowledged that he was invited to participate in the negotiations that preceded the filing of the Stipulation and he received drafts of the Stipulation prior to its filing (Tr. II at 71).

The Board finds that the Stipulation appears to be the product of serious bargaining among capable, knowledgeable parties. It is uncontested that, as noted by Hardin Wind and Staff, all parties engaged in multiple discussions and circulated proposals to each other, as well as to Mr. Grant who declined to be a signatory party to the Stipulation. Consequently, we find that, based upon the record, the first prong is satisfied.

Does the settlement, as a package, benefit ratepayers and the public interest?

Hardin Wind claims that the Stipulation, as a package, benefits the public interest. Hardin Wind witness Speerschneider testified that, when completed, the projects will have a generated capacity of 300 MW, an annual estimated output of approximately 788,400 to 998,640 MW hours of clean energy. He also noted that the projects will benefit local economy through additional new jobs, and more payroll and tax revenue. According to Mr. Speerschneider, tax revenue alone is estimated to provide 1.8 to 2.7 million dollars annually. (Tr. II at 22-23, 40.) While he acknowledged that he did not know the exact number, he stated that the Applicant had discussions with many residents both participating and nonparticipating. Mr. Speerschneider explained that, for residents who have concerns that the projects may exceed the allowable noise limits, there is a condition that requires a complaint resolution process that will ensure the turbines will operate in the mode that they should be operated under. (Tr. II at 27-29.) While acknowledging that there will be some nonparticipating residences that will experience shadow flicker, he stated that the Applicant is committed to make sure that those properties will experience less than 30 hours through the use of mitigation measures, including periodic shutdown of the turbines. With respect to the concerns that ice throw is a possibility that coincides with the presence of wind turbines, Mr. Speerschneider testified that there are sensors on each turbine that will cause it to shutdown until the ice on the blades is shed. He noted that proper siting procedures are also an effective mitigation measure. He also indicated that, while blade accidents do occur, they are very rare and the risk of injury is extremely low, noting that, in the hundreds of thousands of operating hours throughout the world, there has been no incident of human injury. (Tr. II at 31-34.)

Hardin Wind witness Speerschneider responded that there is nothing that prohibits building a house that is closer to a turbine than what was originally laid out in the application and, while he did not currently live next to a wind turbine, he had no concerns about living in proximity to a wind turbine. (Tr. II at 34-35.) Mr. Speerschneider stated that the studies that were used by the Applicant to consider the affect of wind turbine projects on residential home sales were based on executed sales transactions that were within the wind turbine project area and included real estate appraisals, bank negotiations mortgages, and recorded sale prices of those homes.

While recognizing that concerns were raised by individuals at the public hearing, he said the Applicant has gone to great lengths to try to alleviate some of those concerns, have conducting analysis through multiple years and studies to design the projects in a way that the issues and impacts are minimized to the level of having minimal impacts to the affected community. (Tr. II at 37-38.) He also noted that the visual images of the projects were part of the applications and were made available to the public at the local libraries and public informational meetings (Tr. II at 42).

Hardin Wind witness Kaliski described the noise studies undertaken by the Applicant and the operational noise caused by the turbines and he indicated turbine noise has been modeled by the Applicant to measure noise levels, and the conditions adopted as part of the Stipulation that will mitigate noise impacts caused by the projects (App. Ex. 2 at 3; Tr. II at 49). He acknowledged that the projects could cause noise to be heard within a home, depending on the sound inside the room, home construction, climate, noises outside the home, masking sounds, whether you have the windows open or closed, the time of day, and the noise level of the home (Tr. II at 46-47, 56). He also explained that, while the turbines are moving to locate the optimal wind conditions, there are motors that create some noise, which does not add to the noise level, and that ceases once the turbines are in optimal placement (Tr. II at 48). He explained that, for one type of wind turbine, called a Stall Regulated turbine, the sound level increases with wind speed; however, for the Pitch Regulated turbine, which is the type of wind turbine to be used by the Applicant, the sound levels increase to a point and then level off and may be reduced due to improved efficiency (Tr. II at 51-52).

Hardin Wind witness Rupprecht described the studies the Applicant undertook related to construction in or near surface waters (App. Ex. 8 at 1-8). He explained that, even if the area receives heavy rain during construction and the stream crossings are not completed, it is highly unlikely that any homes would be flooded. As a condition of the Stipulation, the Applicant will be required to have a stormwater plan preventing storm water from escaping the site and certain measures to put in temporary structures to control the water. He further stated that the conditions of the stormwater prevention plan will make it highly unlikely that heavy construction could cause surface water to contaminate private wells or escape the project site. According to Mr. Rupprecht, as part of the Stipulation, the Applicant is required to restore the sites back to their preconstruction or better status; although some vegetation restoration will be affected by weather (Tr. II at 58-60).

Staff contends that the conditions in the Stipulation benefit the public interest. Staff also recommends the Board approve the Stipulation with all of the conditions (Tr. II at 75.). Mr. Rostofer stated that Staff did not conduct any air turbulence studies on the projects or related to FAA requirements, because Staff is a review agency. Mr. Rostofer also indicated that the possibility of a person being hit by flying debris

from a wind turbine is very low and he could only speculate on scenarios involving wind turbine safety features that might not work properly. (Tr. II at 79.) Mr. Rostofer also explained that the setbacks that will be utilized with the projects are greater for habitable structures than property lines. He also explained that each property owner in the project area would have to decide for themselves whether to construct a new home within the proximity of a wind turbine. (Tr. II at 82-84.)

Upon review, the Board finds that, as a package, the Stipulation benefits the public interest by: resolving the issues raised in these matters without resulting in expensive litigation; and including conditions on the certificate for the wind turbines that modify and relocate certain access roads and collection systems, shift or eliminate turbines, address additional cultural resources and architectural surveys, and limit impacts to certain animal species, including limitations on tree clearing near Bald Eagle nests or within any wood lots supporting a nest tree. In addition, the Stipulation includes several provisions that reflect consideration and response to Staff's recommendations and conditions, as well as additional screening requirements for the wind turbine, substation, and transmission line projects. Further, the Stipulation contains conditions that address concerns raised at the public hearing, including noise, health impacts, and the risk of flooding of residences. We find that, based on the evidence of record, these projects will generate clean renewable electric energy, increase tax revenue for schools and local governments, create construction and manufacturing jobs, and assist economic development efforts in the counties. We also find that there is minimal risk to human life and safety as a result of blade shear or turbine fires. We note that there was insufficient evidence that the projects would negatively impact wildlife or impact property values. While we recognize that certain members of the public in the affected areas of these projects wish to have the decisions on granting or denying wind turbine projects based on a secret ballot of registered voters, the Board is bound by the statutory mandates established by the Ohio General Assembly which do not include such suggested procedures. Further, although there were several public witnesses who expressed concerns that foreign corporations were attempting to influence the rights of U.S. citizens, there was no evidence that the Applicant or any subsidiary or parent company to the Applicant is engaged in any such actions or any type of nefarious activities. As to the suggestions by some of the public witnesses that landowners attempt to void lease agreements entered into with the Applicant, we would encourage any individual with legal questions regarding any legal agreement related to these projects to consult an attorney licensed to practice law both before and after entering into any such agreement. We also find that the proposition that tax incentives and the PILOT programs for wind projects be eliminated are matters enacted by the Ohio General Assembly and not ones on which the Board has any jurisdictional authority.

Does the settlement package violate any important regulatory principle or practice?

Hardin Wind contends that the Stipulation does not violate any important regulatory principle or practice (Tr. II at 23-24). Hardin Wind witness Speerschneider also testified that the Applicant complied with all procedural notice requirements when it provided notice of the project to landowners in the vicinity of the projects. He also explained that the Applicant conducted a lot of public outreach and provided information to the public. (Tr. II at 25, 32.) Staff similarly claims that the Stipulation does not violate any important regulatory principle or practice (Tr. at 75). Mr. Grant acknowledged that, while he was aware of the informational meeting for the wind turbine project, he was unaware that a public information meeting had been held for the substation project or the transmission line project. He also indicated that he was aware that the applications for the projects in these cases are on file with the Board. He testified that he also received a letter from the Applicant concerning the projects. (Tr. II at 69-70.)

Hardin Wind witness Speerschneider noted that, while the Applicant is not required to evaluate the population density of the area in which the projects are planned, the Application reviews the impacts the projects have on residences by considering the statutorily required setback distances between the projects, residences and other buildings, for noise and shadow flicker. In addition to setbacks, he noted that the Applicant reviewed noise impacts, shadow flicker, and setbacks, in order to locate suitable land where turbines could be located within certain thresholds. (Tr. II at 26-27.)

The Board finds that the Stipulation does not violate any important regulatory principle or practice. As noted by the stipulating parties, all public notices were made as required under Board rules and all informational meetings were held as required by Board rules. Further, copies of the applications were made available to all required entities and placed in required locations. Moreover, the conditions contained within the Stipulation adequately address all statutory requirements for such projects.

Based upon the record in these proceedings, the Board finds that all of the criteria established in accordance with R.C. Chapter 4906 are satisfied for the construction, operation, and maintenance of the facilities as described in the Wind Turbine Application and the Subst./Transm. Applications, subject to the conditions set forth in the Stipulation. Accordingly, based upon all of the above, the Board approves and adopts the Stipulation and hereby issues certificates to Hardin Wind pursuant to R.C. Chapter 4906 for the construction, operation, and maintenance of the facilities as proposed in its Wind Turbine Application on June 28, 2013, as supplemented on July 1, 2013, and in its Subst./Transm. Applications filed on September 30, 2013, as

supplemented on October 1, 2013, and subject to the conditions set forth in Section V of this Opinion, Order, and Certificates.

