

FILE

BEFORE THE OHIO POWER SITING BOARD

In the Matter of the Application)
of Black Fork Wind Energy, LLC for)
a Certificate to Install Numerous) Case No. 10-2865-EL-BGN
Electricity Generating Wind Turbines in)
Crawford and Richland Counties, Ohio)

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PUCO

DIRECT TESTIMONY OF SCOTT HAWKEN

Q.1 Please state your name, title, and business address.

A.1 My name is Scott Hawken, Senior Project Manager with Element Power US, LLC. My business address is 400 Preston Ave., Suite 200, Charlottesville, VA 22901.

Q.2 What are your duties as Senior Project Manager?

A.2 As Senior Project Manager for this project, my duties include initial site selection, land acquisition, land negotiations, landowner relations, public relations, outreach to local officials, preliminary design and layout, environmental impacts and assessment, environmental permitting, local zoning and land use permitting.

Q.3 What is your educational and professional background?

A.3 I received a B.S. in Marketing from Miami University, Ohio in 1999 and an MBA from Troy University in 2005. I was commissioned as an officer in the United States Air Force and served 8 years in varying positions of increasing leadership and responsibility, including serving one year at Wright Patterson Air Force Base, Dayton Ohio. I was honorably discharged as a Captain. I previously served as a Project Manager and Project Director at NextEra Energy Resources from 2007 to 2010 developing wind assets across the Great Lakes region and Midwest. I led the acquisition and completion of a 50 MW

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wind project in Harris Iowa as well as a 150MW project near Ames Iowa. I joined Element Power in 2010 and have responsibility for renewable project development in Ohio and the Mid-Atlantic States including Delaware and Maryland.

Q.4 Is the Application and exhibits, as deemed complete, true and accurate to the best of your knowledge and belief?

A.4 Yes, it is. This application and exhibits were prepared at my direction and under my direct supervision. The Application and Exhibits have been designated as Company Exhibit 1.

Q5. Did you cause to be served a copy of the application and exhibits on various local governmental officials such as county commissioners, township trustees, regional planning commissions and libraries?

A.5 Yes. On June 17, we filed a certificate of service with the board disclosing all the local governmental officials and libraries that were served with a copy of the application. This Certificate of Services has been marked as Company Exhibit 2.

Q.6 Did the Applicant file and serve a copy of the letter sent to property owners and tenants contiguous to the planned site?

A.6 Yes, the Applicant filed a copy of that letter that was sent out initially on August 13, 2011 to 1,068 residents. Twenty-one letters were returned due to incorrect addresses with no forwarding address. An additional twenty-eight letters were returned with a forwarding address. Black Fork Wind re-sent those letters on August 24, 25, 29 and 30, 2011. The sample letter and the chart showing the names and addresses of all addressees was also served on the local officials in accordance with Rule 4906-5-08(C)(3) of the Ohio Administrative Code on August 30, 2011. The sample letter

and the chart showing the names and addresses of all addressees is marked as Company Exhibit 3.

Q.7 Did Black Fork Wind have notices of the December 16 informational public meeting, the Application, and the Hearing published in newspapers of general circulation in Crawford and Richland counties?

A.7 Yes, notices were published on December 7, 2010, June 30, 2011, and September 7, 2011. See Company Exhibits 4, 5 and 6.

Q.8 Will the Applicant be sponsoring witnesses to support the Application in addition to your testimony?

A.8 Yes, Black Fork Wind plans to provide expert testimony in the fields of environmental studies and bat/bird issues (Courtney Dohoney of Ecology and Environment, Inc. and Todd Mattson of Element Power), lack of link to health issues (Dr. Diane Mundt of Environ), sound studies (Kenneth Kaliski of Resource Systems Group, Inc.), shadow flicker studies (Jay Haley of EAPC), transportation routes and repairs to roads (James Mawhorr of K.E. McCartney & Associates), the perspective of the Ohio Farm Bureau (Dale Arnold), and the perspective of a landowner (William Schroeder).

Q.9 Have you reviewed the Staff Report in this proceeding?

A.9 Yes.

Q.10 At page 54 of the Staff Report, the Staff recommends Condition 12 whereby the Applicant is to redesign the collection line system between turbines 30 and 44 to turbine 57, to better utilize disturbed areas of this project, as approved by OPSB Staff, prior to commencement of construction. Is this condition acceptable to the Applicant?

A.10 As written the condition is not acceptable to the Applicant. We have spent a significant amount of time designing the collection system for this project taking into consideration a multitude of factors such as impact avoidance, line loss, economics and land control. The Applicant is more than willing to investigate a redesign of the collection line system as identified by Staff provided Staff clarifies the goal of the redesign. The current design calls for two lines running south from turbines 30 and 44 combining at turbine 57. We can investigate combining those lines to avoid impact, but realize that collection lines cannot be installed in the same trench. Each collection line requires a separate trench for thermo dynamic characteristics and safety consideration purposes. This can result in a greater disturbance to drain tile systems and actually cause more impact than running the lines in separate areas. This would be the case if Staff is recommending that these two circuits be rerouted to the western portion of the project where currently two circuits are contemplated resulting in a total of four separate circuits and four separate collection paths. Such a design change is also impossible at this time because the Applicant does not have land control for all possible routes.

