

BEFORE THE POWER SITING BOARD OF THE STATE OF OHIO

LL	the Matter of the Application of Firelands V C for a Third Amendment to its Certificate d Operate the Emerson Creek Wind Farm P ie and Huron Counties, Ohio	to Install)	25-0495-E	EL-BGA		
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To the Honorable Power Siting Board:

Public Member

Please review the attached Staff Report of Investigation, which has been filed in accordance with the Ohio Power Siting Board (Board) rules. The application in this case is subject to an approval process as required by Ohio Revised Code (R.C.) 4906.03.

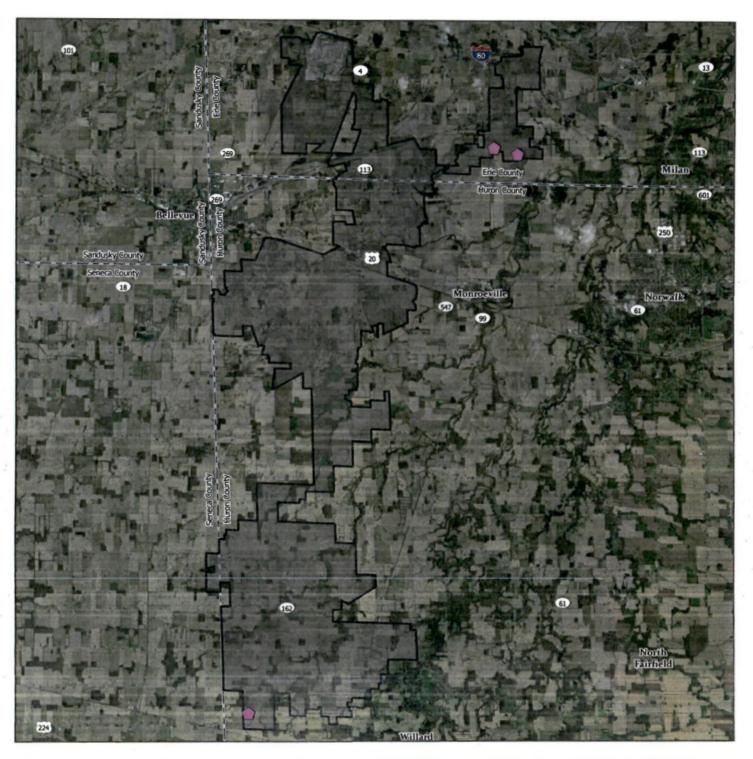
Sincerely,

Michael Williams Executive Director

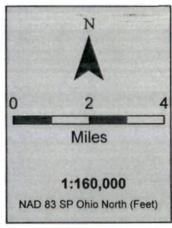
Ohio Power Siting Board

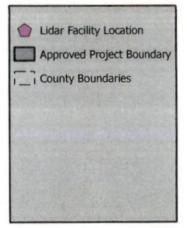
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Overview Map 25-0495-EL-BGA

Emerson Creek Wind Project Amendment III

Maps are presented solely for the purpose of providing a visual representation of the project in the staff report, and are not intended to modify the project as presented by the Applicant in its certified application and supplemental materials.



Detail Map 1

1 inch = 1,000 feet



Detail Map 2

1 inch = 1,000 feet

OPSB STAFF REPORT OF INVESTIGATION

Project Name:	Emerson Creek Wind Farm Third Amendment		
Case Number:	25-0495-EL-BGA Parent Case: 18-1607-EL-BGN Associated Amendments: 21-1055-EL-BGA and 24-0485-EL-BGA		
Project Location:	Erie and Huron Counties		
Applicant:	Firelands Wind, LLC		
Application Filing Date:	April 28, 2025		
Inspection Date:	May 7, 2025		
Report Date:	June 2, 2025		
Applicant's Waiver Requests:	None		
Staff Assigned:	J. O'Dell, A. Conway, M. Bellamy, J. Patmon, and J. Stottsberry		
Summary of Staff Recommenda	tions (see discussion below):		
Application: Appro	val Disapproval Approval with Conditions		
Waiver: Appro	val Disapproval Not Applicable		

Background to the Application

On June 24, 2021, in Case No. 18-1607-EL-BGN, the Ohio Power Siting Board (Board) authorized Firelands Wind, LLC (Applicant) to construct, operate, and maintain a wind-powered electric generation facility consisting of up to 71 wind turbines in Erie and Huron counties with a maximum nameplate capacity of 297.7 megawatts (Original Certificate).