FINDINGS OF FACT AND CONCLUSIONS OF LAW:

- (1) Hardin Wind is a person under R.C. 4906.01(A) and wholly-owned subsidiary of EverPower Wind Holdings, Inc. and licensed to do business in the state of Ohio.
- (2) The wind turbine project qualifies as a major utility facility as defined in R.C. 4906.01(B)(1) and a wind-powered electric generation facility defined in Ohio Adm.Code 4906-17-01. The transmission line project qualifies as a major utility facility as defined in R.C. 4906.01(B)(1) and an electric power transmission line as defined in Ohio Adm.Code 4906-1-01(S). The substation project is a "substantial addition" as defined in Ohio Adm.Code 4906-1-01(O) and Appendix A(7).
- (3) On May 10, 2013, the Applicant filed a preapplication notice of a public informational meeting regarding its Wind Turbine Application. On August 27, 2013, the Applicant filed its preapplication notices of a public informational meeting regarding its Subst./Transm. Applications.
- (4) On June 7, 2013, and September 30, 2013, Hardin Wind filed proof that legal notices were published in the *Bellefontaine Examiner* and in *The Kenton Times*, newspapers of general circulation in Logan and Hardin counties, respectively, for the informational public meetings on its applications in these cases in accordance with Ohio Adm.Code 4906-05-08.
- (5) On May 29, 2013, the Applicant held the public informational meeting in the Wind Turbine Application. On September 11, 2013, the Applicant held a public informational meeting on the Subst./Transm. Applications.
- (6) On June 28, 2013, as supplemented on July 1, 2013, Hardin Wind filed the wind turbine application. On September 30, 2013, as supplemented on October 1, 2013, Hardin Wind filed the Subst./Transm. Applications, pursuant to Ohio Adm.Code Chapter 4906-17.

- (7) By Entry of September 17, 2013, the ALJ granted Hardin Wind's motion to consolidate the applications for purposes of all public hearings, evidentiary hearings, and public notices.
- (8) By letters filed on September 25, 2013, and October 17, 2013, the Board notified Hardin Wind that its applications had been found to be sufficiently complete pursuant to Ohio Adm.Code 4906-1, et seq.
- (9) On October 25, 2013, Hardin Wind filed certificates of service of its accepted and complete applications in the above-captioned cases in accordance with the requirements of Ohio Adm. Code 4906-5-07.
- (10) On October 25, 2013, the Applicant filed a certificate of service indicating that copies of the applications were served upon local public officials and libraries.
- (11) By Entry issued October 30, 2013, the ALJ scheduled a local public hearing for January 8, 2014, at the Hardin County Courthouse in Kenton, Ohio and an adjudicatory hearing for January 22, 2014, at the offices of the Commission, and found the effective date of the filing of the applications was October 25, 2013.
- (12) By Entry issued November 8, 2013, the ALJ granted Hardin Wind's motion for waivers of Ohio Adm.Code 4906-15-04(A) to provide fully-developed information on an alternate location for the substation and an alternate route for the transmission line and Hardin Wind's motion for waiver of Ohio Adm.Code 4906-15-04(B)(2)(a)(i), requiring the applicant to identify grade elevations where modified during construction on a map of the proposed facility layout for associated facilities. The November 8, 2013 Entry also granted Hardin Wind's motion for a protective order for certain financial information contained in the Subst./Transm. Applications.
- (13) On December 5, and 9, 2013, the Applicant filed the first proofs of publication indicating that notice was published in the *Bellefontaine Examiner* and in *The Kenton Times* on November 9, 2013, describing the applications and listing

the hearing dates in accordance with Ohio Adm.Code 4906-5-08(C)(1).

- (14) The Staff Reports for the wind turbine, substation, and transmission line projects were filed on December 24, 2013.
- (15) On various dates, the ALJ granted the motions to intervene filed by the Farm Bureau, Joe and Deb Grant, Michael and Diana Shepherd, and Marilyn and Kent Hampton.
- (16) A local public hearing was held on January 8, 2014, in Kenton, Ohio. At the local public hearing, Michael Shepherd, Diana Shepherd, and Deb Grant testified and gave notice of their withdrawal as parties in these proceedings.
- (17) On January 13, 2014, the Applicant filed the second set of proofs of publication indicating that notice was published in the *Bellefontaine Examiner* and *The Kenton Times* on December 27, 2013, describing the applications and listing the hearing dates in accordance with Ohio Adm.Code 4906-5-08(C)(2).
- (18) On January 15, 2014, the Applicant gave notice of the deletion of Turbine No. 16, from the wind turbine project, along with the related collection lines and access roads for that turbine, and also gave notice of a proposed shift in the location of Turbine No. 169 by 399 feet from the boundary of a property that will not be participating in the project, along with the proposed relocation by approximately 40 feet of a portion of the collection line system between Turbine No. 169 and the substation.
- (19) On January 16, 2014, Marilyn and Kent Hampton filed notice of their withdrawal as parties in these proceedings.
- (20) On January 17, 2014, Hardin Wind filed notice of the deletion of Turbines Nos. 21, 125, and 138, along with notice of a proposed shift in the location of the collection line system and access road to Turbine No. 129.
- (21) On January 21, 2014, Hardin Wind, Staff, and the Farm Bureau filed the Stipulation.

- (22) An adjudicatory hearing commenced on January 22, 2014, in Columbus, Ohio.
- (23) Adequate data on the transmission line project has been provided to determine the need requirement in R.C. 4906.10(A)(1).
- (24) Adequate data on the wind turbine, transmission line, and substation projects has been provided to determine the nature of the probable environmental impact, as required by R.C. 4906.10(A)(2).
- (25) Adequate data has been provided to determine that the facilities described in the wind turbine, transmission line, and substation projects applications and supplemental filings, and subject to the conditions in the Stipulation represents the minimum adverse environmental impact, considering the available technology and nature and economics of the various alternatives, and other pertinent considerations, as required by R.C. 4906.10(A)(3).
- (26) Adequate data has been provided to determine that the wind turbine, transmission line, and substation projects are consistent with regional plans for expansion of the electric power grid of the electric systems serving the state of Ohio and interconnected utility systems, that the facilities will serve the interests of electric system economy and reliability, as required by R.C. 4906.10(A)(4).
- (27) Adequate data on the wind turbine, transmission line, and substation projects has been provided to determine that these facilities will either comply with, or are not subject to, the requirements in the Ohio Revised Code regarding air and water pollution control, withdrawal of waters of the state, solid and hazardous wastes, air navigation, and all regulations there under, as required by R.C. 4906.10(A)(5).
- (28) Adequate data on the wind turbine, transmission line, and substation projects has been provided to determine that the facilities will serve the public interest, convenience, and necessity, as required by R.C. 4906.10(A)(6).

- (29) Adequate data on the wind turbine, transmission line, and substation projects has been provided to determine what the facilities' impact will be on the viability as agricultural land of any land in an existing agricultural district established under R.C. Chapter 929 that is located within the site of the proposed facilities, as required by R.C. 4906.10(A)(7).
- (30) Adequate data on the wind turbine, transmission line, and substation projects has been provided to determine that the facilities as proposed incorporate maximum feasible water conservation practices considering available technology and the nature and economics of the various alternatives, as required by R.C. 4906.10(A)(8).
- (31) The record evidence in these matters provides sufficient factual data to enable the Board to make an informed decision.
- (32) Based on the record, the Board should issue certificates for construction, operation, and maintenance of the wind turbine, transmission line, and substation projects, subject to the conditions set forth in the Stipulation and this Order.

ORDER:

It is, therefore,

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

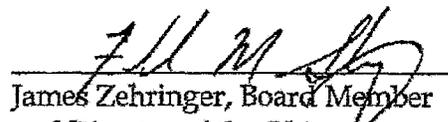
ORDERED, That certificates be issued to Hardin Wind pursuant to R.C. Chapter 4906 for the construction, operation, and maintenance of the wind turbine, substation, and transmission line projects, subject to the conditions set forth in the Stipulation and this Order. It is, further,

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

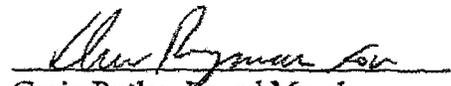
THE OHIO POWER SITING BOARD


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Barcy F. McNeal
Secretary

BEFORE

THE OHIO POWER SITING BOARD

In the Matter of the Application of Hardin)
Wind LLC for a Certificate to Construct a) Case No. 13-1177-EL-BGN
Wind-Powered Electric Generation Facility)
in Hardin and Logan Counties, Ohio.)

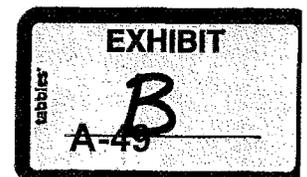
In the Matter of the Application of Hardin)
Wind LLC for a Certificate of)
Environmental Compatibility and Public) Case No. 13-1767-EL-BSB
Need for a Substation Project in Hardin)
County, Ohio.)

In the Matter of the Application of Hardin)
Wind LLC for a Certificate of)
Environmental Compatibility and Public) Case No. 13-1768-EL-BTX
Need for a 345 kV Transmission Line in)
Hardin County, Ohio.)

ENTRY ON REHEARING

The Board finds:

- (1) On June 28, 2013, as supplemented on July 1, 2013, Hardin Wind LLC (Hardin Wind) filed an application in Case No. 13-1177-EL-BGN (*Wind Turbine Case*) to construct a wind-powered electric generating facility in Hardin and Logan counties. On September 30, 2013, as supplemented on October 1, 2013, Hardin Wind filed an application in Case No. 13-1767-EL-BSB to construct a substation (*Substation Case*) and filed an application in Case No. 13-1768-EL-BTX to construct a transmission line (*Transmission Line Case*).
- (2) On March 17, 2014, the Board issued its Opinion, Order, and Certificates (Order) that approved a stipulation entered into between Hardin Wind, Staff, and the Ohio Farm Bureau Federation, and granted the applications in the above cases, subject to 28 conditions.
- (3) R.C. 4906.12 states, in pertinent part, that R.C. 4903.02 to 4903.16 and R.C. 4903.20 to 4903.23 apply to a proceeding or order of the Board as if the Board were the Public Utilities Commission of Ohio (Commission).