Q.11 Would you recommend a revision to Condition 12?

A.11 Yes. As I state above, we are more than willing to investigate a redesign with Staff taking into account all of the factors that affect collection line design. To that end, I recommend that Condition 12 be revised to state:

That the Applicant shall investigate redesigning ~~redesign~~ the collection line system between turbines 30 and 44 to turbine 57, considering among other factors to better utilize utilization of disturbed areas of this project, with any redesign subject to as approved by OPSB Staff approval, prior to commencement of construction.

Q.12 At page 54 of the Staff Report, Staff recommends that the Applicant develop a screening plan for the site containing the substation, laydown yard, O&M building and

temporary concrete batch plant to reduce visual and noise effects to surrounding residences, for review and approval by OPSB Staff. Is this condition acceptable to the Applicant?

A.12 The Applicant is agreeable to developing a screening plan as suggested in Condition 14 but revision is required to remove ambiguity from the condition. For example, the condition states the screening plan must reduce visual and noise effects to surrounding residences, but no standard or level of reduction is given. Likewise, trees cannot be planted and grown to a sufficient height during the construction period. To avoid this issue, I recommend that Condition 14 be revised as follows:

That the Applicant develop a screening plan for the site containing the substation, laydown yard, O&M building, and temporary concrete batch plant ~~to reduce visual and noise effects to surrounding residences,~~ for review and approval by OPSB Staff.

Q.13 At page 57 of the Staff Report, Staff recommends that the Applicant reroute the collection lines between turbines 16 and 90. Do you agree with Staff's recommendation?

A.13 No. We have worked very hard to design this project in a manner that minimizes impacts and as I indicated above, the Applicant is more than willing to investigate relocating collection lines between turbines with Staff. However, mandating a relocation to avoid a wood lot ignores all of the factors that went into locating that collection line as designed. Those factors include land control and lease constraints, natural topography of the area, wetlands avoidance, drainage tile avoidance, landowner preference, line loss and cable length. A condition that mandates rerouting that line must take into consideration all of these factors. Just as important, Staff's recommendation ignores that fact that the landowner who owns that woodlot signed a lease that allows for the placement of collection lines on the property. I also think it is important to note that the current design leaves the majority of the woodlot undisturbed.

Q.14 Would you recommend a revision to Condition 30?

A.14. Yes. The Applicant is certainly open to investigating a redesign, but not a mandated redesign that does not take into account whether the redesign is practicable or feasible. As I noted above, factors to consider when designing a collection system include land control and lease constraints, natural topography of the area, wetlands avoidance, drainage tile avoidance, landowner preference, line loss and cable length. I recommend that the condition be revised as follows:

That the Applicant, in coordination with OPSB Staff, shall ~~reroute~~ investigate rerouting the underground electric collection lines proposed between turbine sites 16 and 90, as to minimize to the extent practicable, impacts to ~~avoid~~ the woodlot located between these turbine sites or utilize HDD or another avoidance measure acceptable to OPSB Staff.

Q. 15 At page 59 of the Staff Report, Staff recommends Condition 44 requiring that the Applicant install and utilize an ice warning system that may include an ice detector installed on the roof of the nacelle, ice detection software for the wind turbine controller, or an ice sensor alarm that triggers an automatic shutdown. Is the Applicant agreeable to this condition?

A.15 The Applicant took great lengths to design the project layout with setback distances to minimize and account for the safe operation of this site, but is generally agreeable to installing safety features on turbines as necessary. I am not aware of any reported cases of any member of the public being injured by ice throw, highlighting the fact that the risk of injury from ice throw is very low. With that said, the Applicant is agreeable to ensuring the appropriate safety features are included on the turbines, but suggests the following revision to the condition to recognize the use of automatic vibration monitoring software:

The Applicant shall install and utilize an ice warning system that may include an ice detector installed on the roof of the nacelle, ice detection software for the wind turbine controller, ~~or~~ an ice sensor alarm that triggers an automatic shutdown or automatic vibration monitoring software.

Q.16 At page 59 of the Staff Report, Staff recommends Condition 45 requiring relocation of turbines 44 and 51 using a setback distance equal to 150 percent of the sum of the hub height and rotor diameter from occupied structures, including businesses to protect from ice throw. Is that condition agreeable to the Applicant?

A.16 The condition as written is acceptable to the Applicant. However, I want to make clear that the Applicant does not agree with the setback applied by Staff. GE has not mandated a specific setback for its turbines in regards to ice throw. Rather, it has suggested that certain actions be considered when siting turbines to mitigate risk for ice-prone project locations including turbine siting, physical and visual warnings, turbine deactivation and operator safety. The Applicant has not only carefully sited turbines, but will utilize physical and visual warnings, turbine deactivation mechanisms and operator safety procedures. The fact that the Applicant is utilizing many of the same actions recommended by GE ensures that the risk of ice throw remains very low. A specific setback formula for ice throw does not need to be applied to this project given the other steps the Applicant is taking to minimize the already reduced risk of injuries from ice throw.