On November 16, 2023, in Case No. 21-1055-EL-BGA, (First Amendment) the Board approved the First Amendment to the Original Certificate. In the First Amendment, the Board authorized the Applicant (a) to shift and relocate 11 wind turbine locations, (b) to use additional wind turbine models, (c) to perform boundary changes to the Original Certificate's project area to accommodate removal of certain wind turbines and addition of five new segments of underground electric collection lines, (d) to allow minor modifications from the engineering design to shift locations of buried electric collection lines and access roads, (e) to relocate the electric collection line north of T87 to avoid archaeological resources, and (f) to extend an access road east of turbine T64 to reduce potential impacts to existing roadways.

On January 16, 2025, in Case No. 24-0845-EL-BGA, the Board approved the Second Amendment to the Applicant's Emerson Creek wind project certificate. This authorized location shifts for 12 turbine locations, minor adjustments to collection line locations, and provided for incorporation of an additional access road.

Application Description

The Applicant continues to adjust and refine its wind facility design and layout to accommodate landowner feedback and to further minimize environmental impacts. The described adjustments reflect a significant reduction in environmental impacts from the project, as the overall number of turbines is being reduced from 70 to 49. As a result, (1) access roads are being reduced from 205,164 to 99,401 linear feet, (2) collection lines are being reduced from 917,390 to 626,497 linear feet, and (3) the collection substation is being reduced from 6.2 to 1.7 acres.

In this amendment application, the Applicant requests:

- (1) refinement to its proposed layout to allow the installation of three light detection and ranging (LiDAR) measurement facilities; and
- (2) refinement of its proposed wind farm layout to reduce the overall total amount of access roads, electric collection lines, and collection substation area. The proposed amendment does not change the currently certificated project area. The Applicant intends to begin construction in 2025 pending authorization from the Board.

Request for installation of LiDAR

In the Original Certificate, the Applicant intended to install up to three permanent meteorological towers (METs). With this Third Amendment application, the Applicant instead intends to install three LiDAR measurement facilities. LiDAR is a remote sensing technology that collects meteorological data for accurate vertical wind profiling. Each LiDAR facility would need an access road, electric service, communication lines, and a temporary monitoring mast. In total, 2,608 feet of access roads and 2,880 feet of underground electric service and communications lines are anticipated to serve the LiDAR facilities. The Applicant also requests flexibility to adjust the location of the LiDAR stations within an approximate 200 feet radius. The associated access roads and electric service and communication lines would also be adjusted.

Request for electric collection line, access road, and substation modifications

The Applicant describes 19 combined underground collection line and access road changes as a result of the revised and reduced turbine configuration. Of these changes, nearly all accommodate landowner or government safety requests. While the changes are not reflected in direct before and after comparisons as to each collection line and access road, the overall impact of the project modifications reflects substantial reductions (access roads reduced by 52% and collection lines reduced by 32%). Further, the reduction in the number of turbines would reduce the footprint of the proposed substation by 4.5 acres; thus, avoiding nearby wetlands.

The monitoring mast would be approximately 197 feet in height and be left in place for up to six months to validate the meteorological data collected from the LiDAR facilities. Staff recommends that at least 30 days prior to the preconstruction conference, the Applicant shall file in this docket a copy of the FAA Determination of No Hazard letter (if applicable) for the LiDAR facility monitoring mast(s).