- (4) R.C. 4903.10 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. Further, R.C. 4903.10 provides that leave to file an application for rehearing shall not be granted to any person who did not enter an appearance in the proceeding, unless the Commission finds that: (1) the applicant's failure to enter an appearance prior to the Commission's order complained of was due to just cause; and (2) the interests of the applicant were not adequately considered in the proceeding.
- (5) Ohio Adm.Code 4906-7-17(D) 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 R.C. 4903.10.
- (6) On April 16, 2014, Joe Grant, an intervenor party in the *Wind Turbine Case*, filed an application for rehearing of the Order in which he raises five assignments of error. Also on April 16, 2014, James Rudolph, Rich Rudolph, Susan Cornell, Ron Brown, and Charles Ruma (collectively, the Indian Lake Residents), filed a petition to intervene, as well as a request for leave to file an application for rehearing and an application for rehearing, in which they raise two assignments of error.
- (7) On April 28, 2014, Hardin Wind filed a memorandum contra the applications for rehearing filed by Mr. Grant and the Indian Lake Residents. Hardin Wind notes that Mr. Grant sought and was only granted intervention in the *Wind Turbine Case*, that his and the Indian Lake Residents' applications for rehearing do not raise issues related to the *Substation Case* or the *Transmission Line Case*, and, therefore, should not be considered as applications for rehearing of portions of the Order that involve the *Substation Case* or the *Transmission Line Case*. On May 1, 2014, Hardin Wind filed a memorandum contra the Indian Lake Residents' petition to intervene. On May 8, 2014, the Indian Lake Residents filed a reply to Hardin Wind's memorandum contra.

- (8) By Entry issued May 12, 2014, in accordance with Ohio Adm.Code 4906-7-17(I), the administrative law judge (ALJ) granted the applications for rehearing filed by Mr. Grant and the Indian Lake Residents solely for the purpose of affording the Board additional time to consider the issues raised in the applications for rehearing. We first address the application for rehearing filed by Mr. Grant in which he raises five assignments of error.
- (9) In his first assignment of error, Mr. Grant asserts the Order is unlawful and unreasonable because the primary threat to the Indiana bat was not addressed. Mr. Grant maintains that the Order states that the primary threat to the Indiana bat would be during operation of the wind turbine facility due to the risk of collision and barotrauma from coming in close proximity to operational wind turbines; however, the preservation countermeasure of the Order was not to cut trees the bats use for roosting between April and September. According to Mr. Grant, this countermeasure may save the trees that the bats are roosting in, but will not save the bats, who still face the threat of collision and barotrauma from the wind turbines.
- (10) In its memorandum contra, Hardin Wind contends the Order addressed the threat to the Indiana bat and the application for rehearing on this issue should be denied. Hardin Wind notes that, in the application, it thoroughly studied the surrounding habitat and the potential impacts that the wind project would have on the Indian bat. In addition, it conducted mist-netting surveys to determine whether the location of the project was appropriate. It also explained that, under the Order, it must submit a post-construction avian and bat monitoring plan for Staff's and the Ohio Department of Natural Resource's review and it must commit to seasonal tree cutting to protect the bat's habitat during the non-winter months.
- (11) We find no merit to Mr. Grant's first assignment of error. The Board considered the evidence regarding the Indiana bat. This evidence included studies and analysis of the Indiana bat that were discussed in Application Exhibit I (Bat Netting Report) and Application Exhibit J (Summer/Fall 2010 Acoustic Bat Survey Report), as well as in the discussion and analysis of the Indiana bat and other

threatened or endangered species on pages 27, 30-31, 47, 63, and 70 of the Staff Report of Investigation (Staff Report). Mr. Grant failed to present any evidence at hearing that disputed Hardin Wind's studies or Staff's findings regarding these studies. As we indicated in the Order, the Indiana bat is a federally-listed threatened and endangered species, and the threats to the Indiana bat occur during the winter months, by tree clearing associated with construction and maintenance of the facility. In order to address that threat, we required Hardin Wind, as a condition to the certificate, to commit to seasonal cutting for removal of suitable Indiana bat habitat trees. In addition, as to the threat to the Indiana bat as a result from collision or barotrauma, due to the operation of the facility, we note that, as discussed in the Staff Report, Hardin Wind filed an application with the U. S. Fish and Wildlife Service for an Incidental Take Permit under Section 10(a)(1)(B) of the Endangered Species Act, which allows for incidental take of federally-listed species through implementation of a Habitat Conservation Plan. As such, the operations of the projects will be in compliance with all federally required mandates related to threatened and endangered species, including the Indiana bat. Therefore, this request for rehearing should be denied.

- (12) In his second assignment of error, Mr. Grant claims the Order is unlawful and unreasonable because wind turbine setbacks are located too close to property lines. Mr. Grant insists that, while nonparticipating property owners may be safe from ice throw while in their dwellings, they may be in danger if they leave their structures and this limits the full use of their property. Mr. Grant argues that setbacks should be based on the property lines, not residential structures. According to Mr. Grant, this concern also applies to blade shear.
- (13) In its memorandum contra, Hardin Wind argues that the setbacks approved in the *Wind Turbine Case* comply with R.C. 4906.20(B)(2) and Ohio Adm.Code 4906-17-07(C)(1)(c), which require a specific minimum distances for wind turbines in relation to receptors. Hardin Wind notes that the evidence does not support Mr. Grant's claim that setbacks should be from property lines to ensure safety outside of occupied structures. According to Hardin Wind, using 492 feet as the maximum turbine height, as proposed in the

application, the nearest nonparticipating property line must be at least 541 feet. In this case, the property line distances from the turbine bases vary from 549 to 2,367 feet, and average 1,198 feet. Hardin Wind also explains that the setbacks approved by the Board conform to turbine manufacturer setbacks.

- (14) We find no merit to Mr. Grant's second assignment of error. Setback distances have been established by the Ohio General Assembly. R.C. 4906.20 provides that the Board rules shall prescribe a minimum setback for a wind turbine or an economically significant wind farm. "That minimum shall be equal to a horizontal distance, from the turbine's base to the property line of the wind farm property, equal to one and one-tenth times the total height of the turbine structure as measured from its base to the tip of its highest blade and be at least 1,125 feet in horizontal distance from the tip of the turbine's nearest blade at 90 degrees to the exterior of the nearest, habitable, residential structure, if any, located on adjacent property at the time of the certification application." The setbacks established by the General Assembly and under the Order were established 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. In the *Wind Turbine Case*, the Board approved setback distances that exceed the statutory requirements. Also, under the conditions of the certificate, ice detection systems will be used on all turbines that cause the turbines to automatically shutdown in the event of dangerous ice buildup of the turbine blades. More importantly, it would have been contrary to the statutory formula on the part of the Board had it approved setback distances less than setback distances established by the Ohio General Assembly. Therefore, Mr. Grant's request for rehearing on this issue should be denied.
- (15) In his third assignment of error, Mr. Grant asserts the Order is unlawful and unreasonable because there will be excessive shadow flicker. Mr. Grant insists that the shadow flicker analysis identified 48 nonparticipating receptors that would be exposed to more than 30 hours of shadow flicker each year, and he claims that amount is excessive. Mr. Grant argues that shadow flicker causes photosensitive epilepsy and he believes that no nonparticipants have been informed.

of this potential problem. Mr. Grant also contends that the method of measuring shadow flicker per receptor is problematic. According to Mr. Grant, a receptor is measured per receptor and, depending on the amount of land a nonparticipant owns, a person could be exposed to flicker in the morning on one side of your home, flicker in the evening on another side of their home, and flicker at other times on other places on their property, which would constitute more than what was simulated in the model.

- (16) In its memorandum contra, Hardin Wind states that it comprehensively analyzed the spatial relationships between the wind turbine locations and receptors, along with weather characteristics, to determine appropriate setbacks. It also worked with Staff to reduce shadow flicker to nonparticipating landowners. As to Mr. Grant's claim that there is a cumulative effect of shadow flicker across his entire property, Hardin Wind points out that its witness, Michael Speerschneider, addressed this point, noting that shadow flicker outside buildings is less distinctive and has generally not caused impacts on human activity.
- (17) We find no merit to Mr. Grant's third assignment of error. Ohio Adm.Code 4906-17-08 requires that an applicant evaluate and describe the potential impact from shadow flicker at adjacent residential structures and primary roads, including its plans to minimize potential impacts if warranted. A review of the evidence in these proceedings demonstrates that Hardin Wind complied with all applicable Board rules related to shadow flicker. As discussed on page 17 of the Order, Hardin Wind conducted studies on the effects of shadow flicker on nonparticipating residents within a specific distance from the turbines. Further, Application Exhibit Q, a 615-page document, describes the shadow flicker analysis conducted by Hardin Wind. Under the rules, receptors were permanent structures upon which shadows from the turbines would be cast. The analysis of the shadow flicker studies contained within the application, determined that each nonparticipating residence would experience 30 hours of shadow flicker per year by the combined facilities and that the 30 hours of shadow flicker per year presents the minimum adverse shadow flicker impact. The 30 hours includes the total hours of shadow flicker that result per year, regardless of the location around

the residence. In addition, under the conditions of the certificate, Hardin Wind is required to develop a complaint resolution process that includes procedures for responding to complaints about excessive shadow flicker caused by operation of the facility. The Board further notes that, while there will be some nonparticipating residences that will experience shadow flicker as a result of the projects, the Order notes that mitigation measures, including periodic shutdown of the turbines, will be used by Hardin Wind to minimize the impacts of shadow flicker. Also, the issue related to the health impacts to health including the possibility of seizures, was discussed on page 41 of the Staff Report and in Application Exhibit Q, and such information was available to any interested person. Lastly, Mr. Grant failed to cite to any evidence of record that would bring into question any of the findings of the Board with regard to this assignment of error. Therefore, the request for rehearing on this issue should be denied.

- (18) In his fourth assignment of error, Mr. Grant asserts that the Order is unlawful and unreasonable because of excessive noise. Mr. Grant claims that it is unreasonable that Hardin Wind's own expert witness stated that there is a possibility that the turbines and turbine motors may be heard inside a home, when they are operating or moving to find optimal wind conditions, even though they are over 1,092 feet from that home.
- (19) In its memorandum contra, Hardin Wind maintains that noise from the wind turbine project will not be excessive. Hardin Wind notes that its witness, Kenneth Kaliski, acknowledged that it might be possible to hear noise from the wind turbines inside a home, but that would depend on various conditions. Hardin Wind also points to Mr. Kaliski's testimony that turbines can be operating in noise reduced operating mode or automatically curtailed if excessive levels of wind turbine noise arise after a project is in operation. Hardin Wind further states that it conducted two acoustic surveys to determine the existing ambient noise level. Hardin Wind notes that it also is required by the Board certificate to operate the facility so that the noise contribution does not result in noise levels exceeding the project area ambient night time and day time noise levels. In addition, Hardin Wind contends that prior Board decisions

have allowed potential increases in noise due to operation of the wind project and have been found to lead to limited complaints.

