

OHIO POWER SITING BOARD MEETING

September 17, 2020 - 1:30 PM

Due to the state of emergency and with the passage of Am. Sub. H.B. 197, the Board will be conducting an electronic meeting on September 17, 2020. The public will be able to attend by calling in or viewing a live video on the internet:

Phone No.: 1-408-418-9388

Event Number / Access Code: 173 149 1206

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AGENDA

Approval of the minutes of the regular Ohio Power Siting Board meeting held August 27, 2020.

1. **Case Number 16-1871-EL-BGN.** Icebreaker Windpower, Inc. for a Certificate of Environmental Compatibility and Public Need for an Electric Generating Facility in Cuyahoga County, Ohio.
(Second Entry on Rehearing)
2. **Case Number 19-778-GE-BRO.** In re the Ohio Power Siting Board's Consideration of Ohio Adm.Code Chapter 4906-4. In the Matter of the Ohio Power Siting Board's Consideration of Ohio Adm.Code Chapter 4906-4.
(Supplemental Order Considering Rules)
3. **Case Number 19-1641-EL-BGN.** In re The Ohio State University for a Certificate of Environmental Compatibility and Public Need to Construct a Combined Heat and Power Facility in Franklin County, Ohio.
(Opinion, Order, and Certificate Considering Application)
4. **Case Number 20-909-EL-BLN.** In re AEP Ohio Transmission Company, Inc. Letter of Notification Application for the Culbertson 138 kV Transmission Line Extension.
(Entry considering request to withdraw application)

ALL INFORMATION CONTAINED IN THIS PACKET SHOULD BE CONSIDERED TO BE IN DRAFT FORM AND OF A CONFIDENTIAL NATURE.

Minutes of the Ohio Power Siting Board Meeting August 27, 2020 – 1:30 p.m.

Present:

Sam Randazzo, Chairman, Public Utilities Commission of Ohio
Brittney Colvin for Mary Mertz, Director, Ohio Department of Natural Resources
Sarah Huffman for Dorothy Pelanda, Director, Ohio Department of Agriculture
Rachel Near for Lydia Mihalik, Director, Ohio Development Services Agency
Laura Factor for Laurie Stevenson, Director, Ohio Environmental Protection Agency
W. Gene Phillips for Lance Himes, Interim Director, Ohio Department of Health
Gregory Murphy, P.E., Public Member
Jay Hottinger for Senator Steve Wilson
Senator Sandra Williams
Representative Jeffrey Crossman
Angela Hawkins, Legal Director
Jeffrey Jones, Telephone and Water Sections, Legal Department

Absent:

Representative Nino Vitale

This meeting was convened pursuant to the regular agenda issued on August 20, 2020 for the week of August 24, 2020.

The minutes of the May 21, 2020 Board meeting were approved by the Board members.

The Board met for the purpose of considering the following cases and to act upon the proposed Entries and Orders.

Representative Jeffery Crossman and Senator Sandra Williams requested a status update on the Board's consideration of the application to construct and operate the Icebreaker wind project. Chairman Randazzo stated that he anticipates that the order on rehearing will be addressed by the Board at its next meeting. The Chairman clarified that the Board received applications for rehearing from entities supporting and opposed to the project.

Senator Williams then identified a letter sent to the Power Siting Board from a group of legislators from northeast Ohio. She mentioned that the only response received by the legislators so far is that the comments will be reflected in the public comment section of the docket. Senator Williams stated that she believes this response to be insufficient and requested further response. Chairman Randazzo stated that it is often the case that Board receives letters from legislators and sometimes groups of legislators. It has always been the practice of the Board that these letters be added to the public comment section of the online docket for the case at issue to create a transparent process whereby all parties and the public can see who has expressed views to the Board members. However, as is the case with all matters before the OPSB, the issues in the case are those defined by the parties. At this rehearing phase, the parties to the Icebreaker case have raised several arguments that will all be taken up at the next meeting of the Ohio Power Siting Board. Senator Williams reiterated her support of the Icebreaker project as the Senator representing the area where the project is set to be constructed.

1. 19-2148-GA-BLN In re the Letter of Notification Application for the Marysville Connector Pipeline Project filed by Columbia Gas of Ohio, Inc.
(Order Considering Application)

Moved by Gene Phillips and seconded by Rachel Near. Approved by vote 6-0.
Dept. of Agriculture recused.

Presentation of the 2019 Annual Report of the Ohio Power Siting Board and a brief snapshot of proposed generation projects in Ohio.

Chairman Randazzo introduced Theresa White, Executive Director of OPSB and Lori Sternisha, Federal Energy Regulatory Commission Advocate. Ms. White provided highlighted information from the 2019 Annual Report of the Ohio Power Siting Board including, the jurisdiction of the Board, maps of pending and approved applications to construct and operate generation facilities by fuel source, and maps of resource inputs by fuel type.

Lori Sternisha provided a brief snapshot of proposed generation projects in Ohio based on information collected by PJM Interconnection. Ms. Sternisha included information about the office of the Federal Energy Regulatory Commission Advocate and PJM generally. Chairman Randazzo likened the role of PJM to air traffic control. She also shared a current snapshot of those generators that have applied to interconnect with PJM (often referred to as the "queue") by fuel source. The snapshot shows that the vast majority of proposed resources in the queue are solar projects. Chairman Randazzo emphasized that these projects come at a time when PJM does not anticipate an increase in growth in demand for electricity. As it relates to the comparison to other states that are members of PJM, Ohio has the second most proposed solar generation and the second most proposed hybrid solar and storage generation. Ms. Sternisha also shared a snapshot of significant growth in proposed wind capacity in PJM over the next few years. She finalized the presentation with an explanation of PJM's interconnection process and a graphical display of emission reductions over the last decade and a half.

Chairman Randazzo concluded the meeting by emphasizing that customers of utilities regulated by the Public Utilities Commission of Ohio have the right to act on their own generation technology preferences. Customers may procure renewable resources from in-state resources of their choosing, or from resources located elsewhere if other states within PJM have better or cheaper solar or wind resources. This is because most renewable generators (in Ohio and elsewhere) sell power into the wholesale power system, and not to individual customers. Further, the Chairman highlighted that the City of Columbus is seeking a community aggregation program that shows this legal framework in action. Retail customers do not need to wait for aggregation opportunities and may select suppliers offering renewable resources on their own. The Chairman concluded by thanking the presenters and Board members.

There being no further business, the Board Meeting adjourned at approximately 2:35 p.m.

Chair

Secretary

SEPTEMBER 17 AGENDA - DRAFT - 9/8/2020 3:40 PM
THE OHIO POWER SITING BOARD

**IN THE MATTER OF THE APPLICATION OF
ICEBREAKER WINDPOWER INC. FOR A
CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED FOR
AN ELECTRIC GENERATING FACILITY IN
CUYAHOGA COUNTY, OHIO.**

CASE NO. 16-1871-EL-BGN

SECOND ENTRY ON REHEARING

Entered in the Journal on September 17, 2020

I. SUMMARY

{¶ 1} In this Second Entry on Rehearing, the Ohio Power Siting Board responds to the applications for rehearing filed by Icebreaker Wind, Inc., Business Network for Offshore Wind, Inc., Indiana/Kentucky/Ohio Regional Council of Carpenters, intervening residents of the Village of Bratenahl, and jointly filed by Ohio Environmental Council and Sierra Club. In some cases the applications for rehearing are legally deficient or raise issues beyond the Board's jurisdiction. In other cases, the applications for rehearing complain about provisions in the Opinion, Order, and Certificate that produce outcomes nearly identical to the litigation position of the party submitting the application for rehearing. Accordingly, and for the reasons explained in more detail below, the Board rejects the alleged errors contained in the applications for rehearing.

II. PROCEDURAL HISTORY

{¶ 2} All proceedings before the Ohio Power Siting Board (Board) are conducted according to the provisions of R.C. Chapter 4906 and Ohio Adm.Code Chapter 4906. Further, R.C. 4906.20 provides that no person shall construct or operate an economically significant wind farm in the state without obtaining a certificate for the facility from the Board.

{¶ 3} Icebreaker Windpower, Inc. (Icebreaker) is a corporation and a person as defined in R.C. 4906.01(A).

{¶ 4} On February 1, 2017, Icebreaker filed its application for a certificate to construct a wind-powered electric generation facility in Cuyahoga County, Ohio, which it described as a six-turbine demonstration wind-powered electric generation facility located eight to ten miles off the shore of Cleveland, in Cuyahoga County, Ohio. The wind turbines are expected to have a nameplate capacity of 3.45 megawatts (MW) each, with a total generating capacity of 20.7 MW. Thereafter, the application was supplemented on July 20, 2017, August 18, 2017, and March 22, 2018.

{¶ 5} By Opinion, Order, and Certificate dated May 21, 2020 (May 21 Order), the Board approved and modified a revised joint stipulation and recommendation (Revised Stipulation) filed by Icebreaker, Staff, Ohio Environmental Council (OEC), the Indiana/Kentucky/Ohio Regional Council of Carpenters (Carpenters), Sierra Club, and Business Network for Offshore Wind, Inc. (BNOW) and issued a certificate of environmental compatibility and public need to Icebreaker for the construction, operation, and maintenance of a wind-powered electric generation facility in Cuyahoga County. As is common in certification proceedings, the May 21 Order set forth 33 conditions including conditions that must be satisfied before construction may commence.

{¶ 6} R.C. 4906.12 provides that R.C. 4903.02 to 4903.10 and R.C. 4903.20 to 4903.23 apply to any proceeding or order of the Board, as if the Board were the Public Utilities Commission of Ohio (Commission).

{¶ 7} Ohio Adm.Code 4906-2-32(A) 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, form, and circumstances set forth in R.C. 4903.10. R.C. 4903.10 states that any party to a Commission proceeding may apply for rehearing with respect to any matter determined by the Commission within 30 days after the entry of the order upon the journal of the Commission. R.C. 4903.10(B) also requires that applications for rehearing be in writing and must set forth specifically the ground or grounds on which the party seeking rehearing considers an order to be unreasonable or unlawful.

{¶ 8} On June 19, 2020, intervenors W. Susan Dempsey and Robert M. Maloney, (collectively, Bratenahl Residents) filed an application for rehearing of the May 21 Order. Thereafter, on June 22, 2020, applications for rehearing were filed by Icebreaker, Carpenters, BNOW, and jointly by OEC and Sierra Club (collectively, OEC/Sierra Club). Icebreaker's application asserts four points of error in the Board's May 21 Order; the alleged errors are focused on the Board's modifications to the Revised Stipulation. Carpenters' application adopts Icebreaker's application in its entirety. The claims advanced by OEC/Sierra Club and BNOW in, as discussed below, deficient applications for rehearing amount to arguments for rehearing that largely overlap with those in Icebreaker's application and will be addressed together where appropriate.

