BEFORE

THE OHIO POWER SITING BOARD

In the Matter of the Application of)	
Blue Creek, LLC for an Amendment to)	
its Certificate of Environmental)	
Compatibility and Public Need for the)	Case No. 11-1995-EL-BGA
Wind-Powered Electric Generation)	
Facility in Van Wert and Paulding)	
Counties, Ohio.)	

ORDER ON CERTIFICATE AMENDMENT

The Ohio Power Siting Board (Board), coming now to consider the above-entitled matter and having determined that a public hearing is not necessary, having reviewed the amendment application and being otherwise fully advised, hereby issues its order on certificate amendment in accordance with Section 4906.10, Revised Code.

OPINION:

A. <u>History of the Proceeding:</u>

On August 23, 2010, the Board issued an opinion, order, and certificate granting the application of Heartland Wind, LLC (Heartland) for a certificate to construct a wind-powered electric generating facility in Van Wert and Paulding Counties, Ohio, in Case No. 09-1066-EL-BGN (09-1066). The Board granted Heartland's application pursuant to a joint stipulation and recommendation filed by Heartland, the Ohio Farm Bureau Federation (OFBF), the Ohio Environmental Protection Agency and Department of Natural Resources, and the Board's Staff (Staff), which included 61 specific conditions. In 09-1066, the Board approved the construction of the facility consisting of 159 turbines. On November 18, 2010, the Board granted a joint application to transfer the certificate from Heartland to Blue Creek Wind Farm, LLC (Blue Creek or Applicant).

On April 12, 2011, Blue Creek filed an application in this proceeding to amend the certificate issued in 09-1066. In the amendment application, Blue Creek proposes to construct and operate eight additional Gamesa G-90 model, 2.0 megawatt (MW) wind turbines at the Blue Creek wind farm. The proposed amendment would increase the total number of wind turbines at the Blue Creek wind farm from 159 to 167. Blue Creek asserts that the amended project would have an aggregate generating capacity of up to 334 MW with an annual production of between 520,000 to 1, 170,000 MW hours.

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In accordance with Rule 4906-5-10(B), Ohio Administrative Code (O.A.C.), Blue Creek served copies of the amendment application upon local officials. Public notice of the proposed amendment was published on April 20, 2011, in *The Lima News*, *The Paulding County Progress, and The Van Wert Times Bulletin*. Blue Creek filed proof of publication with the Board on April 27, 2011. The Board did not receive any letters opposing the proposed amendment. On June 17, 2011, Staff filed a report evaluating the amendment application.

B. Applicable Law:

Blue Creek is a corporation and a person under Section 4906.01(A), Revised Code, and is certificated to construct, operate, and maintain a major utility facility under Section 4906.10, Revised Code, in accordance with the Board's order in 09-1066.

Pursuant to Section 4906.10, Revised Code, the Board's authority applies to major utility facilities and provides that such entities must be certified by the Board prior to commencing construction of a facility. In accordance with Chapter 4906, Revised Code, the Board promulgated rules, which are set forth in Chapter 4906-17, O.A.C., prescribing regulations regarding wind-powered electric generation facilities and associated facilities.

Section 4906.07, Revised Code, requires that, when considering an application for amendment of a certificate, the Board shall hold a hearing "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...." An applicant is required to provide notice of its application for amendment in accordance with Section 4906.06(B) and (C), Revised Code, and Rule 4906-5-10(B), O.A.C.

C. <u>Staff Investigation of Proposed Amendment:</u>

In its report filed on June 17, 2011, Staff represents that it has reviewed the application and that the turbines are within the same project area that was extensively studied by the Applicant and investigated by Staff during the original application process. The amended project area remains within the same 40,500 acres located in Paulding and Van Wert counties. While the original certificate identified 17,000 acres of leased private land and 106 participating homeowners, the amendment provides that the facilities in the amended project area will be located on approximately 24,900 acres of leased private land, with approximately 200 participating landowners.