- (20) We find no merit to Mr. Grant's fourth assignment of error. As noted on page 17 of the Order, based on the evidence, Hardin Wind's proposed turbine layout, with the required turbines operating in noise reduction operation mode, is not likely to generate unacceptable levels of noise for nonparticipating residents. In addition, under the conditions of the certificate, Hardin Wind is required to conduct further review of the impact and possible mitigation of all facility-related noise complaints, as well as develop a complaint resolution process that shall include procedures for responding to complaints about excessive noise during construction, and excessive noise and excessive shadow flicker caused by operation of the facility. Such review was completed and is part of Application Exhibit P (Noise Impact Study). As to Mr. Kaliski's testimony, we note that, while he acknowledged that the projects could cause noise to be heard within a home, he also qualified that the level of noise would depend on a variety of factors, including the sound inside the room, home construction, climate, noises outside the home, masking sounds, whether you have the windows open or closed, the time of day, and the noise level of the home. Mr. Grant also failed to present any evidence that contradicted the noise studies that were part of Hardin Wind's application. Therefore, his request for rehearing on this issued should be denied.
- (21) In his fifth assignment of error, Mr. Grant asserts that the Order is unlawful and unreasonable because he believes the majority of residents within the wind turbine project area are against the project being constructed; yet the Board decided to approve the project. Mr. Grant posits that the determination of whether the project should be approved and constructed should be decided by a vote by all residents living in the townships affected by the wind project. In addition, Mr. Grant hypothesizes that, because of the size and scope of the project, every person within the affected area should have received individual notice of the project, and such notice should have been served in the early stages of the *Wind Turbine Case*.

- (22) In its memorandum contra, Hardin Wind maintains that it properly complied with every notice requirement under the laws for notifying surrounding property owners. According to Hardin Wind, Mr. Grant has identified a problem that he perceives with the laws of Ohio and the rules of the Board, rather than with Hardin Wind's compliance with those laws and rules. Hardin Wind suggests the appropriate forum to voice the concerns raised by Mr. Grant is with the Ohio legislature, rather than in a certificate application proceeding.
- (23) We find no merit to Mr. Grant's fifth assignment of error. Mr. Grant's belief, expressed in his application for rehearing, as well as at the evidentiary hearing, that the decision whether to approve or deny the application in the *Wind Turbine Case* should be made by a vote of the individuals who live in the areas affected by the project, was similarly voiced by several members of the public at the local public hearing. As we noted on page 36 of the Order: "[w]hile we recognize that certain members of the public in the affected areas of these projects wish to have the decisions on granting or denying wind turbine projects based on a secret ballot of registered voters, the Board is bound by the statutory mandates established by the Ohio General Assembly which do not include such suggested procedures." Pursuant to those mandates, the Ohio General Assembly has determined that the Board is the governmental body with the authority to determine whether an application for a major utility facility, including a wind turbine application, should be approved. There is no statutorily mandated procedure whereby the Board could authorize a ballot of registered voters to be undertaken. Pursuant to R.C. 4906.10, the Board is charged with the statutory duty to render a decision, based upon the record evidence, whether to grant or deny the application as filed, or whether to grant it upon such terms, conditions, or modifications of the construction, operation, or maintenance of the major utility facility as the Board considers appropriate. In these cases, the Board rendered its decision based on the record evidence in accordance with R.C. 4906.10.
- (24) As to the portion of Mr. Grant's fifth assignment of error regarding notice of the application, the Board determined

that appropriate notice in accordance with the statutory requirements was provided by Hardin Wind. R.C. Chapter 4906 and Ohio Adm.Code 4906-5-06 set forth all requirements for notice of an application for a certificate to construct a wind turbine project. R.C. 4906.06(B) requires that an applicant place a copy of the accepted, complete application or place a notice of the availability of such application in the main public library of each political subdivision as referenced in R.C. 4906.06(B). R.C. 4906.06 and Ohio Adm.Code 4906-5-06 require that each application shall be accompanied by proof of service of a copy of such 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. Ohio Adm.Code 4906-05-08 provides that an applicant is also required to provide two public notices of the application and the local public hearing and evidentiary hearing through publication in newspapers of general circulation in those municipal corporations and counties in which the chief executive received service of a copy of the application pursuant to Ohio Adm.Code 4906-5-06. Further, an applicant is required to file proof of all required published notices. R.C. 4906.06 provides that an applicant shall give public notice to persons residing in the municipal corporations and counties entitled to receive notice by publication of a summary of the application in newspapers of general circulation in such area. In these cases, Hardin Wind timely complied with all such requisite notices. In addition, there is no statutory requirement that Hardin Wind provide "personal individual notice" as suggested by Mr. Grant. Accordingly, we find no merit to Mr. Grant's fifth assignment of error and his request for rehearing on this issue should be denied.

- (25) We now turn to the Indian Lake Residents' request for leave to file their application for rehearing, the application for rehearing, and the petition to intervene. As stated above, R.C. 4903.10 provides that an application for rehearing may be filed by any party and that leave to file an application for rehearing shall not be granted to any person who did not enter an appearance in the proceeding, unless the Board finds that the movant satisfies both prongs of the following

two-prong test: (1) the applicant's failure to enter an appearance prior to the order complained of was due to just cause; and (2) the interests of the applicant were not adequately considered in the proceeding. The Indian Lake Residents never sought intervention in these cases prior to their April 16, 2014 filings; thus, they were never parties to these cases. Thus, in order to consider the merits of the application for rehearing, the Board must first find that the Indian Lake Residents meet both of the two criteria in R.C. 4903.10 in order to find that they should be granted leave to file their application for rehearing.

- (26) With regard to the first prong of the test in R.C. 4903.10, the Indian Lake Residents set forth one principal reason why their failure to enter an appearance prior to the Order was due to just cause; namely, they were unaware of the projects until after the Order was issued because they are seasonal residents of Indian Lake. They claim that, as seasonal residents, they were not residing in the Indian Lake area when the notices were published, which occurred after Labor Day, and they do not subscribe to the newspapers in which the notices were published.
- (27) Hardin Wind asserts that no just cause exists. Hardin Wind claims that other Indian Lake Residents were aware of the wind turbine project, including a resident who expressed his concerns at the local public hearing about the wind turbine project's impacts on property values and the visual impacts of the turbines. Hardin Wind also contends that notice of the projects was provided in newspapers of general circulation in the project area on May 18, 2013, and that a public information meeting was held on May 29, 2013, both events occurring prior to Labor Day. Hardin Wind further cites to public correspondence in the dockets of the cases that indicate the general public was aware of the projects prior to the public hearing. Hardin Wind notes that the Board has previously determined that just cause is not established when residents, some with earlier knowledge of the project, and others without earlier knowledge, fail to enter an appearance prior to the Order. *In re Columbus Southern Power Company*, Case No. 08-170-EL-BTX, Order of Rehearing (Mar. 22, 2010); and *In re City of Hamilton and American Municipal Power, Inc.*, Case Nos. 10-2439-EL-BSB et al., Entry on Rehearing (Jan. 23, 2012).

- (28) As to the first prong of this test, we initially note that, as discussed previously in finding 24, the evidence shows that Hardin Wind provided copies of the application to the appropriate locations, as well as complied with all requisite publication requirements for notice of the application and notice of the local public and evidentiary hearings, notwithstanding the Indian Lake Residents' assertion that the notice was inadequate and they first learned about the project after the Order was issued. We also note that the Indian Lake Residents' assertion that these notices appeared after Labor Day, traditionally the first Monday in September, belies the fact that another notice requirement, and Hardin Wind's compliance with said requirement, occurred prior to Labor Day. We point out that Ohio Adm.Code 4906-5-08(B), requires that an applicant hold an informational meeting on a project and provide at least one public notice of the informational meeting in newspapers of general circulation in the project area. The rule also requires that public notice shall include a basic description of the project, and the date, time, and location of the public information meeting. The evidence shows that Hardin Wind held an informational meeting on the projects on May 29, 2013, in Belle Center, Ohio, and on June 7, 2013, Hardin Wind filed proof that legal notices of the informational meeting were published in the *Bellefontaine Examiner* and in *The Kenton Times*, newspapers of general circulation in Logan and Hardin counties, respectively. The Indian Lake Residents failed to explain how the informational meeting, and published notice thereof, would not have been sufficient to provide them sufficient notice of the *Wind Turbine Case*, as those events occurred prior to Labor Day, the date the Indian Lake Residents have asserted was the point in time when they were not living in the area. Further, as pointed out by Hardin Wind, other Indian Lake residents were aware of the *Wind Turbine Case*, as evidenced by their comments filed with the Board in the dockets of these cases and the testimony at the local public hearing. Consequently, the Board finds that the Indian Lake Residents have failed to demonstrate, in accordance with the first prong of the test set forth in R.C. 4903.10, that their failure to enter an appearance prior to the Order was due to just cause.