The current proposed LiDAR facilities layout is reflected in the maps in this report.

^{1.} Requested by contractor, Huron County, and townships due to safety considerations. Third Amendment application at Table 2 – Description of Each Modification, page 6.

Application Review

Staff investigated and reviewed the proposed amendment application for adverse environmental impacts. The application indicates that the overall impact of the proposed amendment has been reduced substantially, largely due to a reduction in the number of turbines from 71 to 49. The Applicant summarizes the reduction in impacts as follows²:

Facility Component	Certificated Layout	Proposed Layout	Change
Access Roads	205,164 feet	99,401 feet	-105,762 feet
Collection Lines	917,390 feet	626,497 feet	-290,893 feet
LIDAR Area ¹	0.18 acres	0.07 acres	-0.11 acres
Collection Substation	6.2 acres	1.7 acres	-4.5 acres

Surface Waters³

The Applicant's consultant conducted updated wetland and stream delineations on April 16 and 17, 2025 for all access roads, collection lines, and LiDAR locations that had not been previously studied. Two additional Category 1 wetlands were identified. No additional streams were identified. The Applicant states the additional wetlands would be entirely avoided by proposed facility components, therefore no additional impacts to surface waters would be expected.

Threatened and Endangered Species⁵

The Applicant coordinated with the U.S. Fish and Wildlife Service (USFWS) and the Ohio Department of Natural Resources (ODNR) regarding sensitive species for the initial application.

2. Third Amendment application at Table 1: Overall Change in Impact, page 3.

4. Wetlands falling within the purview of the Clean Water Act are regulated within Ohio by R.C. 6111, et seq. and Ohio Adm.Code 3745-1-50, et seq. Ohio Adm.Code 3745-1-54 establishes wetland categories

^{3.} The Ohio EPA website states: "The Division of Surface Water ensures compliance with the federal Clean Water Act and works to increase the number of water bodies that can be safely used for swimming and fishing. The division issues permits to regulate wastewater treatment plants, factories, and storm water runoff; develops comprehensive watershed plans aimed at improving polluted streams; and samples streams, lakes, and wetlands — including fish, aquatic insects, and plants — to determine the health of Ohio's water bodies." (Ohio EPA, About Us: Surface Water, https://www.epa.ohio.gov/About-surface-water); The U.S. Army Corps of Engineers website states: "The U.S. Army Corps of Engineers (USACE) Regulatory Program involves the regulating of discharges of dredged or fill material into waters of the United States and structures or work in navigable waters of the United States, under section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act of 1899." (USACE, Obtain a Permit, https://www.usace.army.mil/Missions/Civil-Works/Regulatory/Program-and-Permits/Obtain-a-Permit/;—The Ohio Department of Natural Resources (ODNR) website states: "The Division of Water Resources manages statewide oversight of dams & levees, floodplains, and the collection and management of data related to the state's water resources." (ODNR, Division of Water Resources, https://ohiodnr.gov/wps/portal/gov/odnr/discover-and-learn/safety-conservation/about-odnr/water-resources/water resources).

^{5.} Based on agency coordination with the USFWS and ODNR, identified species of concern are, in general, defined as those species that are protected under the federal Endangered Species Act of 1973, as amended (16 U.S.C. §§ 1531-1544) and/or according to the Conservation of Natural Resources within R.C. 1518.01-1518.99; 1531.25; and 1531.99. See also e.g., R.C. 1531.08 states, in part: "In conformity with Section 36 of Article II, Ohio Constitution, providing for the passage of laws for the conservation of the natural resources of the state, including streams, lakes, submerged lands, and swamplands, and in conformity with this chapter and Chapter 1533. of the Revised Code, the chief of the division of wildlife has authority and control in all matters pertaining to the protection, preservation, propagation, possession, and management of wild animals and may adopt rules under

The Applicant has committed to adhering to the conditions in the Original Certificate for the project to minimize impacts to listed species. No additional impacts to threatened and endangered species would be expected.