Staff concludes that the amendment is unlikely to have any significant impact on land-use within the project area. Staff states that the eight turbines proposed in the amendment would be located no closer than 1,200 feet from the nearest habitable

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residence, and no closer to the nearest uncontrolled property than 624 feet, thus complying with the minimum setback requirement. Staff notes that one residence will be within 100 feet of an access road and an underground collection line, but explained the collection line is not visible, and the access road will be reduced from 40 feet wide to a maximum of 20 feet wide.

Staff notes that the Applicant previously completed archaeological and architectural surveys for the project area, entering into a Memorandum of Agreement (MOA) with the Ohio Historic Preservation Office, and the United States Army Corps of Engineers. The stipulated MOA provides mitigation measures for effects of the wind farm on cultural resources. Staff explains that no additional impacts to cultural resources are anticipated as a result of the construction and operation of the eight proposed turbines.

Staff explains that, as set forth in the application, the proposed turbines are the Gamesa G-90 model with a nameplate capacity of 2.0 MW for the project. The application explains that the maximum height of the turbines would be 476 feet, with the hub height being 328 feet, and the rotor diameter consisting of 295 feet. The base of the wind turbine will consist of a crane pad area of 100 feet by 75 feet during construction, but will be restored level with permanent gravel around the base of the turbine upon completion. Staff also finds that a concrete batch plant is no longer necessary, as the Applicant's general contractor is purchasing concrete.

In addition, Staff explains that an electric collection system would be installed to transfer energy from the turbines to the collector substations, and then into the electric transmission grid. Staff states that the 34.5 kilovolt (kV) collection system would consist of 97.7 miles of underground cable buried to a minimum depth of 48 inches, and 7.8 miles of above ground lines, in contrast to the August 2010 certificate which indicated 103.2 miles of underground cabling and 5.4 miles of above ground lines. Staff notes that the overhead 115 kV collection system's length has decreased since the original certificate, from 7.4 to 1.8 miles of above-ground lines.

With regard to access roads, Staff provides that, when possible, Applicant should upgrade existing roads for use as access roads during construction and for wind farm maintenance following the construction period. Staff explains that the roads should include appropriate drainage and culverts. In addition, Staff notes that local landowners were consulted about access roads, and the project would require 42.9 miles of permanent access roads with a maximum width of 100 feet during construction, to be reduced to a width of 16 feet after construction is complete.

Staff explains that the Applicant has completed an ecological review which determined that wetland ditches and a stream would be impacted by the addition of

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8 turbines, but no ponds, lakes, wildlife, or woodlots should be impacted. Staff notes there are no expected impacts to public or private water suppliers. Staff provides that the Applicant has agreed to conduct unanticipated spill response training for construction and operations and maintenance staff as needed.

Staff's review of the application found that the temporary impact to agricultural land totals 1,650.5 acres (1,239.6 acres in Van Wert County and 410.9 acres in Paulding County). Staff notes that this is a reduction of 65.5 acres from the original application. Further, Staff's evaluation of the application determined that the permanent impact of agricultural land totals 166.3 acres (140.6 acres in Van Wert County and 25.7 acres in Paulding County).

Further, Staff finds that 12 of the 25 agricultural district parcels within the project area would be directly impacted by turbines, electric collection lines, access roads, and/or crane routes. Staff states there is a total of 86.9 acres of temporary impact (55.6 acres in Van Wert County and 31.3 acres in Paulding County). In addition, Staff explains that 5.8 acres of permanent impact would occur in the two counties (3 acres in Van Wert County and 2.8 acres in Paulding County). Therefore, Staff concludes the agricultural district parcels would not be adversely affected because of the small amount of impact to the agricultural land associated with the project.

Staff's review of the applicant's updated noncumulative shadow flicker model identified 643 receptors within 1,000 meters of the project boundaries. After modeling each receptor in realistic mode and worst-case mode, Staff determines from the worst-case mode that 11 receptors could receive shadow flicker in excess of 30 hours per year. Of the 11 receptors receiving shadow flicker, Staff notes that 10 are participating receptors.