- (29) With regard to the second prong of the test in R.C. 4903.10, the Indian Lake Residents stated that, while the Ohio Farm Bureau Federation and Mr. Grant were parties to these cases, they did not raise the issues regarding conservation of Indian Lake and the devaluation of lake front property as a consequence of the wind farm. According to the Indian Lake Residents, they are the only ones that will be able to explain to the Board their interest in the conservation and preservation of Indian Lake.
- (30) In response, Hardin asserts that the interests of the Indian Lake Residents related to the visual impacts and effect on property values were addressed and considered by the Board. Hardin Wind points to the Order which noted Staff's summary of the impact of the wind turbines on surrounding recreational areas, including Indian Lake State Park, and Staff's finding that the visual impact would be reduced to varying degrees by topographical and vegetative screening. Hardin Wind also notes that there was testimony of a witness at the local hearing, also part of the record in the *Wind Turbine Case*, who was a real estate agent who presented her analysis of the impact of wind turbine projects on real estate property values. In addition, Hardin Wind points to the testimony of its own witness, Mr. Speerschneider, who summarized a study on property values performed by the Lawrence Berkley National Laboratories.
- (31) As to the second prong of the test, the Board finds that, even had the Indian Lake Residents demonstrated that their failure to enter an appearance was due to just cause, the Board cannot find that their interests were not adequately considered in these proceedings. As reflected on the record in these cases, the concerns that the project would depreciate property values of home owners was extensively analyzed by Hardin Wind, and exhibits and testimony concerning this issue were presented at the hearings. In addition, as pointed out by Hardin Wind, several of the comments received by the Board spoke directly to the issue related the impact the projects would have on property values at Indian Lake. Further, at the evidentiary hearing, one of Hardin Wind's witnesses, Mr. Speerschneider presented testimony and was cross-examined by Mr. Grant over this specific issue, and the studies relied upon by Hardin Wind that analyzed the

impact on property values from wind turbine projects. In the Order, the Board found that this issue was investigated during the course of the proceedings and was adequately addressed. Additionally, the Board was fully cognizant and noted on page 9 of the Order that the addition of a new transmission line and substation, as well as the addition of wind turbines, would change the appearance of the rural setting and the new facility would be visible from roads and nearby residences. It was also noted that the wind turbine project's visual and aesthetic impacts will vary depending on the distance between the viewer and the turbines, the number of turbines visible, the amount of screening, atmospheric conditions, and the presence of other vertical elements, such as utility poles and communication towers.

- (32) To the claim that the Board needs to take into account the conservation and preservation of Indian Lake, we note that Indian Lake is specifically discussed, at page 9 of the Order, as the largest recreational area in the vicinity and is 0.5 miles from the nearest turbine. Indian Lake is also identified in many portions of the Application (pages 30, 43, 83-84, 101, 104, 116-117, 132, Exhibit G (Socioeconomic Report), Exhibit M (Cultural Resources), and Exhibit R (Visual Impact Assessment) and in the Staff Report pages 22-23, 30, 58. The Order also noted the nature of the probable environmental impact of the projects, including impacts to cultural resources, land uses, population, archaeological resources, historic resources, recreational areas, including Indian Lake State Park, visual impacts, economic development, natural resources, noise, water, plants and animals, including impacts to threatened and endangered species, private and public water supplies, impacts to public roads, noise, sensitive ecological resources, and agriculture. In addition, the Board was aware of the issue of conservation of land, flora, and fauna that could be impacted by the project, including Indian Lake and the property surrounding Indian Lake. In the Order, there is extensive evidence regarding the environmental effects of the project that was fully considered by the Board. Many of the conditions on the certificate are specifically designed to reduce the impact on wildlife and aesthetics, as well as the conservation and preservation of land in the project area, and other conditions that will occur as a result of the project. Consequently, the

Board cannot find that the Indian Lake Residents satisfied the second prong of the statutory test because their interests were adequately considered in the proceedings.

- (33) Because the Board has found that the interests of the Indian Lake Residents were adequately considered in these proceedings, and that the movants failed to demonstrate that their failure to enter an appearance prior to the Order complained of was due to just cause, the Board finds that the Indian Lake Residents have failed to demonstrate grounds to file an application for rehearing pursuant to R.C. 4903.10. Consequently, the Board declines to grant the Indian Lake Residents leave to file an application for rehearing, and the application will not be considered on its substantive merits.
- (34) We now turn to the Indian Lake Residents' petition to intervene. Ohio Adm.Code 4906-7-04 provides, in pertinent part, that a person desiring to intervene in a Board proceeding should prepare a motion for leave to intervene, setting forth the grounds for proposed intervention and the petitioner's interest in the proceeding, and file the petition within 30 days after the date of publication of the notice required in accordance with Ohio Adm.Code 4906-5-08(C)(1). Further, Ohio Adm.Code 4906-7-04(C) provides that an ALJ may, in extraordinary circumstances and for good cause shown, grant an untimely petition for leave to intervene. In such circumstances, the petition must contain a statement of good cause for failing to timely file and shall be granted only upon a finding that extraordinary circumstances justify granting the petition and that the intervenor agrees to be bound by agreements previously made in the proceeding.
- (35) As discussed previously in finding 24, Hardin Wind filed their proofs of service reflecting that the appropriate legal notices of the local public and adjudicatory hearings were published in newspapers of general circulation, and the notices discussed the deadline for intervention and provided the Board's address. Given the date of publication of the notices, under Ohio Adm.Code 4906-7-04, petitions to intervene were due by January 2, 2014. Here, the petition to intervene filed by the Indian Lake Residents is untimely as it was filed 103 days after the filing deadline for petitions to intervene, and after the Board issued the Order. Thus, we

must turn to the issue as to whether extraordinary circumstances exist in these cases sufficient to warrant granting the motion to intervene.

- (36) The Indian Lake Residents assert that extraordinary circumstances justify their intervention because the proceedings took place in the winter, when they were not residing by Indian Lake. They claim that, even had they had constructive notice of the application, they would not have seen Indian Lake in the photographs of the project area. They also contend that their interests include the conservation of the natural landscape of Indian Lake and the devaluation of their real property in close proximity to the installation of wind turbines and those interests were not a proper part of the consideration by the Board. According to the Indian Lake Residents, only they will be able to explain to the Board their interests in the conservation and preservation of Indian Lake. In addition, they assert that their interests in the conservation and preservation of Indian Lake were not sufficiently addressed during the proceedings and should outweigh any other factor that the Board considers in determining whether to grant intervention. They believe their intervention will contribute to the just and expeditious resolution of the issues in the proceedings and will not unduly delay the proceedings.
- (37) We find no merit to the claim that extraordinary circumstances exist to warrant granting the motion to intervene. The published notice that was provided by Hardin Wind is the statutorily required and accepted method of notice in Board proceedings involving applications for wind turbine projects, and Hardin Wind timely fulfilled all of the notice requirements as prescribed by Ohio statute and Board rules. Further, there is no statutory obligation on the part of Hardin Wind to provide any additional notice, simply because some potentially affected persons do not see the publication of the legal notice. The purpose of laws regulating the publication of legal notice is to assure that published legal material will come to the attention of persons in the area affected, but it does not guarantee that all persons affected will receive actual notice. Once an applicant has complied with its statutory obligation to publish legal notice, it is then incumbent upon those persons potentially affected by the

project to partake in reasonable due diligence regarding their properties and interests. Personal notice is not required by statute and the Board believes that it would be impossible for companies to personally contact every potential person that might or could be affected by an application filed at the Board and to provide them with personal notice of the proceedings.

- (38) We also find no merit to the claim that the two interests cited by the Indian Lake Residents warrant the Board granting the petition to intervene. As discussed previously in findings 31 and 32, the issue related to the impacts on property values and the conservation and preservation of land, including to Indian Lake, were both parts of the record in these cases and were fully considered by the Board. We further note that Application Exhibit R (Visual Impact Assessment) includes multiple photographs showing Indian Lake, as well as a variety of maps that clearly identify Indian Lake in proximity to some of the wind turbine locations approved in the *Wind Turbine Case*. Consequently, the Board finds that the petition for leave to intervene filed by the Indian Lake Residents fails to comply with Ohio Adm.Code 4906-7-04 and should be denied.

It is, therefore,

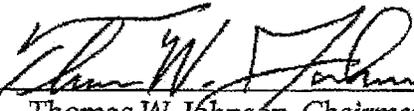
ORDERED, That James Rudolph, Rich Rudolph, Susan Cornell, Ron Brown, and Charles Ruma be denied leave to file applications for rehearing. It is, further,

ORDERED, That the petitions for leave to intervene filed by James Rudolph, Rich Rudolph, Susan Cornell, Ron Brown, and Charles Ruma be denied. It is, further,

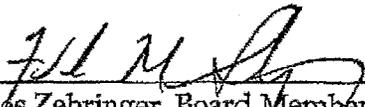
ORDERED, That the application for rehearing filed by Joe Grant be denied. It is, further,

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

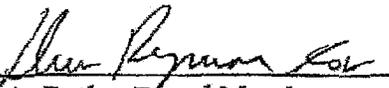
THE OHIO POWER SITING BOARD


Thomas W. Johnson, Chairman
Public Utilities Commission of Ohio

David Goodman, Board Member
and Director of the Ohio
Development Services Agency


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


Lance Himes, Board
Member and Interim Director of the
Ohio Department of Health


Craig Butler, Board Member
and Director of the Ohio
Environmental Protection Agency


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

Jeffrey J. Lechak, Board Member
and Public Member

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MAY 19 2014


Barcy F. McNeal
Secretary

FILE

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BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Hardin Wind LLC, for a Certificate to Construct a Wind-Powered Electric Generating Facility in Hardin and Logan Counties, Ohio : Case No. 13-1177-EL-BGN

In the Matter of the Application of Hardin Wind LLC for a Certificate of Environmental Compatibility and Public Need for a Substation Project in Hardin County : Case No. 13-1767-EL-BSB

In the Matter of the Application of Hardin Wind LLC for a Certificate of Environmental Compatibility and Public Need for a 345kV Transmission Line in Hardin County : Case No. 13-1768-EL-BTX

APPLICATION FOR REHEARING

Pursuant to 4903.10, Ohio Revised Code ("RC") and Rule 4901-1-35, Ohio Administrative Code ("OAC"), I respectfully file this Application for Rehearing of the Ohio Power Siting Board's ("OPSB") March 17, 2014 Opinion and Order (the "Opinion and Order") approving the Stipulation and Recommendation and issuing the certificates to Hardin Wind, LLC for the construction, operation, and maintenance of the Scioto Ridge Wind Farm. This Application for Rehearing requests an Order on Rehearing finding that the OPSB's March 17 2014 Opinion and Order is unreasonable and unlawful for the following reasons:

- A. The Opinion and Order is unlawful and unreasonable because the primary threat to the Indiana Bat was not addressed.
- B. The Opinion and Order is unlawful and unreasonable because wind turbine setbacks are located to close to the property lines.