{¶ 9} On June 29, 2020, Icebreaker, OEC, Sierra Club, Carpenters, and BNOW jointly filed a memorandum contra the application for rehearing filed by Bratenahl Residents. On July 1, 2020, Bratenahl Residents filed a memorandum contra the applications for rehearing filed by the other intervening parties.

{¶ 10} By Entry issued July 17, 2020, pursuant to the authority set forth in Ohio Adm.Code 4906-2-32(E), the administrative law judge (ALJ) granted rehearing for the limited purpose of affording the Board additional time to consider the issues and arguments raised in the applications for rehearing.

III. DISCUSSION

{¶ 11} The applications for rehearing filed by Icebreaker, Carpenters, OEC/Sierra Club, and BNOW claim that the Board erred in modifying the Revised Stipulation which was contested by Bratenahl Residents. In the May 21 Order, the Board authorized a certificate for the construction, operation, and maintenance of the proposed project as recommended in the Revised Stipulation, subject to limited modifications. The limited modifications required by the May 21 Order were necessary because of the incompleteness of work that, as acknowledged in the Revised Stipulation, must be completed to properly identify and mitigate the project's risk to bird and bat populations. As presented, the

Revised Stipulation was substantively defective given the findings the Board must make pursuant to R.C. 4906.10 and procedurally defective because of the non-transparent and inappropriate dispute resolution and other processes contained therein. More specifically, the Board found that the Revised Stipulation could be adopted but only if: (1) an interim bird and bat population risk mitigation protocol was added; and (2) a public and transparent Board process was substituted for the private and non-transparent process briefly described in the Revised Stipulation including incorporated memoranda. Among other things, the Board found that reliable data need to be gathered and submitted regarding the flight patterns of birds and bats at the project site and particularly in the rotor-swept zone to better inform the Board on the nature and extent of the bird and bat population risk created by this first-of-its-kind project and what, if any, risk mitigation protocol might be safely substituted for the interim risk mitigation protocol adopted by the May 21 Order.

{¶ 12} Contrarily, Bratenahl Residents go further and claim that the May 21 Order is unreasonable and unlawful because Icebreaker failed to introduce sufficient evidence for the Board to make valid findings and determinations as to the nature of the probable environmental impact of the project, pursuant to R.C. 4906.10(A)(2), and to determine that the project represents the minimum adverse environmental impact, pursuant to R.C. 4906.10(A)(3), even after considering the Revised Stipulation modifications made by the Board. In their second assignment of error, Bratenahl Residents claim that the May 21 Order is also unreasonable and unlawful as the project does not serve the public interest, convenience, and necessity, pursuant to R.C. 4906.10(A)(6), because the granting of the certificate violates the Public Trust Doctrine.

{¶ 13} The Board has reviewed and considered all of the claims and arguments contained in the applications for rehearing. Any claim or argument contained in the applications for rehearing that is not specifically discussed herein has been thoroughly and adequately considered by the Board and is, unless otherwise specifically stated, denied.

A. *Summary of the applications for rehearing from Icebreaker, Carpenters, OEC/Sierra Club, and BNOW*

{¶ 14} Icebreaker's first claim contends that the Board's modifications to the Revised Stipulation are against the manifest weight of the evidence. OEC/Sierra Club and BNOW join Icebreaker in this regard. Icebreaker explains that its first claim arises because the Board modified and approved the Revised Stipulation to require the operation of the turbines be curtailed from dusk to dawn during the period running from March 1 through November 1 of each year following construction, until otherwise ordered by the Board. As already explained, the May 21 Order authorizes Icebreaker to seek to modify this interim bird and bat risk mitigation protocol after gathering and providing the data regarding the flight patterns of migratory birds and bats in the project area; the same data required by the Revised Stipulation. May 21 Order at ¶¶ 159-160. According to Icebreaker, the modification of the Revised Stipulation was unnecessary. Effectively conceding the need for mitigating the project's risks to bird and bat populations, Icebreaker asserts that the Revised Stipulation included numerous safeguards that will protect birds and bats and also allows the project to be financially viable. Icebreaker emphasizes that if the operation of the turbines are curtailed ("feathered") for the time period specified, on an interim basis, in the May 21 Order, the project will not be financeable, citing the testimony of Icebreaker President David Karpinski (Tr. Vol. 1 at 31-43). As described by Icebreaker, the Board's additional restrictions are thus redundant, overly broad, and pointless. BNOW agrees with Icebreaker, asserting that Conditions 18, 21, and 23 of the Revised Stipulation provide sufficient protections for birds and bats. BNOW notes that the Revised Stipulation requires Icebreaker to supply the necessary pre-construction radar data regarding birds and bats at the project site and requires Icebreaker to supply an impact mitigation plan that includes the necessary collision-detection technology. Continuing, BNOW explains that the Revised Stipulation already requires the facility to be feathered if the collision-detection technology fails and directs Icebreaker to report any significant mortality events. According to BNOW, the unmodified version of the contested Revised Stipulation provides the Board and its Staff with all necessary information and installs sufficient precautions to ensure the project

minimally impacts migrating birds and bats. Icebreaker additionally lists evidence admitted into the record that supports a finding that the Revised Stipulation complies with R.C. 4906.10(A)(2) and (A)(3). Icebreaker maintains that the cumulative amount of this evidence demonstrates that the Revised Stipulation should be approved without modification. OEC/Sierra Club submit that the Board recognized the large amount of evidence in the record that supports the Revised Stipulation. OEC/Sierra Club further aver that Staff witness Erin Hazelton, from the Ohio Department of Natural Resources (ODNR), testified that the conditions already in the Revised Stipulation ensure that the project will have the minimum adverse environment impact. The Board erred by ignoring the expertise of the ODNR, according to OEC/Sierra Club, as the ODNR is most qualified to understand the risks associated with the project and the ODNR would be providing ongoing monitoring of the project.

{¶ 15} Icebreaker and OEC/Sierra Club further contend that the Board reached its decision by considering evidence outside of the record. Icebreaker asserts the application before the Board only consisted of six turbines. According to Icebreaker, however, the Board misleadingly applied the application's acknowledgment of the facility as a demonstration project and wrongfully considered the project's larger scale implications. Icebreaker explains, misleadingly, that the application was explicit that there are no current plans regarding additional turbines and it was inappropriate for the Board to consider additional evidence not in the record. OEC/Sierra Club maintains that, pursuant to R.C. 4906.10, the Board can only consider the application as filed and that, here, the application only consisted of the six turbines. According to OEC/Sierra Club, a project of such a small scale satisfies the statutory requirements and the only way the Board could have found the project did not represent the minimum adverse environmental impact is if the Board considered future wind projects being built in Lake Erie.

{¶ 16} For its next alleged error, Icebreaker claims that the Board violated R.C. 4903.09 by failing to set forth the reason for its decision to modify the Revised Stipulation. According to Icebreaker, the Board's decision to modify the Revised Stipulation and require

additional feathering was unsupported by the evidence. Apparently acknowledging record evidence on the subject, Icebreaker avers that the only evidence the Board relied on was the testimony of Icebreaker witness Dr. Caleb Gordon. As this alleged error is further unpacked, Icebreaker contends that the Board failed to provide context for the portion of Dr. Gordon's testimony cited in the May 21 Order. Icebreaker argues that, while Dr. Gordon acknowledged feathering would provide greater protections for birds and bats, he emphasized that such protections were not necessary. Icebreaker claims that the testimony from Dr. Gordon relied on by the Board was in relation to the Initial Stipulation, not the Revised Stipulation. Evolving its alleged error, Icebreaker contends that testimony and evidence submitted in support of the Initial Stipulation is not relevant as that stipulation was not before the Board. Along those lines, Icebreaker notes that the Board unreasonably considered public testimony evidence from a witness from the National Audubon Society, who testified prior to the filing of the revised testimony. Similarly, Icebreaker argues that the Board wrongfully cited to testimony of Staff witness Hazelton and Bratenahl Residents witness Dr. Henry Streby, who were also testifying regarding the Initial Stipulation. OEC/Sierra Club agree with Icebreaker's allegation of error, asserting that the Board failed to justify the modifications to the Revised Stipulation and failed to properly cite to the record.

{¶ 17} In response, Bratenahl Residents state there was sufficient evidence to justify the Board's modifications. The Bratenahl Residents state that the Staff Report and Staff witness Hazelton's initial testimony support the Board's modification of the Revised Stipulation, citing Staff Exhibit 1 at 47-48 and Staff Exhibit 7 at 8-10. Bratenahl Residents assert that no facts changed from the Initial Stipulation to the Revised Stipulation. Specifically, as explained by Bratenahl Residents, Icebreaker has not provided pre-construction radar data sufficient to assess the risks to birds and bats and Icebreaker has not identified post-construction collision technology to determine the actual impacts to birds and bats. Bratenahl Residents, thus, conclude that the initial, sworn testimony of Staff witness Hazelton is part of the record evidence and remains relevant. In that testimony,

Bratenahl Residents point out that witness Hazelton found that the initial application did not represent the minimum adverse environmental impact and that the only way to ensure the project minimized risks to birds and bats was to feather the turbines from dusk to dawn, March 1 to January 1, citing Staff Exhibit 7 at 8-10.

{¶ 18} Next, Icebreaker and OEC/Sierra Club contend that the Board wrongfully applied the requirements of R.C. 4906.10(A)(3) to determine whether the facility represents the minimum adverse environmental impact. Icebreaker and OEC/Sierra Club creatively claim that the Board improperly required that the project have zero environmental impact. According to Icebreaker, R.C. 4906.10(A)(3) directs the Board to consider the state of the available technology and the economics of other alternatives when making its assessment regarding the environment impact. Additionally, Icebreaker states the General Assembly, in crafting the statute, considered that all projects will have some environmental impact. By modifying the Revised Stipulation to mitigate, on an interim basis, potential bird and bat population risks, Icebreaker and OEC/Sierra Club claim that the Board's May 21 Order requires the project to have zero environmental impacts on birds and bats.

{¶ 19} Bratenahl Residents counter that the feathering requirements were necessary because of Icebreaker's inability to collect and provide data for the Board to review. Bratenahl Residents observe that such information has been requested from Icebreaker since 2008. Due to this lack of critical data, Bratenahl Residents state that the Board was unable to determine whether the project represented the minimum adverse environmental impact. Bratenahl Residents thus affirm that the Board properly considered the state of available technology when assessing the environmental impact of the project.