Staff's review of the model determined that Receptor 224 is the only nonparticipating receptor to be in excess of 30 hours per year. Staff notes that Blue Creek was unable to reach an agreement with the receptor party. According to Staff, however, the Applicant was able to show that the receptor's exposure can be reduced below the 30 hour threshold by curtailing operations of the turbine between the hours of 6:00 a.m. E.S.T and 7:00 a.m. E.S.T. from July 1 to August 7.

In addition, Staff explains that Blue Creek will remain subject to the previously conditioned mitigation in 10-1099, regarding any shadow flicker in excess of 30 hours per year, as measured at a nonparticipating receptor. Staff concludes that a reduction through curtailment can be met, and Blue Creek has performed its due diligence by reducing impacts to nonparticipating receptors.

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Regarding aviation hazards, Staff states that all turbine locations at the new hub heights have been reviewed by the Federal Aviation Administration. It has been determined that the turbine locations pose no hazard to aviation. Staff finds that Blue Creek has not evaluated the potential impact the increased number of turbines may have on communications and radar equipment. After speaking with the Chairman of the National Telecommunications and Information Administration (NTIA), Staff and the NTIA find that filing all new turbine coordinates with the NTIA is advisable. Staff explains that the new turbine locations would not be subject to the same review period as previously imposed by the NTIA, rather, the new coordinates would serve as notice for concerned federal agencies.

Further, Staff states that Blue Creek made no changes to the original application's language about decommissioning. Therefore, Staff finds that Blue Creek should proceed with the conditions set forth in the original certificate, noting that the eight turbines, if constructed, shall be incorporated into all estimates. Staff also reviewed pertinent data regarding the layout and impacts of the eight additional turbines with the project currently under construction. Staff finds that the conditions contained in the August 23, 2010, order in 09-1066 adequately address potential impact from high winds, blade shear, and ice throw, and no changes are warranted.

Based on its investigation, Staff recommends the following nine conditions for approval of the amendment application. The following is a summary of Staff's proposed conditions and does not supplant or replace the full description set forth in Staff's report:

- (1) Blue Creek adhere to all conditions of the original certificate approved in 09-1066.
- (2) The owner and operator of the facility curtail the operations of the turbine influencing Receptor 24 so as to not exceed 30 hours per year of shadow flicker, until the receptor becomes a project participant. Should Receptor 24 become a project participant, Blue Creek shall immediately notify Staff of the change. Blue Creek may also propose other mitigation measures acceptable to Staff in consultation with the affected receptor.
- (3) Prior to construction of the eight turbines, Blue Creek shall provide the coordinates of the turbines, along with a summary of the additions and changes to the NTIA. If Blue Creek receives an adverse notification from the NTIA, it must notify Staff immediately.

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(4) Blue Creek must obtain and comply with all applicable permits and authorizations as required by federal and state laws prior to construction, and provide copies of the permits and authorizations, including all supporting documentation, to Staff within seven days of its issuance or receipt.

- (5) At least seven days prior to the preconstruction conference, Blue Creek should submit a copy of the updated National Pollutant Discharge Elimination System permits, including its approved Storm Water Prevention Pollution Prevention and Spill Prevention, Containment, and Countermeasure procedures, and its erosion and sediment control plan to Staff for review and approval. If any issues arise with Blue Creek's erosion and sediment control plan, they must be addressed through proper design and adherence to the Ohio Environmental Protection Agency's best management practices related to erosion and sedimentation control.
- (6) The Applicant should not place permanent fill material within the 100-year floodplain in association with any turbine, and Blue Creek should place a note of such in the final engineering drawings.
- (7) Blue Creek submit a copy of the Phase I archaeological survey for this amended portion of the project to Staff and all signatories of the October 2010 MOA regarding cultural impacts.
- (8) Should site-specific conditions warrant blasting, the Applicant shall submit a blasting plan for Staff review and acceptance at least 30 days in advance of the blasting.
- (9) At least 30 days before the preconstruction conference, Blue Creek shall submit to Staff, for review and approval, the following updated documents:
 - (a) Detailed engineering drawings of the final project design.
 - (b) A stream and/or ditch crossing plan, which includes details on specific streams and/or ditches to be crossed by construction vehicles and/or facility components.