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.
Technician SM Date Processed APR 16 2014

- C. **The Opinion and Order is unlawful and unreasonable because of the excessive shadow flicker.**
- D. **The Opinion and Order is unlawful and unreasonable because of the excessive turbine noise.**
- E. **The Opinion and Order is unlawful and unreasonable because the majority of the residents within the wind turbine project are against the project being constructed.**

Respectfully submitted,



Joe Grant
20616 US Highway 68N
Belle Center, OH 43310

MEMORANDUM IN SUPPORT

A. The Opinion and Order is unlawful and unreasonable because the primary threat to the Indiana Bat was not addressed.

Page 11 section 14 of the Opinion and Order; Ohio Department of Natural Resources and the US Fish and Wildlife Service, regarding State and Federal listed threaten and endangered plant and animal species found that the wind turbine project is within the range of four federally listed species. In addition one candidate species for Federal listing is known to be present within the facility boundaries.

Page 12 section 15 of the Opinion and Order; states the primary threat to the Indiana Bat would be during operation of the wind turbine facility do to the risk of collision and barotrauma from coming in close proximity to operational wind turbine. Preservation countermeasure was not to cut trees the bat uses for roosting between April 2 and September 29. This may save the tree that the bat is roosting in but the primary threat of collision and barotrauma from 176 wind turbines would cause death to many if not all the Indiana Bats within the wind turbine project.

B. The Opinion and Order is unlawful and unreasonable because wind turbine setbacks are located to close to the property lines.

Page 14 section 25 of the Opinion and Order; A German Wind Energy Institute consulting company study on ice throw recommends locating turbines a distance of at least 150% of the sum of the hub height and rotor diameter from occupied structures. The turbines under consideration would need to be located approximately 1092 feet from any occupied structure or heavily traveled road. Based on turbines proposed locations no turbine would need to be moved.

Page 12 section 16 of the Opinion and Order states the distance between the nearest non-participating property lines varies from 549 to 2637 feet. Non-participants

living safely in occupied structures may be 1092 feet away from turbine provided they never leave the structure, but if they do they may be in danger of ice throw. This would limit the full use of non-participants land. This is why setbacks should be based on property lines not residential structures. This concern applies to blade shear also. The report did not reference any studies on blade shear referencing to setback differences, which I feel could be equal to or a greater distance than ice throw.

C. The Opinion and Order is unlawful and unreasonable because of excessive shadow flicker.

Page 14 section 28 of the Opinion and Order; Shadow flicker was simulated from the proposed turbines out to 1220 meters. The analysis identified 48 non-participating receptors would be exposed to more than 30 hours of shadow flicker per year by the wind turbine facility. I feel 30 hours or more to be unreasonably excessive would no mention of counter measuring. Shadow flicker could cause seizures in residents who have photosensitive epilepsy. To the best of my knowledge, no non-participants have been informed that this could be a potential problem. The definition of a receptor is one square meter one meter off the ground. The shadow flicker is measured per receptor, 633 total. Depending on the amount of land a non-participant owns, they could be exposed to more than what is simulated in the model. For example, you could have two hours of shadow flicker in the morning on your front porch and then two more hours of shadow flicker when you go several acres away to fish in your pond on your property. I personally own 18 acres and a receptor equaling one square meter is very small part of my property.

D. The Opinion and Order is unlawful and unreasonable because of excessive noise.

Page 35, paragraph 2; Hardin Wind's witness Kaliski described the noise studies undertaken by the applicant and the operational noise caused by the turbines. Kaliski acknowledged that the project could cause noise to be heard within a home depending on various conditions that he listed. He also explained that while the turbines are moving to locate the optimal wind condition there are motors that create some noise. I find it unreasonable that Hardin Wind's own expert witness states there is a possibility that you could hear the turbines inside your home even though they are over 1092 feet from your home and that when it moves to find a new wind position the turbine makes even greater noise.

E. The Opinion and Order is unlawful and unreasonable because of majority of the residents within the wind turbine project are against the project being constructed.

Many of the non-participant residents that live in the area were not aware the wind farm was to be constructed. This is partly due to a previous wind energy company starting procedures for constructing a wind farm and then deciding not to go forward and many thought it was over. Another reason is due to poor out dated communication techniques, many people received news and information through new electronic methods and less of the older traditional methods. It is my belief that a project on this size and scope that will have far reaching effects on the lives of thousands living within the footprints of the wind farm should not only be printed in local newspapers, but also each and every person within the affected area should be served a personal individual notice. Their personal individual notices need to be served in the early stages of the project, not after leases are signed, maps drawn, railroads are built and money

exchanges hands. We live in a democracy where issues are voted on and the majority rules. Let's not forget the Boston Tea Party, protesting taxation without representation. The residents and local government officials, inside the wind farm area, need to have a say early in the project creation, not years later after leases are signed and millions of dollars are spent. The lack of good communication early in the project has led many non-participants in the project area to feel some government officials; wind energy company and lease holders are trying to keep everything hush hush until it is too late to stop the wind farm from being constructed. Many non-participants in the footprint of the project, myself included, feel it is not right for 70 or so large land owners to sign leases with the wind energy company allowing 173 turbines that are 500 feet tall to be built. Many of the turbines will be close to their homes and in some cases, surrounding their homes, forcing them to be subjected to the negative impacts of the massive wind turbines. Negative impacts include noise, shadow flickering, devaluation of property, and loss of scenic views from their homes just to name a few. Many non-participants and myself, believe that a project of this magnitude should be held to a vote.

To state a short quote from a famous speech from our nation's 16th President, Abraham Lincoln's – Gettysburg Address, delivered on November 19, 1863:

“and that government of the people, by the people,
for the people, shall not perish from the earth.”

With that in mind, how can 70 or so large landowners who have leases, and are going to make money from the project, some of which do not even live in the wind farm area, have a right to construct 500 foot turbines forcing several thousand residents, that are non-participants that live within the confines of the project area, to put up with the

negative impact of the turbines? If government is truly of the people, by the people, for the people, then the non-participants need a voice. With no disrespect to the siting board, complaining to strangers on the siting board in a city 60 miles away from the project area, to people that do not and probably never will live in the project area is not what I call a voice. What I call a voice is for the affected people inside the project area, to vote on whether the project should be constructed or not. I believe items that affect residents on local levels should be dealt with on local levels. I believe residents living in the townships affected by the Scioto Ridge Wind Farm, should be allowed to cast a vote on approval or disapproval of the project. Win or lose, pass or fail, this gives all parties a chance to have their voice, not just heard, but put into action. The Declaration of Independence preamble starts out with these three famous words, We the People, not "We" the government, not "We" the Ohio Power Siting Board, but "We the People".

I request the Siting Board allow residents in the effect townships to cast a vote on the approval or disapproval of the Scioto Ridge Wind Farm project.

III. Conclusion.

For the foregoing reasons, I respectfully urge the Ohio Power Siting Board to grant rehearing in this case.

Respectfully submitted,



Joe Grant
20616 US Highway 68N
Belle Center, OH 43310

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served this 16th day of April,

2014 by U.S. Mail upon the following:

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Miranda R. Leppla
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Public Utilities Section
Office of Ohio Attorney General Mike DeWine
180 E. Broad Street, 6th Floor
Columbus, OH 43215


Joe Grant

31547815.1

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TITLE 49. PUBLIC UTILITIES
CHAPTER 4903. PUBLIC UTILITIES COMMISSION -- HEARINGS

Go to the Ohio Code Archive Directory

ORC Ann. 4903.12 (2014)

§ 4903.12. Jurisdiction

No court other than the supreme court shall have power to review, suspend, or delay any order made by the public utilities commission, or enjoin, restrain, or interfere with the commission or any public utilities commissioner in the performance of official duties. A writ of mandamus shall not be issued against the commission or any commissioner by any court other than the supreme court.

HISTORY:

GC § 549; 103 v 804, § 38; Bureau of Code Revision. Eff 10-1-53.

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TITLE 49. PUBLIC UTILITIES
CHAPTER 4906. POWER SITING

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ORC Ann. 4906.04 (2014)

§ 4906.04. Construction of major utility unlawful without a certificate

No person shall commence to construct a major utility facility in this state without first having obtained a certificate for the facility. The replacement of an existing facility with a like facility, as determined by the power siting board, shall not constitute construction of a major utility facility. Such replacement of a like facility is not exempt from any other requirements of state or local laws or regulations. Any facility, with respect to which such a certificate is required, shall thereafter be constructed, operated, and maintained in conformity with such certificate and any terms, conditions, and modifications contained therein. A certificate may only be issued pursuant to Chapter 4906. of the Revised Code.

A certificate may be transferred, subject to the approval of the board, to a person who agrees to comply with the terms, conditions, and modifications contained therein.

HISTORY:

134 v S 397 (Eff 10-23-72); 139 v H 694. Eff 11-15-81.

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TITLE 49. PUBLIC UTILITIES
CHAPTER 4906. POWER SITING

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ORC Ann. 4906.07 (2014)

§ 4906.07. Scheduling of hearing on application; investigation and report

(A) Upon the receipt of an application complying with *section 4906.06 of the Revised Code*, the power siting board shall promptly fix a date for a public hearing thereon, not less than sixty nor more than ninety days after such receipt, and shall conclude the proceeding as expeditiously as practicable.

(B) On an application for an amendment of a certificate, the board shall hold a hearing in the same manner as a hearing is held on an application for a certificate if the proposed change in the facility would result in any material increase in any environmental impact of the facility or a substantial change in the location of all or a portion of such facility other than as provided in the alternates set forth in the application.

(C) The chairperson of the power siting board shall cause each application filed with the board to be investigated and shall, not less than fifteen days prior to the date any application is set for hearing submit a written report to the board and to the applicant. A copy of such report shall be made available to any person upon request. Such report shall set forth the nature of the investigation, and shall contain recommended findings with regard to division (A) of *section 4906.10 of the Revised Code* and shall become part of the record and served upon all parties to the proceeding.