{¶ 20} In its fourth assignment of error, Icebreaker claims that the Board violated R.C. 4906.10(A) by failing to render a decision on the record. Icebreaker then claims that, as explained by the Board's May 21 Order, the Board modified the Revised Stipulation to, in effect, require two Board decisions, one for construction and one for operation. Icebreaker maintains this is unlawful and unnecessary. Apparently acknowledging that the Revised

Stipulation also required Icebreaker to successfully complete additional work to identify and properly mitigate the project's risks to bird and bat populations, Icebreaker and OEC/Sierra Club, argue that the Board's Staff, which includes the ODNR, is more than capable of ensuring Icebreaker's compliance with the required risk identification and mitigation work that is, as all parties acknowledge, presently incomplete. Icebreaker continues by pointing out that the Board's rules allow the Board to rely on Staff to monitor certificate conditions and such practice has been approved by the Supreme Court of Ohio, citing *In re Application of Buckeye Wind, LLC*, 131 Ohio St.3d 449, 452, 2012-Ohio-878. OEC/Sierra Club state the Board should have relied on the expertise of Staff and the ODNR and should not have rendered its own judgement. Further, OEC/Sierra Club submit that the Board should not be the arbiter of whether lifting restrictions is permissible; instead such decisions should be left to experts of Staff and the ODNR. Both Icebreaker and OEC/Sierra Club maintain that the Board's decision to require a second hearing is unprecedented. Neither Icebreaker, BNOW, nor OEC/Sierra Club address the potential of the Revised Stipulation to place responsibility for determining compliance in the hands of mediators or courts rather than the Board Staff, cause compliance determinations to be made outside Board supervision and result in review of Board decisions by other than the Ohio Supreme Court which has exclusive jurisdiction to review Board decisions.

{¶ 21} Bratenahl Residents maintain that it was proper for the Board to require Icebreaker to come before the Board to request that the interim feathering restrictions be modified. Bratenahl Residents reiterate their argument from the initial briefs that allowing Staff and the ODNR to determine whether the turbines can be fully operational is an unlawful delegation of the Board's authority. Bratenahl Residents aver that, according to R.C. 4906.02(C), only the Board has the power to make such determinations. Additionally, according to Bratenahl Residents, a private determination by Staff deprives them and other interested parties from the ability to review information and an opportunity to be heard.

{¶ 22} In the final assignment of error, OEC/Sierra Club submit that the Board's decision is unlawful as it violates public policy by failing to act as quickly as possible to

reduce climate change. OEC/Sierra Club evolve this claim by asserting that the modifications to the Revised Stipulation render the project financially unviable and unable to go forward. Then, OEC/Sierra Club leaps to assert that the Board has put forth a decision that will result in a long reliance on fossil fuels statewide. According to OEC/Sierra Club, the Board has an obligation to consider the impact of the project on climate change.

B. *Summary of the applications for rehearing filed by the Bratenahl Residents*

{¶ 23} As part of its first assignment of error, Bratenahl Residents contend that the May 21 Order is unreasonable and unlawful because it grants a certificate of environmental compatibility and public need to Icebreaker, despite Icebreaker having failed to introduce sufficient evidence for the Board to make valid findings and determinations as to the nature of the probable environmental impact. Specifically, Bratenahl Residents claim that Icebreaker and other Signatory Parties admitted that Icebreaker has yet to identify the radar monitoring technologies it intends to use to gather the necessary data to evaluate the potential impact on birds and bats, even though the ODNR and the U.S. Fish and Wildlife Service (USFWS) have been requesting that Icebreaker collect such data since 2008. According to Bratenahl Residents, Icebreaker's own application indicated that these state and federal agencies agreed that, while the permitting processes was allowed to proceed, Icebreaker was nonetheless required to conduct additional field surveys prior to construction in order to provide a direct comparison with post construction survey information as a means to assess the level of wildlife impact during the operational phase of the project (Icebreaker Ex. 1 at 90). In Staff's October 23, 2017 sustained motion to suspend the procedural schedule, Bratenahl Residents also argue Staff noted that this type of information regarding the viability and design of pre-and post-construction radar monitoring protocols would be necessary to measure the effect of the proposed turbines on birds and bats. In fact, Bratenahl Residents contend that the nature of the probable environmental impact cannot be determined unless and until Icebreaker submits sufficient evidence to show the number and density of birds and bats that fly through the project's rotor-swept zone, which evidence, according to Bratenahl Residents, Icebreaker

acknowledged does not exist at this time (Tr. Vol. II at 317, 331). While Icebreaker alleges that the Diehl Report should be considered as a response to these concerns, Bratenahl Residents contend that the report consists of nothing more than an evaluation of several different proposals for the radar monitoring technology to be used, all of which were subject to several deficiencies that would need to be evaluated and corrected to obtain credible data, especially in the event the avian radar technology would be deployed on a floating platform rather than a stationary platform (Icebreaker Ex. 37 at 1). May 21 Order at ¶ 154. As the requisite information regarding the risk associated with birds and bats has not been provided to date, particularly in relation to the admitted collision, avoidance, and attraction phenomena, Bratenahl Residents contend that the Board erred when it concluded it could determine the nature of the project's probable environmental impact (Staff Ex. 7 at 6).

{¶ 24} In response to Bratenahl Residents, Icebreaker, BNOW, Carpenters, Sierra Club, and OEC argue that the Board was correct in its determination regarding the nature of the probable environmental impact of the facility under R.C. 4906.10(A)(2). Initially, these parties claim that Bratenahl Residents do not contest the Board's determination in respect to a majority of the potential impacts considered by the Board, such as socioeconomic effects or impacts on aquatic species. Rather, Icebreaker, BNOW, Carpenters, Sierra Club, and OEC argue that Bratenahl Residents limit their argument to the fact that the May 21 Order does not contain sufficient documentation regarding the impact of the demonstration project on migrating birds and bats, despite the Board's acknowledgement of the "extensive evidence provided in order to evaluate the nature of the probable environmental impact of the project on birds and bats." May 21 Order at ¶ 103 [where the Board specifically listed documents supporting its ultimate conclusion regarding R.C. 4906.10(A)(2)]. After evaluating this evidence, as well as Dr. Gordon's review of 42 land-based wind farms and other studies, Icebreaker and the supporting parties argue, again, that the Board correctly concluded that the small scope of the one-of-a-kind project and the proposed project location will minimize the potential effects often associated with wind generation facilities, further noting that the

demonstration project's main impact is expected to be on nocturnal migrating birds. May 21 Order at ¶ 108.

{¶ 25} Additionally, Icebreaker and the other supporting parties claim that the Revised Stipulation resolves all of the allegedly outdated issues regarding pre- and post-construction raised by Bratenahl Residents in their application for rehearing. In fact, these parties maintain that any concerns initially raised by USFWS regarding the project were addressed by the March 12, 2018 letter from USFWS to the ODNR, which included the agency's final findings and concluded the project has "limited direct risk to migratory birds and bats." Opinion, Order, and Certificate at ¶ 163. Moreover, pursuant to the terms laid out in the Revised Stipulation, Icebreaker, BNOW, Carpenters, Sierra Club, and OEC opine that Bratenahl Residents' insistence that the pre-construction radar studies be completed and the collision monitoring technology be selected prior to a certificate being issued are also misplaced. Specifically, these parties point to the requirements, among other commitments in the Revised Stipulation, to strictly comply with the terms of the Avian and Bat memorandum of understanding (MOU) and its associated pre-construction and post-construction monitoring plans, implement the avian and bat impact mitigation plan and collision monitoring plan prior to construction, ensure that the collision monitoring technology be fully functioning at the time the turbines commence operation, and maintain the strict reliability thresholds to verify the veracity and viability of the avian and bat radar data collected at the project site (Joint Ex. 2 at 5-9). Here, Icebreaker and the other supportive signatory parties, argue that the Board properly evaluated all of this evidence to conclude the expected risk associated with this demonstration project is low. In doing so, these parties acknowledge that there is a distinct difference between determining the probable environmental impact and the actual environmental impact of the facility once it is operational, noting the Board made this same distinction when it determined the purpose of the pre-construction radar studies to be completed is to provide the baseline to determine the actual environmental impact of the facility. May 21 Order at ¶ 103. As such, they contend that the completion of the required pre-construction and post-construction radar

monitoring outlined in the Revised Stipulation is not required for the Board to ascertain the nature of the probable environmental impact, in accordance with R.C. 4906.10(A)(2).

{¶ 26} As their second of assignment of error, Bratenahl Residents claim the May 21 Order is unreasonable and unlawful because the facility does not serve the public interest, convenience, and necessity. More specifically, Bratenahl Residents assert that the Board cannot determine that the project serves the public interest under R.C. 4906.10(A)(6) if the project violates the Public Trust Doctrine, the doctrine prohibiting the state from using its title in public property for the benefit of a private party such as Icebreaker. Not only do Bratenahl Residents object to the notion that a valid determination regarding the Public Trust Doctrine lies outside of the Board's jurisdiction, they contend that the Board erroneously determined that "because the state is not relinquishing any interest in Lake Erie" the project was not in violation of the Public Trust Doctrine, citing to the fact that the project was planned to be constructed on the bed of Lake Erie on leased, submerged land off the coast of Cleveland, Ohio. May 21 Order at ¶ 35. Further, while the Bratenahl Residents claim the Board erroneously determined that the significance of relinquishing an interest of the title to Lake Erie to a private commercial enterprise should be minimized due to the fact that the turbines would be considered a demonstration project that may be informative for potential future larger-scale offshore wind farms in Lake Erie and other Great Lakes, Bratenahl Residents argue the Public Trust Doctrine is, nonetheless, violated. May 21 Order at ¶ 200. Accordingly, as Bratenahl Residents claim the May 21 Order violates the Public Trust Doctrine, they request that the Board find that the project is not in the public interest, a finding required by R.C. 4906.10(A)(6) before the Board can authorize a certificate.