Cultural Resources

In the original application case and the First Amendment case the Applicant's cultural resources consultant performed a literature review and Phase I cultural resource management investigation (archaeology and history/architecture) for the project. The consultant identified archaeological sites that are recommended as eligible or potentially eligible for listing on the National Register of Historic Places (NRHP) and in need of mitigation or avoidance. The Ohio Historic Preservation Office (OHPO) has requested that Applicant enter a memorandum of understanding (MOU) to address the sites that have been recommended for avoidance. In reference to Historical/Architectural impacts, the OHPO states there will be an adverse impact from the project if no mitigation was implemented. The OHPO requests a MOU to address the mitigation of the adverse effect.

The Applicant has committed, through a programmatic agreement between the Applicant and the OHPO, to avoiding adverse impacts to cultural resources. This would be accomplished by avoiding and mitigating impacts to resources, including mitigation as recommended by the OHPO for historical resources, which would be memorialized in a MOU between the Applicant and the OHPO. The original programmatic agreement signed by the applicant and OHPO has expired but the Applicant has committed to signing a new programmatic agreement.

For the current amendment application, the consultant surveyed 49 additional acres. From this survey, three archaeological sites were newly identified. The consultant recommended that all three sites are not eligible for listing on the NRHP. The OHPO concurred with this recommendation. OHPO also stated that a previously identified archaeological site (known as Sawyer Burial), that is partially located in a project survey area, should be further investigated.

With the Applicant's commitments, and OHPO's recommendation, Staff has determined that minimal adverse environmental impacts to cultural resources would be achieved.

Recommended Findings

Staff finds that the impacts associated with the proposed amendment would not result in a significant increase in overall environmental impact, as compared to the previously certificated project. Staff's review of the amendment application included consideration of the requirements listed in R.C. 4906.10. Based on Staff's review, the amendment application meets the necessary criteria for granting an amended certificate. Staff recommends that the Board approve the proposed amendment to the Certificate, provided that the following conditions are satisfied.

section 1531.10 of the Revised Code for the management of wild animals." One of the missions of the ODNR is to "conserve and improve the fish and wildlife resources and their habitats and promote their use and appreciation by the public so that these resources continue to enhance the quality of life for all Ohioans." In carrying out this mission, the ODNR considers the "status of native wildlife species [to be] very important" and therefore lists wildlife species needing protection. (ODNR, State Listed Species, https://ohiodnr.gov/wps/portal/gov/odnr/discover-and-learn/safety-conservation/about-ODNR/wildlife/state-listed-species). In addition to endangered species, those species classified as "threatened" are considered during OPSB project planning and approval because these species are those "whose survival in Ohio is not in immediate jeopardy, but to which a threat exists. Continued or increased stress will result in its becoming endangered." Id.

Conditions

- (1) The Applicant shall adhere to all conditions of the Original Certificate (Case No. 18-1607-EL-BGN), the First Amendment (Case No. 21-1055-EL-BGA), the Second Amendment (Case No: 24-0845-EL-BGA), and the installation of LiDAR facilities in lieu of METs and shifts to access roads and collection line locations as described in the Third Amendment application.
- (2) Prior to the commencement of construction, the Applicant shall finalize coordination of the assessment of potential effects of the proposed facility with Staff and the OHPO. If the resulting coordination discloses a finding of cultural or archaeological significance, or a site that could be eligible for inclusion in the NRHP, then the Applicant shall submit a modification or mitigation plan to Staff. Any such mitigation effort, if needed, shall be developed in coordination with the OHPO and submitted to Staff for review to confirm that it complies with this condition. If mitigation is not feasible, the Applicant shall submit a revised filing to the Board. Additionally, the Applicant shall enter into a new programmatic agreement with OHPO.
- (3) At least 30 days prior to the preconstruction conference, the Applicant shall file in this docket a copy of the FAA Determination of No Hazard letter (if applicable) for the LiDAR facility monitoring mast(s).

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