HISTORY:

134 v S 397 (Eff 10-23-72); 139 v H 694 (Eff 11-15-81); 141 v H 381, Eff 10-17-85; 2012 SB 315, § 101.01, eff. Sept. 10, 2012.

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TITLE 49. PUBLIC UTILITIES
CHAPTER 4906. POWER SITING

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ORC Ann. 4906.10 (2014)

§ 4906.10. Guidelines for granting or denying certificate; facility must comply with air, water, and solid waste requirements; facility subject to enforcement and monitoring powers of director of environmental protection

(A) The power siting board shall render a decision upon the record either granting or denying the application as filed, or granting it upon such terms, conditions, or modifications of the construction, operation, or maintenance of the major utility facility as the board considers appropriate. The certificate shall be conditioned upon the facility being in compliance with standards and rules adopted under sections 1501.33, 1501.34, and 4561.32 and Chapters 3704., 3734., and 6111. of the Revised Code. An applicant may withdraw an application if the board grants a certificate on terms, conditions, or modifications other than those proposed by the applicant in the application. The period of initial operation under a certificate shall expire two years after the date on which electric power is first generated by the facility. During the period of initial operation, the facility shall be subject to the enforcement and monitoring powers of the director of environmental protection under Chapters 3704., 3734., and 6111. of the Revised Code and to the emergency provisions under those chapters. If a major utility facility constructed in accordance with the terms and conditions of its certificate is unable to operate in compliance with all applicable requirements of state laws, rules, and standards pertaining to air pollution, the facility may apply to the director of environmental protection for a conditional operating permit under division (G) of *section 3704.03 of the Revised Code* and the rules adopted thereunder. The operation of a major utility facility in compliance with a conditional operating permit is not in violation of its certificate. After the expiration of the period of initial operation of a major utility facility, the facility shall be under the jurisdiction of the environmental protection agency and shall comply with all laws, rules, and standards pertaining to air pollution, water pollution, and solid and hazardous waste disposal.

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 pipeline;
- (2) The nature of the probable environmental impact;
- (3) 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;
- (4) In the case of an electric transmission line or generating facility, that the facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems and that the facility will serve the interests of electric system economy and reliability;

(5) That the facility will comply with Chapters 3704., 3734., and 6111. of the Revised Code and all rules and standards adopted under those chapters and under *sections 1501.33, 1501.34, and 4561.32 of the Revised Code*. In determining whether the facility will comply with all rules and standards adopted under *section 4561.32 of the Revised Code*, the board shall consult with the office of aviation of the division of multi-modal planning and programs of the department of transportation under *section 4561.341 of the Revised Code*.

(6) That the facility will serve the public interest, convenience, and necessity;

(7) In addition to the provisions contained in divisions (A)(1) to (6) of this section and rules adopted under those divisions, what its impact will be on the viability as agricultural land of any land in an existing agricultural district established under Chapter 929. of the Revised Code that is located within the site and alternative site of the proposed major utility facility. Rules adopted to evaluate impact under division (A)(7) of this section shall not require the compilation, creation, submission, or production of any information, document, or other data pertaining to land not located within the site and alternative site.

(8) That the facility incorporates maximum feasible water conservation practices as determined by the board, considering available technology and the nature and economics of the various alternatives.

(B) If the board determines that the location of all or a part of the proposed facility should be modified, it may condition its certificate upon that modification, provided that the municipal corporations and counties, and persons residing therein, affected by the modification shall have been given reasonable notice thereof.

(C) A copy of the decision and any opinion issued therewith shall be served upon each party.

HISTORY:

134 v S 397 (Eff 10-23-72); 139 v H 694 (Eff 11-15-81); 139 v S 78 (Eff 6-29-82); 140 v S 225 (Eff 7-4-84); 142 v H 662 (Eff 6-29-88); 144 v H 15 (Eff 10-15-91); 146 v H 572 (Eff 9-17-96); 148 v H 163 (Eff 6-30-99); 148 v S 3. Eff 10-5-99; 150 v H 133, § 1, eff. 4-7-04; 2012 SB 315, § 101.01, eff. Sept. 10, 2012.

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TITLE 49. PUBLIC UTILITIES
CHAPTER 4906. POWER SITING

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ORC Ann. 4906.12 (2014)

§ 4906.12. Power siting board to follow procedures of public utilities commission

Sections 4903.02 to 4903.16 and 4903.20 to 4903.23 of the Revised Code shall apply to any proceeding or order of the power siting board under Chapter 4906. of the Revised Code, in the same manner as if the board were the public utilities commission under such sections.

HISTORY:

134 v S 397 (Eff 10-23-72); 139 v H 694. Eff 11-15-81.

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TITLE 49. PUBLIC UTILITIES
CHAPTER 4906. POWER SITING

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ORC Ann. 4906.20 (2014)

THIS SECTION HAS MORE THAN ONE DOCUMENT WITH VARYING EFFECTIVE DATES.

§ 4906.20. Certificate for economically significant wind farm [Effective until September 15, 2014]

(A) No person shall commence to construct an economically significant wind farm in this state without first having obtained a certificate from the power siting board. An economically significant wind farm with respect to which such a certificate is required shall be constructed, operated, and maintained in conformity with that certificate and any terms, conditions, and modifications it contains. A certificate shall be issued only pursuant to this section. The certificate may be transferred, subject to the approval of the board, to a person that agrees to comply with those terms, conditions, and modifications.

(B) The board shall adopt rules governing the certificating of economically significant wind farms under this section. Initial rules shall be adopted within one hundred twenty days after June 24, 2008.

(1) The rules shall provide for an application process for certificating economically significant wind farms that is identical to the extent practicable to the process applicable to certificating major utility facilities under *sections 4906.06, 4906.07, 4906.08, 4906.09, 4906.10, 4906.11, and 4906.12 of the Revised Code* and shall prescribe a reasonable schedule of application filing fees structured in the manner of the schedule of filing fees required for major utility facilities.

(2) Additionally, the rules shall prescribe reasonable regulations regarding any wind turbines and associated facilities of an economically significant wind farm, including, but not limited to, their location, erection, construction, reconstruction, change, alteration, maintenance, removal, use, or enlargement and including erosion control, aesthetics, recreational land use, wildlife protection, interconnection with power lines and with regional transmission organizations, independent transmission system operators, or similar organizations, ice throw, sound and noise levels, blade shear, shadow flicker, decommissioning, and necessary cooperation for site visits and enforcement investigations. The rules also shall prescribe a minimum setback for a wind turbine of an economically significant wind farm. That minimum shall be equal to a horizontal distance, from the turbine's base to the property line of the wind farm property, equal to one and one-tenth times the total height of the turbine structure as measured from its base to the tip of its highest blade and be at least one thousand one hundred twenty-five feet in horizontal distance from the tip of the turbine's nearest blade at ninety degrees to the exterior of the nearest, habitable, residential structure, if any, located on adjacent property at the time of the certification application. For any existing certificates and amendments thereto, and existing certification applications that have been found by the chairperson to be in compliance with division (A) of *section 4906.06 of the Revised Code* before the effective date of the amendment of this section by H.B. 59 of the 130th

general assembly, the distance shall be seven hundred fifty feet instead of one thousand one hundred twenty-five feet. The setback shall apply in all cases except those in which all owners of property adjacent to the wind farm property waive application of the setback to that property pursuant to a procedure the board shall establish by rule and except in which, in a particular case, the board determines that a setback greater than the minimum is necessary.

HISTORY:

152 v H 562, § 101.01, eff. 6-24-08; 2012 SB 315, § 101.01, eff. Sept. 10, 2012; 2013 HB 59, § 101.01, eff. Sept. 29, 2013.

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TITLE 49. PUBLIC UTILITIES
CHAPTER 4906. POWER SITING

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ORC Ann. 4906.20 (2014)

THIS SECTION HAS MORE THAN ONE DOCUMENT WITH VARYING EFFECTIVE DATES.

§ 4906.20. Certificate for economically significant wind farm [Effective September 15, 2014]

(A) No person shall commence to construct an economically significant wind farm in this state without first having obtained a certificate from the power siting board. An economically significant wind farm with respect to which such a certificate is required shall be constructed, operated, and maintained in conformity with that certificate and any terms, conditions, and modifications it contains. A certificate shall be issued only pursuant to this section. The certificate may be transferred, subject to the approval of the board, to a person that agrees to comply with those terms, conditions, and modifications.

(B) The board shall adopt rules governing the certificating of economically significant wind farms under this section. Initial rules shall be adopted within one hundred twenty days after June 24, 2008.

(1) The rules shall provide for an application process for certificating economically significant wind farms that is identical to the extent practicable to the process applicable to certificating major utility facilities under *sections 4906.06, 4906.07, 4906.08, 4906.09, 4906.10, 4906.11, and 4906.12 of the Revised Code* and shall prescribe a reasonable schedule of application filing fees structured in the manner of the schedule of filing fees required for major utility facilities.

(2) Additionally, the rules shall prescribe reasonable regulations regarding any wind turbines and associated facilities of an economically significant wind farm, including, but not limited to, their location, erection, construction, reconstruction, change, alteration, maintenance, removal, use, or enlargement and including erosion control, aesthetics, recreational land use, wildlife protection, interconnection with power lines and with regional transmission organizations, independent transmission system operators, or similar organizations, ice throw, sound and noise levels, blade shear, shadow flicker, decommissioning, and necessary cooperation for site visits and enforcement investigations.

(a) The rules also shall prescribe a minimum setback for a wind turbine of an economically significant wind farm. That minimum shall be equal to a horizontal distance, from the turbine's base to the property line of the wind farm property, equal to one and one-tenth times the total height of the turbine structure as measured from its base to the tip of its highest blade and be at least one thousand one hundred twenty-five feet in horizontal distance from the tip of the turbine's nearest blade at ninety degrees to property line of the nearest adjacent property at the time of the certification application.

(b) (i) For any existing certificates and amendments thereto, and existing certification applications that have been found by the chairperson to be in compliance with division (A) of *section 4906.06 of the Revised Code* before the effective date of the amendment of this section by H.B. 59 of the 130th general assembly, September 29, 2013, the distance shall be seven hundred fifty feet instead of one thousand one hundred twenty-five feet.