{¶ 27} Icebreaker, BNOW, Carpenters, OEC, and Sierra Club contend that Bratenahl Residents are incorrect, noting that the submerged land lease between the state of Ohio and Icebreaker specifically requires Icebreaker to "respect * * * the public's right to the free and unrestricted use of the waters * * * and the project is subject to the public's right of navigation in and around the facility." May 21 Order at ¶ 200. Further, these parties argue that the Board examined the potential impact of the facility on certain recreational activities such as

boating, fishing, and swimming, and found, due to the small scope of the project and its proposed location, the project is expected to have minimal impact on the public's enjoyment of Lake Erie. Most importantly, according to these parties, the Board also explained that the state is in no way relinquishing its interest in Lake Erie. May 21 Order at ¶ 200. As detailed in the May 21 Order, these parties also note that the Board recognized the benefits associated with the project raised by several of the Signatory Parties, as well as those presenting testimony during the local public hearings, including added renewable generation to Ohio's generation mix, economic benefits garnered through job creation, and the opportunity to gain experience with an offshore freshwater wind generation project. May 21 Order at ¶ 190. As a final measure, Icebreaker, BNOW, Carpenters, OEC, and Sierra Club claim that Icebreaker submitted a complaint resolution plan as part of its application to ensure that any complaints about the facility construction or operation are adequately investigated and resolved. May 21 Order at ¶ 183. None of the parties seeking rehearing address the condition included in the Revised Stipulation, as adopted by the May 21 Order that requires Icebreaker to secure a new submerged land lease from the ODNR.

C. Board conclusion

{¶ 28} As an initial matter, R.C. 4903.10 states that applications for rehearing "shall set forth specifically the ground or grounds on which the applicant considers the order to be unreasonable or unlawful." Furthermore, pursuant to Ohio Adm.Code 4906-2-32, an application for rehearing must be accompanied by a memorandum in support, which sets forth an explanation of the basis for each ground for rehearing identified in the application for rehearing. No specific assignments of error are set forth in the applications for rehearing filed by Carpenters or OEC/Sierra Club. See *In re Ohio Edison Co., The Cleveland Elec. Illum. Co., and The Toledo Edison Co.*, Case Nos. 16-481-EL-UNC, et al., Entry on Rehearing (Sept. 11, 2019) at ¶ 22. The Supreme Court of Ohio has previously refused to consider matters which were not set forth with adequate specificity, holding that an application for rehearing must include an allegation of the legal error the Board may have made or an allegation of the Board's incorrect factual finding in order to satisfy the statutory requirements applicable

to applications for rehearing. *Discount Cellular, Inc. v. Pub. Util. Comm.*, 112 Ohio St.3d 360, 374-375, 2007-Ohio-53, 859 N.E.2d 957; see also *The Conneaut Telephone Co. v. Pub. Util. Comm.*, 10 Ohio St.2d 269, 227 N.E.2d 409 (1967); *Consumers' Counsel v. Pub. Util. Comm.*, 70 Ohio St.3d 244, 1994-Ohio-469, 638 N.E.2d 550; *City of Cincinnati v. Pub. Util. Comm.*, 151 Ohio St. 353, 376-378, 86 N.E.2d 10 (1949) (where the Court stated “[i]t may fairly be said that, by the language which it used, the General Assembly indicated clearly its intention to deny the right to raise a question on appeal where the appellant's application for rehearing used a shotgun instead of a rifle to hit that question.”) When solely evaluating the applications for rehearing, neither Carpenters nor OEC/Sierra Club state specifically the ground or grounds on which they consider the May 21 Order to be unreasonable or unlawful. In fact, Carpenters’ application for rehearing consists of a sentence indicating it is merely adopting the application for rehearing submitted by Icebreaker. Thus, the Board finds that the applications for rehearing filed by Carpenters and OEC/Sierra Club fail to set forth specific grounds required by R.C. 4903.10(B) and, therefore, should be denied. Although these applications for rehearing should be denied due to this failure, we will, nonetheless, address their allegations as they largely overlap with those advanced by Icebreaker.

{¶ 29} Additionally, before our discussion of the arguments, we acknowledge that during the pendency of Icebreaker’s application before the Board, which was originally filed February 1, 2017, the General Assembly modified the definition of “economically significant wind farm” as it appears in R.C. 4906.13. See Substitute House Bill 6, 133rd General Assembly. This change in law, effective October 22, 2019, expands the scope of local control and narrows the Board’s jurisdiction in the case of “* * *one or more wind turbines and associated facilities that are primarily dedicated to providing electricity to a single customer at a single location and that are designed for, or capable of, operation at an aggregate capacity of less than twenty megawatts, as measured at the customer’s point of interconnection to the electrical grid.” While no party has advanced any claims or arguments based on this change of law, we mention, on our own initiative, this change in

law because the record in this proceeding indicates that the aggregate nameplate capacity of the six wind turbine generators proposed by Icebreaker is 20.7 MW. The record does not identify the aggregate capacity at the customer's point of interconnection to the electrical grid. The record does indicate that Cleveland Public Power, a wholesale customer, may be Icebreaker's primary customer.

{¶ 30} Because of the lack of any party's assertion to the contrary and the failure by any party to provide evidence that might now allow a different legal determination, the Board continues to process Icebreaker's application as presented by Icebreaker. But we do so without addressing the legal significance of the change to R.C. 4906.13 as it may relate to this project.

{¶ 31} As to Icebreaker's application for rehearing, we will first address Icebreaker's arguments regarding Board oversight. In the May 21 Order, the Board modified the Revised Stipulation to input initial turbine operating restrictions which may be modified through the public and transparent process by which all certificates issued by the Board may be changed, amended, or modified. Icebreaker and others claim this to be an unlawful "bifurcation" of the certification process. In considering Icebreaker's argument, we must first analyze the Revised Stipulation, including the incorporated memoranda, which Icebreaker and other parties submitted to the Board and have urged the Board to adopt without modification. As described in Condition 21 of the Revised Stipulation, Icebreaker must complete two years of *pre-construction* radar at the project site. The accumulated radar data must meet certain qualification, including determining the flight altitude of birds and bats near and within the project's rotor swept zone. The Revised Stipulation called for the required pre-construction data to be shared with Staff and the ODNR before any construction could commence for the purpose of ensuring the information complied with the Revised Stipulation's requirements as they relate to the identification of risks to bird and bat populations and proper mitigation of such risks. Similarly, pursuant to Condition 18 and prior to the commencement of construction, the Revised Stipulation required Icebreaker to provide the ODNR with the bird and bat impact mitigation plan, which includes the

collision monitoring plan. Thus the Revised Stipulation precluded Icebreaker from commencing construction (and therefor operation) until the bird and bat population risks were adequately identified and mitigated and Icebreaker secured the additional approvals required by the Revised Stipulation. Our May 21 Order did not change the scope of the work that Icebreaker must complete before construction can commence or the nature of the approvals that Icebreaker must secure prior to construction to ensure that the bird and bat population risks presented by this project are adequately identified and mitigated. We simply recognized the same risks that are confirmed by the Revised Stipulation and modified the Revised Stipulation so that an interim risk mitigation protocol is in place until this necessary work is complete. Also, and as described in the Avian and Bat MOU incorporated in the Revised Stipulation, any dispute as to interpretation or implementation of the MOU could be mediated by a third party and any resulting litigation could be commenced either at the Board or a Franklin County court. *See* Icebreaker Ex. 38. These dispute resolution clauses have the potential to circumvent the jurisdiction of the Board as well as the Ohio Supreme Court. Our limited modifications to the Revised Stipulation maintain the Board's oversight over compliance with the May 21 Order while providing for a public and transparent process that protects the rights of all the parties including Icebreaker.

{¶ 32} Further, we emphasize that the May 21 Order permits Icebreaker to construct, operate, and maintain a wind generation facility in Ohio. While the certificate was conditioned to initially require limited feathering, we observe that Icebreaker is able to fully operate the facility completely without restrictions from November 1 to March 1 and from dawn until dusk the remainder of year. May 21 Order ¶ 160. In other words, there is no mandate for Icebreaker to come back before the Board in order to operate the facility. Rather, Icebreaker is only required to come back to the Board, if it so chooses, to seek modification of the interim bird and bat population risk mitigation protocol specified by the May 21 Order. In making Icebreaker come before the Board to ease feathering restrictions, OEC/Sierra Club asserts the Board is ignoring the expertise of Staff and the ODNR.

Icebreaker asserts the Board's rules and the Supreme Court of Ohio authorize Staff to oversee compliance with the conditions. As we stated in our May 21 Order, Staff is qualified to oversee Icebreaker's compliance. May 21 Order ¶ 199. As described in the Revised Stipulation largely adopted by the Board, Staff is tasked with overseeing much of Icebreaker's ongoing compliance with the other conditions attached to the certificate by the Revised Stipulation and the May 21 Order. Pursuant to R.C. 4906.02, the Board has the sole power to approve, deny, or modify and approve an application for a certificate, and, pursuant to R.C. 4906.10(A), the Board may condition such a certificate. While R.C. 4906.02 allows duties to be assigned to Staff, including the oversight of condition compliance, no such delegation is required. Here, in the case of a one-of-a-kind project and for a limited purpose, the Board established a transparent and public process that allows for thorough review by the Board Staff and the parties. The expertise of Staff and the ODNR has not been displaced by the May 21 Order; it will still be relied upon as appropriate. Further, the decision encourages Icebreaker to proactively work with Staff and the ODNR to facilitate Icebreaker's efforts to seek and secure, if it so chooses, any modifications to the interim protocol for mitigating bird and bat population risks. May 21 Order at ¶ 161.

{¶ 33} We additionally flatly reject the contentions of Icebreaker and OEC/Sierra Club that the Board erred by treating the project as a demonstration project. In our May 21 Order, we recognized that Icebreaker's application described the project's primary purpose as "exploring the viability of other, large-scale offshore wind facilities." May 21, Order at ¶ 151, citing Icebreaker Ex. 1 at 3. The May 21 Order continues, "The project constitutes a novel undertaking, not only in the state of Ohio, but the entire country; as such, we must ensure that all necessary precautions have been taken and all necessary measures are in place to mitigate both projected and unanticipated risks associated with avian and bat migratory behavior." May 21 Order at ¶ 151. In our decision, the Board did consider the six turbines in the application, but, based on the representations of Icebreaker, we also recognize that this is a first-of-its-kind project that understandably carries with it both known and unknown risks. We also recognized that Icebreaker and the other parties

supporting the Revised Stipulation frequently described the project as a demonstration project. Based on the facts and circumstances presented, the May 21 Order recognizes the significance of this project as that significance was represented to the Board by the parties supporting and contesting the Revised Stipulation. May 21 Order at ¶ 160.