Q.17 Have you reviewed Condition 59 of the Staff Report?

A.17 Yes. I have one minor revision to that condition to ensure that mitigation only relates to interference with existing structures, not structures built after the turbines are constructed. I suggest the condition be revised as follows:

That all licensed microwave paths and communication systems, as identified within the application and all other communications studies performed for this project, shall be subject to avoidance or mitigation. The Applicant shall complete avoidance or mitigation measures prior to construction for impacts that can be predicted in sufficient detail to implement appropriate and reasonable avoidance and mitigation measures. After construction, the Applicant shall mitigate all observed impacts of the project to microwave paths and systems existing prior to construction within seven (7) days or within a longer time period approved by OPSB Staff. Avoidance and mitigation measures for any known point-to-point microwave paths shall consist of either shifting the location of the turbine(s) so as to not affect any known microwave paths, or other measures approved by OPSB Staff, the Applicant, and the affected path owner, operator, or licensee(s). If interference with an omni-directional or multi-point system is observed after construction, mitigation would be required only for the affected receptor(s).

Q.18 At page 63 of the Staff Report, Staff recommends language in Condition 66(c) that the Board may also require decommissioning of individual wind turbines due to health, safety, wildlife impact, or other concerns that prevent the turbine from operating within the terms of the Certificate. Do you have any concerns with this language?

A.18 Yes. This language creates an ambiguity as it seems to repeat generally the statutory and regulatory enforcement sections. Specifically, counsel has informed me that Section 4906.98 of the Ohio Revised Code prohibits persons from constructing, operating or maintaining a major utility facility other than in compliance with the certificate. Counsel has also informed me that Chapter 4906-9 of the Board's rules provide for enforcement investigations which provide the due process protections of an evidentiary hearing for alleged violations. There is no need for the language added to the end of Condition 66(c), and open ended language of that sort in a certificate can have a chilling effect on our ability to obtain financing for the project. The last sentence of Condition 66(c) should be deleted in its entirety.

Q. 19 Do you have any comments on Condition 18 as recommended in the Staff Report?

A.19. Yes. I have one suggested revision to Condition 18 intended to acknowledge that the current design does require changes to drainages. Specifically, I recommend that Condition 18 be revised to read as follows:

That the Applicant shall avoid or minimize where reasonably possible, ~~or minimize to the maximum extent practicable~~, any damage to field tile drainage systems and soils resulting from construction, operation, and/or maintenance of the facility in agricultural areas. Damaged field tile systems shall be promptly repaired to at least original conditions at the Applicant's expense. Excavated topsoil, with the exception of soil excavated during the laying of cables for the collection system, shall be segregated and restored in accordance with the Applicant's lease agreement with the landowner. Severely compacted soils shall be plowed or otherwise de- compacted, if necessary, to restore them to original conditions unless otherwise agreed to by the landowner.

Q.20. Do you have any comments on Condition 40 as recommended in the Staff Report?

A.20 Yes. I am not aware of any similar setback from natural gas pipelines applied in other wind projects. Likewise, I do not believe the risk involved warrants a setback of this nature. With that said, the Applicant is agreeable to Condition 40 subject to the following revisions to ensure that the pipeline right of way distance is not included in the setback and that relocation can be made as necessary on other adjacent parcels that could be owned by the same landowner or other participating landowners:

That the Applicant shall adhere to a setback distance of at least one and one-tenth (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 pipeline ~~right-of-way~~. Specifically to conform to this setback distance, the Applicant shall resize and/or relocate turbines 8, 15, 18, 33, and 37 as necessary elsewhere on the same parcels ~~as proposed in the Application or Application Supplement~~. At least thirty (30) days before the pre-construction conference, the Applicant shall submit to OPSB Staff, for review and acceptance, any required studies that changed due to resized and/or relocated turbines .

Q.21 What do you recommend that the Ohio Power Siting Board do in this case?

A.21 I recommend that the Ohio Power Siting Board grant the Application based upon the recommended conditions contained in the September 1 Staff Report and as revised in the testimony filed by the various witnesses for the Applicant.

Q.22 Does this conclude your direct testimony?

A.22 Yes, it does.

CERTIFICATE OF SERVICE

I certify that a copy of the foregoing document was served by hand delivery upon John Jones and Stephen Reilly, Assistant Attorneys General, Public Utilities Section, 180 E. Broad Street, 6th Floor, Columbus, OH 43215 and via U.S. Mail upon the following persons listed below this 8th day of September 2011:

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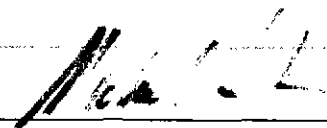
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