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(c) A detailed frac-out contingency plan for stream and ditch crossings that are expected to be completed via horizontal directional drill. The frac-out contingency plan may be incorporated in the required stream and/or ditch crossing plan.

(d) A tree clearing plan that describes how trees and shrubs around turbines, access routes, collection line corridors, construction staging areas, and in proximity to other project facilities will be protected from damage during construction.

Therefore, Staff recommends that the Board find that the proposed amendment to the Certificate poses minimal social and environmental impact, provided that the amendment includes the conditions as specified in Staff's report.

D. <u>Decision</u>:

Upon review of the record, the Board finds, pursuant to Section 4906.07, Revised Code, that the proposed amendment to the certificate issued in 09-1066, with the adoption of Staff's recommended conditions, does not result in any material increase in any social or environmental impact, or a substantial change in the location of the certificated facility. Therefore, the Board finds that a hearing is not necessary under the circumstances presented in this case. Accordingly, the Board concludes that Blue Creek's 09-1066 certificate should be amended to permit the construction of eight additional Gamesa G-90 model 2.0 MW wind turbines at the Blue Creek wind farm. Further, Blue Creek's certificate conditions adopted in 09-1066 should be amended to incorporate the recommended conditions as set forth in Staff's report filed on June 17, 2011.

FINDINGS OF FACT AND CONCLUSIONS OF LAW:

- (1) Blue Creek is a corporation and a person under Section 4906.01(A), Revised Code.
- (2) Blue Creek's wind-powered electric generation facility is a major utility facility under Section 4906.01(B)(1), Revised Code.

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(3) On April 12, 2011, Blue Creek filed an application to amend the certificate issued in 09-1066, in accordance with Rule 4906-5-10, O.A.C.

- (4) The proposed amendment involves the construction of eight additional Gamesa G-90 model 2.0 MW wind turbines at the Blue Creek wind farm.
- (5) In accordance with Section 4906.06, Revised Code, and Rule 4906-5-10(B), O.A.C., copies of the amendment application were served upon local government officials and public notice of the amendment was published in Van Wert and Paulding Counties. On April 27, 2011, Blue Creek filed its proof of publication.
- (6) The Board did not receive any letters opposing the proposed amendment.
- (7) On June 17, 2011, Staff filed a report evaluating the amendment application.
- (8) The proposed changes to the certificated facility do not result in any material increase in any social or environmental impact, or a substantial change in the location of the facility; therefore, in accordance with Section 4906.07, Revised Code, a hearing is not necessary.
- (9) Based on the record, in accordance with Chapter 4906, Revised Code, the certificate of environmental compatibility and public need issued in 09-1066 for Blue Creek's wind-powered electric generation facility should be amended to permit the construction of eight additional turbines, as described in this order and subject to the conditions set forth in 09-1066, as amended in this order.

ORDER:

It is, therefore,

ORDERED, That the application filed by Blue Creek to amend the certificate issued in 09-1066 be granted, as described in this order and subject to the conditions set forth in 09-1066 and this order. It is, further,

ORDERED, That a copy of this order on certificate amendment be served upon all interested persons of record.

THE OHIO POWER SITING BOARD

Toda A. Snitchler, Chairman Public Utilities Commission of Ohio

James Leftwich, Board Member and Director of the Ohio Department of Development

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

Jim Zehringer, Board Member and Director of the Ohio Department of Agriculture

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Entered in the Journal

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Betty McCauley Secretary David Mustine, Board Member

and Director of the Ohio

Department of Natural Resources

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

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