{¶ 34} The Board also rejects the claim of Icebreaker and others that our modification to the Revised Stipulation goes against the manifest weight of the evidence. In Icebreaker's application for the rehearing, Icebreaker lists evidence in the record that supports the Revised Stipulation, including the 2016 Summary of Risks to Birds and Bats (Icebreaker Ex. 1, Ex. J), 2018 Risk Assessment Summary (Icebreaker Ex. 6, Attach. 2), and the Avian and Bat MOU (Icebreaker Ex. 38). Icebreaker, BNOW, and OCC/Sierra Club identify the evidence in favor of the Revised Stipulation and also point out the conditions in the Revised Stipulation that, in their view, provide necessary environmental safety precautions. However, as noted by Icebreaker, this was all relevant information considered by the Board in determining that a certificate for construction, operation, and maintenance should be issued to Icebreaker and the Board relied on that evidence in approving the Revised Stipulation, albeit with modifications. May 21 Order, at ¶¶ 104-105, 149, 156. And the Board is cognizant that it is these modifications that are largely what is at issue in the applications for rehearing. However, and as explained herein and previously, the Board's modification of the contested Revised Stipulation was due to the incompleteness of the risk identification and mitigation work, an incompleteness that is confirmed by the Revised Stipulation. Also, the testimony of Bratenahl Residents witness Dr. Henry Streby confirms that there is no data from the project site identifying the number of birds and bats that may migrate through the rotor-swept zone. May 21 Order at ¶ 159, citing Bratenahl Residents Ex. 3 at 6. This lack of information was confirmed by Staff witness Hazelton. May 21 Order at ¶ 159, citing Tr. Vol. VIII at 1791-1792. The need for reliable information from the project site was a known issue throughout the life of this proceeding, with much of the initial hearing spent debating the best method for obtaining reliable radar data. We note that the revised Stipulation, with and without modification, still requires at least a full year of reliable *pre-construction* radar

data at the project site and does not specifically identify how that information will be obtained. Rather than disagreeing with the Revised Stipulation and the signatory parties, the Board agrees the work to properly identify bird and bat risks and any replacement mitigation protocol should, if Icebreaker so chooses, move forward expeditiously.

{¶ 35} The Board is additionally unpersuaded by Icebreaker's argument that the modifications to the Revised Stipulation were unsupported by the record. As we discussed in the May 21 Order, "the ability to calculate and assess the actual environmental impact relies on technology and data that is, to an extent, unknown," May 21 Order at ¶ 160. In reaching this conclusion, we relied on the testimony of Bratenahl Residents' witness Dr. Streby and Staff witness Hazelton. May 21 Order at ¶ 159, citing Tr. Vol. VIII at 1751-1753, 1773-1776, 1791-1792; Bratenahl Residents Ex. 23; Staff Ex. 3 at 6, 8-9; Staff Ex. 14 at 5; Icebreaker Ex. 30 at 4. Of particular importance was gathering information, prior to construction, indicating the number of birds and bats that pass through the rotor-swept zone. The unmodified Revised Stipulation required Icebreaker to collect and provide this information prior to construction; our May 21 Order does likewise. Because this information is not yet available, the Board determined it was prudent to establish an interim bird and bat risk mitigation protocol applicable to the times, as the evidence shows, that birds and bats would be most at risk. May 21 Order at ¶ 160, citing Tr. Vol. III at 684, 702-703, 726; Tr. Vol. IV at 996-1000; Tr. Vol. VII at 1647-1649; Tr. Vol. VIII at 1793-1798. Icebreaker largely contends that the testimony relied on by the Board was submitted in regard to the Initial Stipulation, and not the Revised Stipulation but this claim is without merit. The testimony relied on by the Board was given under oath and subject to cross-examination in this proceeding. After the filing of the Revised Stipulation, the record was merely supplemented, not newly created. Rather, pursuant to the ALJ's June 17, 2019 Entry, the hearing regarding the Revised Stipulation was limited to "the fifth amendment to the application, modifications made between the September 4, 2018 stipulation and the Revised Stipulation, as well as any new, relevant information that has developed since the proceeding adjourned on October 2, 2018, which could not, with reasonable diligence, have

been presented earlier in the proceeding.” Thus, all previously admitted evidence was considered part of the record.

{¶ 36} The Board also rejects Icebreaker and OEC/Sierra Club’s claim that the May 21 Order wrongfully applied R.C. 4906.10(A)(3). As argued by Icebreaker and OEC/Sierra Club, the Board’s modifications to the Revised Stipulation ultimately require the project to have no environmental impact on birds and bats, while R.C. 4906.10(A)(3) only requires the minimum environmental impact, considering, among other things, the state of available technology. First, we respond by pointing out that at no place in the May 21 Order does the Board require the project have zero impact on birds and bats. In fact, we explicitly rejected that interpretation of the statutory requirements. May 21 Order at ¶ 151. The modifications to the Revised Stipulation require the turbines to be feathered on an interim basis only during the times that birds and bats would be at the most risk, which is nighttime hours from March 1 to November 1. May 21 Order at ¶ 160. Even so, this still leaves all daytime hours and four full months of the year when the turbines would be operational. Second, the interim risk mitigation protocol can be modified, if Icebreaker so chooses, through the process specified by the Board. Icebreaker argues that the Board, pursuant to R.C. 4906.10(A)(3) must consider the state of available technology at the time the Board examines the environmental risk of the project. However, that is precisely what the Board did in modifying the Revised Stipulation.

{¶ 37} Regarding the application for rehearing filed by the Bratenahl Residents, as noted in the May 21 Order, the Board concluded that the nature of the environmental impact can be determined only after considering the extensive amount of evidence presented regarding the potential impacts to birds and bats, including, but not limited to, various risk assessments,¹ acoustic surveys, aerial waterfowl reports, ODNR’s 2009 Wind Turbine Placement Favorability Analysis, NEXRAD analyses, and Staff’s review of mortality results

¹ Notably, the 2016 Risk Assessment and 2018 Risk Summary included an evaluation of 42 land-based wind projects in the Great Lakes region regarding bird migration patterns and 55 land-based projects in the Great Lakes region regarding bat fatalities.

from terrestrial wind energy projects in Ohio. May 21 Order at ¶¶ 103-104. Further, the Board determined that the project, as conditioned by the May 21 Order to include an interim bird and bat risk mitigation protocol, represents the minimum adverse environmental impact, while recognizing, however, that there is a considerable unknown risk associated with the number and density of birds and bats potentially migrating through the rotor-swept zone. Bratenahl Residents make the same fundamental flaws in their arguments regarding the purpose of the radar monitoring and the collision monitoring as they made in their post-hearing briefs. These arguments have already been addressed and rejected in the May 21 Order. As we noted there, the utilization of the radar monitoring program prior to construction is to verify the number or density of birds and bats migrating through the project area in order to create a baseline for comparative purposes with post-construction radar monitoring. Contrary to Bratenahl Residents' claims, the radar monitoring to be conducted for the project will allow for a comparative analysis of the pre- and post-construction conditions to determine if other risk mitigation protocols will appropriately mitigate the bird and population risks. Thus, and based on the conditions attached to the certificate by the May 21 Order, its completion is not required prior to the certification of the project. May 21 Order at ¶153, citing Joint Ex. 2 at 7-8; Icebreaker Ex. 38, Attach. A at 12-13; Icebreaker Ex. 59 at 2; Staff Ex. 14 at 7-10.

{¶ 38} Again, while we acknowledged that no decision has yet been made as to whether the chosen avian radar technology will be deployed on a floating platform or a stationary platform, we ultimately determined that Icebreaker will, nonetheless, have to adhere to the stringent requirements of the Revised Stipulation. Ultimately, we continue to find that Icebreaker holds the burden to identify an appropriate technology that will satisfy all of the conditions set forth in the May 21 Order. May 21 Order at ¶¶ 154-155, citing Staff Ex. 1 at 24; Staff Ex. 2 at 2-3; Joint Ex. 2 at 7-8; Icebreaker Ex. 32 at 6-7; Icebreaker Ex. 37 at 9; Tr. Vol. VIII at 1771, 1788). Similarly, the collision monitoring technology is not required to be identified prior to the issuance of a certificate, as suggested by Bratenahl Residents. Notably, Revised Stipulation Condition 18 helps ensure that the facility will represent the

minimum adverse environmental impact to wildlife by requiring that a collision monitoring plan, and the associated collision-monitoring technology, will be established prior to construction. As we explained in the May 21 Order, the mere fact the collision monitoring technology has not been chosen does not eliminate the strict requirements set forth in the Revised Stipulation regarding the Board's expectations as to how the technology will operate at the project site. May 21 Order at ¶ 163, citing Joint Ex. 2 at 6; Staff Ex. 14 at 4. As these arguments have already been thoroughly addressed by the Board, and Bratenahl Residents have failed to raise any additional arguments for our consideration, Bratenahl Residents' first assignment of error should be denied.

{¶ 39} The Board notes that Bratenahl Residents largely reiterate the arguments asserted in their post-hearing briefs. The Board thoroughly considered, and rejected those arguments, explaining its rationale in the May 21 Order at ¶¶ 151-157. We would, however, note that while Bratenahl Residents argue that the Board was incorrect to determine that the Board lacks jurisdiction to entertain the arguments regarding the Public Trust Doctrine, Bratenahl Residents provide absolutely no legal basis for such a conclusion. We were very clear in the May 21 Order that the determination of whether the project violates the Public Trust Doctrine is one of a judicial nature and, consequently, outside the Board's jurisdiction. May 21 Order at ¶ 200.

{¶ 40} Moreover, even if we were to accept that the Board does possess the requisite jurisdiction to make such a determination, which we do not, we would come to the same conclusion as that expressed in the May 21 Order. May 21 Order, ¶ 200.² Further, the Board has already examined the potential impact of the facility on certain recreational activities such as boating, fishing, and swimming, and found, due to the small scope of the project

² We note that, pursuant to the Revised Stipulation, Icebreaker is required to execute a modified submerged land lease with the ODNR prior to the required preconstruction conference, as well as file it in the case docket (Joint Ex. 2 at 3, 5). As such, these arguments could also be found to be misplaced since the final lease agreement remains to be finalized.

and its proposed location, the project is expected to have minimal impact on the public's enjoyment of Lake Erie. May 21 Order at ¶ 166.

{¶ 41} In summary, having found the arguments discussed above to be without merit, the Board finds that the applications for rehearing filed by Bratenahl Residents, Icebreaker, BNOW, Carpenters, and OEC/Sierra Club should be denied.

IV. ORDER

{¶ 42} It is, therefore,

{¶ 43} ORDERED, That the applications for rehearing filed by Bratenahl Residents, Icebreaker, BNOW, Carpenters, and OEC/Sierra Club be denied. It is, further,

{¶ 44} ORDERED, That a copy of this Second Entry on Rehearing be served upon all parties and interested persons of record.