(ii) Any amendment made to an existing certificate after the effective date of the amendment of this section by H.B. 483 of the 130th general assembly shall be subject to the setback provision of this section as amended by that act. The amendments to this section by that act shall not be construed to limit or abridge any rights or remedies in equity or under the common law.

(c) The setback shall apply in all cases except those in which all owners of property adjacent to the wind farm property waive application of the setback to that property pursuant to a procedure the board shall establish by rule and except in which, in a particular case, the board determines that a setback greater than the minimum is necessary.

HISTORY:

152 v H 562, § 101.01, eff. 6-24-08; 2012 SB 315, § 101.01, eff. Sept. 10, 2012; 2013 HB 59, § 101.01, eff. Sept. 29, 2013; 2014 HB 483, § 101.01, eff. Sept. 15, 2014.

OHIO ADMINISTRATIVE CODE
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*** This document is current through the Ohio Register for the week of September 22, 2014 through September 25, 2014 ***

4906 Ohio Power Siting Board
Chapter 4906-17 Wind-powered Electric Generation Facilities

OAC Ann. 4906-17-08 (2014)

4906-17-08. Social and ecological data.

(A) Health and safety. (1) Demographic. The applicant shall provide existing and ten-year projected population estimates for communities within five miles of the proposed project area site(s).

(2) Noise. The applicant shall:

(a) Describe the construction noise levels expected at the nearest property boundary. The description shall address:

(i) Dynamiting activities.

(ii) Operation of earth moving equipment.

(iii) Driving of piles.

(iv) Erection of structures.

(v) Truck traffic.

(vi) Installation of equipment.

(b) For each turbine, evaluate and describe the operational noise levels expected at the property boundary closest to that turbine, under both day and nighttime conditions. Evaluate and describe the cumulative operational noise levels for the wind facility at each property boundary for each property adjacent to the project area, under both day and nighttime operations. The applicant shall use generally accepted computer modeling software (developed for wind turbine noise measurement) or similar wind turbine noise methodology, including consideration of broadband, tonal, and low-frequency noise levels.

(c) Indicate the location of any noise-sensitive areas within one mile of the proposed facility.

(d) Describe equipment and procedures to mitigate the effects of noise emissions from the proposed facility during construction and operation.

(3) Water. The applicant shall estimate the impact to public and private water supplies due to construction and operation of the proposed facility.

(4) Ice throw. The applicant shall evaluate and describe the potential impact from ice throw at the nearest

property boundary, including its plans to minimize potential impacts if warranted.

(5) Blade shear. The applicant shall evaluate and describe the potential impact from blade shear at the nearest property boundary, including its plans to minimize potential impacts if warranted.

(6) Shadow flicker. The applicant shall evaluate and describe the potential impact from shadow flicker at adjacent residential structures and primary roads, including its plans to minimize potential impacts if warranted.

(B) Ecological impact. (1) Project area site information. The applicant shall:

(a) Provide a map of 1:24,000 scale containing a half-mile radius from the proposed facility, showing the following:

(i) The proposed project area boundary.

(ii) Undeveloped or abandoned land such as wood lots, wetlands, or vacant fields.

(iii) Recreational areas, parks, wildlife areas, nature preserves, and other conservation areas.

(b) Provide the results of a survey of the vegetation within the facility boundary and within a quarter-mile distance from the facility boundary.

(c) Provide the results of a survey of the animal life within the facility boundary and within a quarter-mile distance from the facility boundary.

(d) Provide a summary of any studies which have been made by or for the applicant addressing the ecological impact of the proposed facility.

(e) Provide a list of major species from the surveys of biota. "Major species" are those which are of commercial or recreational value, or species designated as endangered or threatened in accordance with the United States and Ohio threatened and endangered species lists.

(2) Construction. The applicant shall:

(a) Estimate the impact of construction on the areas shown in response to paragraph (B)(1)(a) of this rule.

(b) Estimate the impact of construction on the major species listed under paragraph (B)(1)(e) of this rule.

(c) Describe the procedures to be utilized to avoid, minimize, and mitigate both the short- and long-term impacts due to construction.

(3) Operation. The applicant shall:

(a) Estimate the impact of operation on the areas shown in response to paragraph (B)(1)(a) of this rule.

(b) Estimate the impact of operation on the major species listed under paragraph (B)(1)(e) of this rule.

(c) Describe the procedures to be utilized to avoid, minimize, and mitigate both the short- and long-term impacts of operation.

(d) Describe any plans for post-construction monitoring of wildlife impacts.

(C) Economics, land use and community development. (1) Land uses. The applicant shall:

(a) Provide a map of 1:24,000 scale indicating general land uses, depicted as areas on the map, within a five-mile radius of the facility, including such uses as residential and urban, manufacturing and commercial, mining, recreational, transport, utilities, water and wetlands, forest and woodland, and pasture and cropland.

(b) Provide the number of residential structures within one thousand feet of the boundary of the proposed facility, and identify all residential structures for which the nearest edge of the structure is within one hundred feet of the boundary of the proposed facility.

(c) Describe proposed locations for wind turbine structures in relation to property lines and habitable residential structures, consistent with no less than the following minimum requirements:

(i) The distance from a wind turbine base to the property line of the wind farm property shall be at least one and one-tenth 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.

(ii) The wind turbine shall be at least seven hundred fifty feet in horizontal distance from the tip of the turbine's nearest blade at ninety degrees to the exterior of the nearest habitable residential structure, if any, located on adjacent property at the time of the certification application.

(iii) Minimum setbacks may be waived in the event that all owners of property adjacent to the turbine agree to such waiver, pursuant to rule 4906-1-03 of the *Administrative Code*.

(d) Estimate the impact of the proposed facility on the above land uses within a one-mile radius.

(e) Identify structures that will be removed or relocated.

(f) Describe formally adopted plans for future use of the site and surrounding lands for anything other than the proposed facility.

(g) Describe the applicant's plans for concurrent or secondary uses of the project area.

(2) Economics. The applicant shall:

(a) Estimate the annual total and present worth of construction and operation payroll.

(b) Estimate the construction and operation employment and estimate the number that will be employed from the region.

(c) Estimate the increase in county, township, city, and school district tax revenue accruing from the facility.

(d) Estimate the economic impact of the proposed facility on local commercial and industrial activities.

(3) Public services and facilities. The applicant shall describe the probable impact of the construction and operation on public services and facilities.

(4) Impact on regional development. The applicant shall:

(a) Describe the impact of the proposed facility on regional development, including housing, commercial and industrial development, and transportation system development.

(b) Assess the compatibility of the proposed facility and the anticipated resultant regional development with current regional plans.

(D) Cultural impact. (1) The applicant shall indicate, on the 1:24,000 map referenced in paragraph (C)(1)(a) of

this rule, any registered landmarks of historic, religious, archaeological, scenic, natural, or other cultural significance within five miles of the proposed facility.

(2) The applicant shall estimate the impact of the proposed facility on the preservation and continued meaningfulness of these landmarks and describe plans to mitigate any adverse impact.

(3) Landmarks to be considered for purposes of paragraphs (D)(1) and (D)(2) of this rule are those districts, sites, buildings, structures, and objects which are recognized by, registered with, or identified as eligible for registration by the national registry of natural landmarks, the Ohio historical society, or the Ohio department of natural resources.

(4) The applicant shall indicate, on the 1:24,000 map referenced in paragraph (C)(1)(a) of this rule, existing and formally adopted land and water recreation areas within five miles of the proposed facility.

(5) The applicant shall describe the identified recreational areas within one mile of the proposed project area in terms of their proximity to population centers, uniqueness, topography, vegetation, hydrology, and wildlife; estimate the impact of the proposed facility on the identified recreational areas; and describe plans to avoid, minimize, or mitigate any adverse impact.

(6) The applicant shall describe measures that will be taken to minimize any adverse visual impacts created by the facility, including, but not limited to, project area location, lighting, and facility coloration. In no event shall these measures conflict with relevant safety requirements.

(E) Public responsibility. The applicant shall:

(1) Describe the applicant's program for public interaction for the siting, construction, and operation of the proposed facility, i.e., public information programs.

(2) Describe any insurance or other corporate programs for providing liability compensation for damages to the public resulting from construction or operation of the proposed facility.

(3) Evaluate and describe the potential for the facility to interfere with radio and TV reception and, if warranted, describe measures that will be taken to minimize interference.

(4) Evaluate and describe the potential for the facility to interfere with military radar systems and, if warranted, describe measures that will be taken to minimize interference.

(5) Evaluate and describe the anticipated impact to roads and bridges associated with construction vehicles and equipment delivery. Describe measures that will be taken to repair roads and bridges to at least the condition present prior to the project.

(6) Describe the plan for decommissioning the proposed facility, including a discussion of any financial arrangements designed to assure the requisite financial resources.

(F) Agricultural district impact. The applicant shall:

(1) Separately identify on a map(s) of 1:24,000 scale all agricultural land and all agricultural district land located within the proposed project area boundaries, where such land is existing at least sixty days prior to submission of the application.

(2) Provide, for all agricultural land identified under paragraph (F)(1) of this rule, the following:

(a) A quantification of the acreage impacted, and an evaluation of the impact of the construction, operation, and maintenance of the proposed facility on the following agricultural practices within the proposed facility boundaries:

(i) Field operations (i.e., plowing, planting, cultivating, spraying, harvesting, etc.).

(ii) Irrigation.

(iii) Field drainage systems.

(b) A description of any mitigation procedures to be utilized by the applicant during construction, operation, and maintenance to reduce impacts to the agricultural land.

(3) Provide, for all agricultural land identified under paragraph (F)(1) of this rule, an evaluation of the impact of the construction and maintenance of the proposed facility on the viability as agricultural land of any land so identified. The evaluation shall include impacts to cultivated lands, permanent pasture land, managed woodlots, orchards, nurseries, livestock and poultry confinement areas, and agriculturally related structures. Changes in land use and changes in methods of operation made necessary by the proposed facility shall be evaluated.

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Statutory Authority: 4906.03, 4906.20.

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