NJW/hac

SEPTEMBER 17 AGENDA - DRAFT - 9/8/2020 3:41 PM
THE OHIO POWER SITING BOARD

**IN THE MATTER OF THE APPLICATION OF
ICEBREAKER WINDPOWER INC. FOR A
CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED FOR
AN ELECTRIC GENERATING FACILITY IN
CUYAHOGA COUNTY, OHIO.**

CASE NO. 16-1871-EL-BGN

CONCURRING OPINION OF CHAIRMAN SAM RANDAZZO

Entered in the Journal on September 17, 2020

Our initial Opinion, Order, and Certificate dated May 21, 2020 (Order) seems to have had the effect of accelerating the deployment of words and deeds that indicate the passions felt by stakeholders for and against this project. At times, the passionate advocacy tends to resemble advice rooted in theology rather than policy or advice that is unhinged from controlling statutory requirements.

Not so long ago, similar passions were on display as a result of the potential exploration for and development of oil and natural gas resources that reside under Lake Erie. Governors Taft and Kasich ended, in succession, the opportunity for such exploration and development by issuing executive orders preventing the Ohio Department of Natural Resources (ODNR) from leasing land under Lake Erie for such purposes.

In any event, both current events and history tell us that when energy production issues involve Lake Erie, passions are likely to run high.

But passion is no substitute for evidence or reasoning properly aligned with the facts and the law. Passion does not swing the burden of proof or persuasion away from the applicant and on to the opponents. Passion does not dictate that a demonstration project will become a commercially successful venture. And, in an adversarial process guided by a search for the public interest, being disagreeable does not enhance the value of the process or enhance the opportunity for reasoned decision making.

One of the central issues presented by the applications for rehearing arises from the claim by some stakeholders that that the Board erred by not approving, as filed, the Second Joint Stipulation and Recommendation¹ submitted at the hearing as Joint Exhibit 2 (Recommendation). Through their advocacy, they essentially assert that their Recommendation left nothing for the Board to do but to approve it.² In other words, they campaign as though this demonstration project has nothing to demonstrate. As the Recommendation itself makes clear, the truth lies elsewhere.³

¹ During the course of this proceeding, different settlements were filed. A settlement was filed on September 4, 2018 because the applicant and a few other parties opposed the shutdown condition in Staff Report of Investigation. Application For Rehearing of Icebreaker Windpower, Inc. at page 5. On May 15, 2019, the applicant and some of the parties submitted a Second Joint Stipulation and Recommendation (Joint Exhibit 2).

² In its application for rehearing, the applicant makes claims about the motivation of parties to enter or resume negotiations. Application For Rehearing of Icebreaker Windpower, Inc. at page 5. The Business Network for Offshore Wind, Inc. moves in a similar direction. Application for Rehearing of Business Network for Offshore Wind, Inc. at page 6. Such claims are inappropriate whether made in pleadings or otherwise. Opponents of the project were not permitted to pursue a similar line of inquiry during the hearing. Tr. Vol, VIII at pages 1760 and 1761. Settlements must speak for themselves. Claims by one party about what may have motivated other parties to engage in settlement negotiations are inappropriate, period. But once they are made in circumstances where parties were precluded from conducting cross examination on the settlement process, the proceeding should, in fairness and when requested, be reopened to ensure that opponents have appropriate cross examination latitude.

³ Page 11 of the Application for Rehearing submitted by Icebreaker Windpower, Inc. erroneously characterized the Recommendation as follows:

... the Revised Stipulation [Recommendation] includes Tactical Feathering, where the starting point/default is operating the turbines 24/7, unless a proven collision detection technology (which must be fully functioning prior to operation) fails to perform in accordance with the Collision Monitoring Plan.

This erroneous description of the Recommendation tellingly comes with no citation to the record. Numbered paragraph 15 at page 5 of the Recommendation clearly states that the applicant must comply with all terms in Avian and Bat Memorandum of Understanding (MOU) as well as any other protocols or documents resulting from this MOU. The same paragraph states that the required monitoring plans must be finalized and accepted in writing by ODNR *prior to construction* and will remain "living documents" allowing further modifications by this same mostly-mysterious process. The claim that the Recommendation sanctioned operating the turbines 24/7 presumes an outcome that was, by the terms of the Recommendation, neither stated nor certain. And if the claim were true, it would help to explain why the Recommendation could not be accepted by the Board. Allowing a default 24x7 operation of the turbines given the, at best, incomplete work on the identification of avian and bat risks and necessary mitigation protocols unacceptably degrades the very purpose of the work that the applicant is required to

The Recommendation and its incorporated memoranda of understanding (MOU) clearly and repeatedly reveal that the Board's adoption, as filed, would have *precluded⁴ any construction and operation of the wind turbine generators until the unquantified risks⁵ to avian and bat⁶ populations are adequately identified and mitigated.*⁷ Our initial order lands in the same place except that it explicitly includes a default mitigation remedy which controls in the meantime.⁸ This explicit interim requirement is certainly one of the outcomes within the range of potential risk mitigation remedies that are allowable by the terms of the Recommendation. Thus and to the extent that our initial order might be fairly or unfairly characterized as the delivering a "poison pill", the applicant and the other settlement signatory parties wrote the prescription.

Our initial Order also recognized and uncorrected an unlawful and unreasonable deficiency of the Recommendation. More specifically, the Recommendation did not identify a lawful and reasonable process by which the open and significant issues associated with the identification and mitigation of the risks to avian and bat populations would be resolved. Instead it offered an agreement to either try to agree, agree or disagree accompanied by attributes that suggest that both procedural and substantive outcomes could be determined

perform both by the terms of the Recommendation and the Board's Order and transforms the required statutory findings into window dressing.

⁴ Tr. Vol VIII at pages 1757-1761. Recommendation, Joint Exhibit 2, paragraph 19, pages 6 and 7.

⁵ Tr. Vol VIII at page 1753.

⁶ As evident from the list of issues and concerns submitted by the parties, the effect of this project on avian and bat populations were a main focus of the proceeding. See Ohio Environmental Council and Sierra Club's List of Issues and Concerns for Cross Examination, July 10, 2018.

⁷ The evidence shows that ... "there are hundreds of thousands of birds that regularly cross Lake Erie". Tr. Vol VIII at page 1773.

⁸ How long this default risk mitigation remedy remains in place is, in part, up to applicant. Given the investigatory work that the applicant must commence and complete *prior to construction*, the associated reporting requirements and the ongoing engagement of ODNR and Board staff, I believe that it is highly likely that any sensible modifications to the default risk mitigation condition adopted by the Board can be considered and addressed by the Board well before operation of the wind turbine generators.

by mediation or litigation operating outside the supervision of the Board, outside public view and outside the exclusive right of review vested in the Ohio Supreme Court.⁹ At a time when the public and public officials are pushing for more transparency and public access, the Recommendation asked the Board to do the opposite. Instead, the Board determined that these issues must be addressed, if at all, through a public and transparent process that respects the Board's jurisdiction and statutory responsibilities, preserves the due process rights of the applicant and other parties, operates in the sunshine and respects the Ohio Supreme Court's exclusive right of review.¹⁰

The Recommendation was contested and, as a matter of law, no settlement, contested or uncontested, rises to become more than a recommendation to the Board on how the Board might, if the law and evidence allow, resolve issues of law and fact. The Board carefully considers contested settlements and did so here. But, as any experienced Board practitioner will quickly confirm, the Board has no duty to accept a settlement, contested or uncontested. These are not new or novel positions. This is and has been the law for decades.

Accordingly, no person can rightly claim surprise as a result of the Board exercising its lawful authority to modify a settlement or to impose additional conditions. In fact, Section C of the Recommendation, at page 15, spelled out the rights of the signatory parties (including the applicant) in the event the Board rejected, materially modified or added additional conditions to their Recommendation. The content of the Recommendation itself shows that the signatory parties contemplated the outcome they now contest while claiming to be surprised or "stunned".¹¹ Passion offers no license for being disingenuous.

From a bigger picture perspective and the beginning of this proceeding, hindsight brings a number of red flags into view.

⁹ Recommendation, Avian and Bat MOU, Section L.8 at pages 5-6.

¹⁰ Tr. Vol VIII at page 1779. As witness Hazelton correctly testified, the Board had and has the option to modify the Recommendation.

¹¹ Application For Rehearing of Icebreaker Windpower, Inc. at page 4.

For example, the initial application was deficient thereby delaying its acceptance.

The applicant made repeated requests to modify and delay the procedural schedule to allow it more time to attempt to address issues and questions that were in play from the get go.

The applicant was unwilling or unable to timely pay a Board invoice thereby resulting in additional delay.

The Bird and Bat MOU (including the Icebreaker Wind Avian and Bat Monitoring Plan incorporated in the Recommendation) called for the applicant's expert to determine if vessel-based collection of pre-construction radar data at the project site is feasible and will achieve study objectives plus provide a recommendation on viability and precise design of any pre-construction radar by the Fall of 2017.¹² If this determination was made and the precise design finalized, these facts are missing from the record.

In its application for rehearing, Icebreaker alleges that the Board's initial Order is unlawful because it results in a bifurcation of construction and operation determinations. However, the Recommendation urged upon the Board by Icebreaker calls for the same bifurcation. Thus, if the Board's Order is unlawful for the reason advanced by Icebreaker, the Board would be obligated to reject the Recommendation as a matter of law.

The same MOU commits the applicant to develop a Bird and Bat Conservation Strategy (BBCS) to conduct thorough post-construction monitoring of proposed project impacts and to undertake adaptive management measures if necessary. It also states that the BBCS would be submitted during the certification process and would be finalized well before construction. Yet, the BBCS, if finalized, was not submitted during the certification process.

¹² Recommendation, Joint Exhibit 2, Icebreaker Wind Avian and Bat Monitoring Plan at pages 12-13.

The applicant has, at times, claimed that it is seeking certification of a demonstration project¹³ and, at other times, argued as though there is nothing to demonstrate.

The applicant has alleged that the Board’s order will make it more difficult for the applicant to secure financing.¹⁴ The assertion ignores the fact that the terms and conditions of the Recommendation urged upon us by the applicant (with no mention of negative financing implications), *precluded construction and operation* unless and until risks to avian and bat populations are adequately identified and mitigated. Had the Board approved the Recommendation, as filed, what assumptions could potential creditors or equity investors prudently make about when construction might commence, when construction might be completed, when commercial operation might commence or what operating limitations might be attached through the deferred and non-transparent issue resolution approach already described?

None of these red flags were considered for purposes of casting my vote. But, based on real world demands that reside on the implementation side of the Board’s order, I take this opportunity to remind the applicant and its many supporters that passion is also a poor and very risky substitute for due diligence.

I come now to discuss the relatively recent change in Ohio law that appears to have been ignored by the project proponents and opponents alike. As already explained in the

¹³ Recommendation at page 2.

¹⁴ The evidence suggests that: (1) the project’s commercial viability may hinge on the applicant’s ability to secure purchased power agreements (PPA); (2) Cleveland Public Power (CPP) has agreed to take two-thirds of the unidentified output quantity; and, (3) the balance of the output may be sold either through other PPAs or into the PJM organized wholesale market. To the extent that the entire output is sold into the PJM market, there is some indication in the record that the applicant will be unable to recover operation and maintenance cost. Tr. Vol. VI at pages 1286-1288. The record also indicates that the City of Cleveland has announced a goal of relying on 100% renewable energy for use in the City. Tr. Vol. VI at page 3121. The extent to which the City of Cleveland or CPP is the “customer” supplied by this project may be relevant for purposes of applying the new definition of “economically significant wind farm” as discussed further below.

foregoing order on rehearing, the Board has not addressed the significance of this change in law because no party asked the Board to do so.

On October 22, 2019, the jurisdiction of the Board changed with regard to any “economically significant wind farm” because of the enactment of Substitute House Bill 6 (HB 6). As modified, R.C. 4906.13 now excludes from the definition of an economically significant wind farm”one or more turbines and associated facilities that are primarily dedicated to providing electricity to a single customer at a single location and that are designed for, or capable of, operation at an aggregate capacity less than twenty megawatts, as measured at the customer’s point of interconnection to the electrical grid”. As modified and from a different perspective, R.C. 4906.13 now expands the scope of land use regulation by local authorities to the extent wind turbine generator projects that are less than twenty megawatts are not subject to the Board’s jurisdiction. R.C. 4906.13 does not alter the nature or extent of the authority of other agencies from which a project developer may need to secure permits, permissions or other authorizations. For example, R.C. 4906.13 does not modify the authority or discretion of the ODNR with regard to such things as a submerged land lease that must be obtained by the applicant in this case.

Chairman Steve Wilson and Senator Sandra Williams, who ably lead the Ohio Senate Energy and Public Utilities Committee and are non-voting members of the Board, sent me a letter dated August 28, 2020 regarding this change in law. Senator Williams also raised a similar question during the Board meeting on August 27, 2020.¹⁵ For what it may be worth, below I offer my views on this academic question.

The nameplate capacity of the six turbines proposed by the applicant is 20.7 megawatts. However, the change made to R.C 4906.13 does not measure megawatts based on the name plate rating of the turbines. It measures megawatts at the customer’s point of

¹⁵ The question raised by Chairman Wilson and Ranking Member Williams indicates the depth of their understanding of the significance of HB 6 in areas less prone to examination by the press and devotees of social media. I will not here comment on the implications of the failure of the parties, and particularly the applicant, to raise this question.

interconnection to the electrical grid. There is no evidence in the record identifying the output of the turbines proposed in this case as measured at the customer's point of interconnection to the electrical grid.

As modified by HB 6, the twenty megawatt Board jurisdictional threshold specified in R.C. 4906.13 is only applicable if the turbines and associated facilities are primarily dedicated to providing electricity to a single customer. The word "customer" is not defined. However, under common usage within the electricity industry, a customer can be either a retail or wholesale customer.

As noted previously, the purchased power agreements (PPA) described in the evidentiary record indicate that Cleveland Public Power (CPP), a wholesale customer, will take two-thirds of the project's output. Whether this two-thirds commitment by CPP is sufficient to allow the project to be determined as being primarily dedicated to CPP would be a question of first impression if it should be raised in any future proceeding. However and as a matter of law, the parties to any PPA are free to modify their agreement to the extent that they mutually agree to do so and such modifications are lawful.

So, with regard to the question raised by Chairman Wilson and Ranking Member Williams, it is my view (and my view alone¹⁶) that the modifications made to R.C. 4906.13 by HB 6 could be relevant prospectively for purposes of determining the Board's jurisdiction with regard to this project depending upon the resolution of threshold factual questions.

When I began this concurring opinion, I offered my thoughts on the role of passion in circumstances such as these. I will end where I began. Passionate opposition to a particular piece of legislation can sometimes blind opponents to provisions in the legislation that may be beneficial.

¹⁶ As already explained, these questions are not before the Board in this proceeding and my view should not be construed or applied as indicating how the full Board might rule if these questions were to be addressed by the Board.

With regard to the foregoing Second Entry on Rehearing, I concur.

THE OHIO POWER SITING BOARD

/s/Sam Randazzo

By: Sam Randazzo
Chairman

SEPTEMBER 17 AGENDA - DRAFT - 9/8/2020 3:49 PM
THE OHIO POWER SITING BOARD

**IN THE MATTER OF THE OHIO POWER
SITING BOARD'S CONSIDERATION OF
OHIO ADM.CODE CHAPTER 4906-4.**

CASE NO. 19-778-GE-BRO

FINDING AND ORDER

Entered in the Journal on September 17, 2020

I. SUMMARY

{¶ 1} The Ohio Power Siting Board finds that proposed Ohio Adm.Code 4906-4-10(D) should be amended in order to improve the incident management of wind farms.

II. DISCUSSION

A. Procedural History

{¶ 2} The Ohio Power Siting Board (Board) has jurisdiction to issue certificates for construction of major utility facilities or economically significant wind farms, and to ensure that such facilities are constructed, operated, and maintained in compliance with the certificate obtained. R.C. 4906.04, 4906.20(A), 4906.98(A)-(B). Ultimately, the Board sets forth certificated conditions directed at, among other things, ensuring the safe operation of major utility facilities.

{¶ 3} In response to weather-related incidents that impacted the safe operation of wind turbines, the Board initiated this rulemaking proceeding to investigate whether additional or modified rules were necessary as to the construction and incident management of wind farm operations.

{¶ 4} On April 30, 2019, the Board held an informal stakeholder workshop to discuss the propriety of rule changes relating to the construction and incident management of wind farms.

{¶ 5} On June 20, 2019, the Board published an Entry seeking public comment as to: (1) proposed rule (Ohio Adm.Code 4906-4-10) (Incident Reporting Rule), which would

adopt notice and reporting requirements when an incident causes a shutdown of a wind turbine; and, (2) proposed edits to Ohio Adm.Code 4906-4-09 (Building Code Rule), which would ensure that the construction and operation of non-generating plant wind farm facilities are consistent with local building codes. In addition to the proposed rule changes, the Board also published the business impact analysis (BIA) instrument setting forth the anticipated adverse impact to businesses that would result from the rule modifications, as required by R.C. 121.82. The Board also sought formal comments as to the rule proposals.

{¶ 6} Following the review of comments and reply comments, the Board adopted: (1) amendments to proposed Ohio Adm.Code 4906-4-09; and, (2) new Ohio Adm.Code 4906-4-10, by Finding and Order and Entry on Rehearing issued on November 21, 2019 and February 20, 2020, respectively.

{¶ 7} On August 7, 2020, the Board proposed modifications to Ohio Adm.Code 4906-4-10(D), and scheduled another informal stakeholder workshop on August 14, 2020. The proposed modifications addressed the time allotted for a post-incident Staff site visit, and the time and manner for restarting operations after an operator files an investigation report detailing the cause of the incident and that a return to safe operations can occur.

{¶ 8} The workshop was held as scheduled on August 14, 2020. On August 17, 2020, in response to comments received at the workshop, the administrative law judge (ALJ) published an Entry proposing further modifications to proposed Ohio Adm.Code 4906-4-10(D), and opened the case for formal comments. In addition to the proposed rule changes, the Board also published an updated business impact analysis (BIA) instrument setting forth the anticipated adverse impact to businesses that would result from the rule modifications, as required by R.C. 121.82.

{¶ 9} Comments were filed by (1) Mid-Atlantic Renewable Energy Coalition (MAREC)¹, and (2) jointly by Hardin Wind LLC and RWE Renewables Americas, LLC (Hardin Wind). No reply comments were filed in the case.

B. Summary of the Comments

{¶ 10} MAREC's comments addressed the plan for communication between an operator and Staff in connection with restarting operations including: (1) the nature of the representation to Staff that is required prior to restarting operations; and, (2) who should be responsible for providing the representation. MAREC proposes that the restarting representation more reasonably focuses on a determination that a satisfactory repair or replacement of damaged property has been completed, rather than a declaration that it is safe to restart the damaged property. Further, MAREC proposes expanding the list of persons qualified to make the restart declaration to also include "another person that Board Staff determines has appropriate qualifications to provide the required statement under the circumstances." MAREC maintains that the flexibility achieved by its proposal maintains regulatory controls over certified operators, and also balances reasonable repair expectations with Staff's need for timely, reliable evidence that damaged property has been repaired to the point where it is again safe to operate.

{¶ 11} Hardin Wind's comments align with MAREC's in regard to the need to empower operators to provide statements that repairs have been completed such that the equipment is ready to restart. Hardin Wind argues against requiring restarting statements from either professional engineers or original equipment manufacturers, asserting that these options are inconsistent with the professional limitations upon engineers, and the ongoing operational business expectations of equipment manufacturers. The proposal expands the persons qualified to make the restart declaration and clarifies that the statement is aimed at the quality of the repairs, which aligns the operator's expertise and Staff's continuing

¹ The Board grants MAREC's motion for leave to file comments out of time, as the deadline was not statutory and there is no prejudice to the parties or the Board.

regulatory jurisdiction. Hardin Wind further advocates for a presumption of restarting authority within three, rather than five, business days of Staff's receipt of the repair statement provided in the rule. Hardin Wind maintains that Staff's review can reasonably occur in the reduced time period, and that the lost revenue associated with the delayed restart of a facility could be significant. Beyond these proposals, Hardin Wind offers additional comments that are outside the realm of the Board's current rule consideration, including: (1) the Board lacks authority to apply the proposed rule against existing operators; and, (2) the definition of a wind farm "incident" is both unclear and overly broad to the extent that it also includes non-turbine events.

C. Board Conclusion

{¶ 12} Upon review of the comments, the Board finds that Ohio Adm.Code 4906-4-10(D) should be further amended. Subject to the amendments outlined herein, the Board finds that the rule proposal should be adopted.

{¶ 13} R.C. 107.53 sets forth several factors to be considered in the promulgation of rules and the review of existing rules. Among other things, the Board must review any proposed rules to determine the impact that a rule has on small businesses; attempt to balance properly the critical objectives of regulation and the cost of compliance by the regulated parties; and, amend or rescind rules that are unnecessary, ineffective, contradictory, redundant, inefficient, needlessly burdensome, have had negative unintended consequences, or unnecessarily impede business growth.

{¶ 14} Additionally, in accordance with R.C. 121.82, in the course of developing draft rules, the Board must conduct a business impact analysis regarding the rules. If there will be an adverse impact on business, as defined in R.C. 107.52, the agency is to incorporate features into the draft rules to eliminate or adequately reduce any adverse impact. Furthermore, the Board is required, pursuant to R.C. 121.82, to provide the Common Sense Initiative (CSI) office the draft rules and the BIA.

{¶ 15} The Board finds that actions taken in further consideration of the Incident Reporting Rule are compliant with the legal mandates applicable to rule implementation. As amended herein, the proposed rule balances regulatory objectives, such as the safety of the public, and compliance costs of adhering to the rules.

{¶ 16} The proposed Incident Reporting Rule is further amended as attached to clarify: (1) the nature of the representation required to restart damaged equipment; and, (2) the qualifications of the entity responsible for providing the restart representation. The Board finds it reasonable to expand the rule to allow for the presumption of restarting operations upon filing a statement as to the quality of the repair to damaged equipment, and to expand the list of persons qualified to provide that assurance. The Board finds that these additional changes to the proposed rule continue to preserve the primary function of protecting public safety while also acknowledging the needs of operators to obtain timely Staff review and consideration of relevant information from operators that are the subject of incident reviews.

{¶ 17} The Board considered and rejects additional public comment suggestions as filed by Hardin Wind. Initially, the Board declines to reduce the time for restarting operations from five to three days after the filing of the required operator statements, finding that: (1) the additional review time provided to the Board is reasonable; and, (2) the financial impact to operators that Hardin Wind references is overstated, as only damaged property - not entire operations - is subject to suspension during this period of the Board's safety review. In declining to adopt the remainder of Hardin Wind's suggestions, the Board notes that it made clear the scope of its limited further consideration of the Incident Reporting Rule when it reopened this case on August 7, 2020. Moreover, the further issues raised by Hardin Wind were previously considered and rejected by the Board by Finding and Order and Entry on Rehearing issued on November 21, 2019 and February 20, 2020, respectively.

{¶ 18} In conclusion, the Board finds that the Incident Reporting Rule should be further amended as outlined herein and adopted. The proposed rule changes enhance the ability of operators to predictably and efficiently restart operations after incidents without sacrificing public safety. By requiring a timely incident response and investigatory cooperation with Staff, the Board is satisfied with the public safety enhancements contained in these rules. We find that Ohio Adm.Code 4906-4-10, as amended, should be filed with the Joint Committee on Agency Rule Review, the Secretary of State, and the Legislative Service Commission, in accordance with R.C. 111.15.

III. ORDER

{¶ 19} It is, therefore,

{¶ 20} ORDERED, That newly proposed Ohio Adm.Code 4906-4-10, as amended, be adopted as set forth in Attachment A. It is, further,

{¶ 21} ORDERED, That Ohio Adm.Code 4906-4-09 and 4906-4-10 be filed with the Joint Committee on Agency Rule Review, the Secretary of State, and the Legislative Service Commission, in accordance with R.C. 111.15. It is, further,

{¶ 22} ORDERED, That the final rules be effective on the earliest date permitted. Unless otherwise ordered by the Board, the five-year rule review date for Ohio Adm.Code 4906-4-09 and 4906-4-10 shall be in compliance with R.C. 119.032. It is, further,

{¶ 23} ORDERED, That a copy of this Finding and Order be served upon all commenters and interested persons of record in this matter.

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NEW

4906-4-10 Notice and reports of incidents involving wind farm facilities.

(A) Telephone notice of incidents.

- (1) Wind farm operators should notify the board's executive director by calling: 1-844-OHCALL1 (1-844-642-2551), as well as local law enforcement and first responders on all incidents involving a wind turbine, within thirty minutes after discovery unless notification within that time is impracticable under the circumstances.
- (2) For purposes of this rule incidents include, events where:
 - (a) There is injury to any person.
 - (b) There is damage to property other than the property of the wind farm operator.
 - (c) Where an event such as tower collapse, turbine failure, thrown blade or hub, collector or feeder line failure, ice throw, or nacelle fire, causes damage to the wind farm operator's property that is estimated to exceed fifty thousand dollars, excluding the cost of electricity lost, which is the sum of the estimated cost of material, labor, and equipment to repair and/or replace the operator's damaged property.

(B) Written reports regarding incidents.

- (1) Within thirty days after the incident is discovered, a wind farm operator will submit a written report to the executive director describing the cause of the incident, where ascertainable, and any damage to the wind farm facility or to neighboring properties or persons, on a form provided by the board.
- (2) Each wind farm operator will also docket, in the wind farm certificate case, a final written report on a form provided by the board within sixty days after discovery of the incident, unless the wind farm operator:
 - (a) For good cause shown, demonstrates more time is needed; and
 - (b) Submits interim reports to the executive director at intervals of not more than sixty days until a final report is docketed.

(C) Each final written report will address:

- (1) Cause of the incident;
- (2) Date and time the incident occurred and date and time it was discovered;

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- (3) If the incident involved a turbine, the distance between debris and the wind turbine base;
 - (4) If the incident involved a turbine, the distance between debris to habitable structures and property lines, and photographs of the debris field;
 - (5) A narrative description of the incident and actions taken by the wind farm operator, including a timeline of events;
 - (6) What, if any, damage occurred to the property within the wind farm facility;
 - (7) What steps were necessary to repair, rebuild, or replace damage to any property within the wind farm facility;
 - (8) What, if any, personal injury was caused by, or related to, the incident.
 - (9) What, if any, damage to properties within or adjacent to the wind farm project area was caused by, or related to, the incident;
 - (10) What, if any, steps were, or will be, taken to prevent future incidents.
- (D) Staff investigation and restart
- (1) Staff will investigate every incident that results in a report being submitted pursuant to this rule. Except as necessary for public safety, a wind farm operator should not disturb any damaged property within the facility or the site of a reportable incident until after staff has made an initial site visit. Staff will make its initial visit to review any damaged property within three business days of the notice provided for in paragraph (A)(1) unless otherwise prohibited from accessing the area of the damaged property by public safety officials.
 - (2) A wind farm operator will not restart any damaged property within a facility involved in a reportable incident until such restart is approved by the board's executive director or the executive director's designee pursuant to the following process:
 - (a) Such approval is premised upon the filing of:
 - (i) a complete and final written report fully addressing the factors set forth in paragraph (C),
 - (ii) a representation by the wind farm operator that it is ready to restart the damaged property, and,
 - (iii) as well as a notarized statement that a satisfactory repair or replacement of the damaged property has been completed from:
 - (1) a licensed professional engineer;-

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(2) a qualified representative from the manufacturer of the damaged equipment; or

(3) another person employed by or hired by the operator having ~~having that Staff determines has appropriate~~ qualifications under the circumstances to provide the required statement ~~that it is safe to restart the damaged property.~~

(b) Unless otherwise suspended for good cause shown by the board, executive director, or an administrative law judge, a wind farm operator may restart damaged property five business days after docketing the ~~final written report and statement~~ information required in this section.

**SEPTEMBER 17 AGENDA - DRAFT - 9/8/2020 4:09 PM
THE OHIO POWER SITING BOARD**

**IN THE MATTER OF THE APPLICATION OF
THE OHIO STATE UNIVERSITY FOR A
CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED TO
CONSTRUCT A COMBINED HEAT AND
POWER FACILITY IN FRANKLIN COUNTY,
OHIO.**

CASE NO. 19-1641-EL-BGN

OPINION, ORDER, AND CERTIFICATE

Entered in the Journal on September 17, 2020

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I. SUMMARY

{¶ 1} The Ohio Power Siting Board issues a certificate of environmental compatibility and public need to The Ohio State University for the construction, operation, and maintenance of its proposed combined heat and power facility, subject to the conditions set forth in this Opinion, Order, and Certificate.

II. PROCEDURAL BACKGROUND

{¶ 2} All proceedings before the Ohio Power Siting Board (Board) are conducted according to the provisions of R.C. Chapter 4906 and Ohio Adm.Code Chapter 4906-1, et seq.

{¶ 3} The Ohio State University (Ohio State, University, or OSU) is a person as defined in R.C. 4906.01.

{¶ 4} Pursuant to R.C. 4906.04, no person shall construct a major utility facility without first having obtained a certificate from the Board. In seeking a certificate for an electric generation facility, applicants must comply with the filing requirements outlined in R.C. 4906.06, as well as Ohio Adm.Code Chapters 4906-3 and 4906-4.

{¶ 5} On September 11, 2019, Ohio State filed a preapplication notification letter with the Board regarding its proposal to construct a combined heat and power (CHP) major utility facility on the University's campus in Clinton Township in Franklin County, Ohio. According to Ohio State, the CHP facility would serve as a primary source of heating and electricity to its Columbus campus.

{¶ 6} On November 6, 2019, Ohio State filed with the Board an application for a certificate of environmental compatibility and public need to construct the new CHP facility. Ohio State supplemented its application on November 27, 2019.

{¶ 7} On January 6, 2020, Staff issued correspondence to Ohio State, stating that the University's application, as supplemented, provided sufficient information to permit

Staff to begin its review of the application. Staff also identified additional information that would be requested, during the course of its investigation, to ensure that Staff would be able to conduct its review of the application. This information included the following: description of operation noise impacts at noise-sensitive receptors; final erosion and sediment control plans; any authorizations, permits, or approvals for discharges to the sanitary sewer from the City of Columbus Division of Sewerage and Drainage Pretreatment Office; gas supply feasibility and interconnection study; and visual impact evaluations.

{¶ 8} On January 23, 2020, Ohio State filed correspondence indicating that the application fee had been submitted to the Board, pursuant to Ohio Adm.Code 4906-3-07(A)(5) and 4906-3-12.

{¶ 9} On January 23, 2020, Ohio State filed its proof of compliance with Ohio Adm.Code 4906-3-07(A), which requires service of the accepted and complete application.

{¶ 10} By Entry dated January 29, 2020, the effective date of the filing of the application was deemed January 29, 2020, pursuant to Ohio Adm.Code 4906-3-08(A). A procedural schedule was also established for this case, including a local public hearing to occur on April 9, 2020, and an adjudicatory hearing to commence on April 23, 2020. Ohio State was directed to issue public notices of the application and hearings pursuant to R.C. 4906.06(C) and Ohio Adm.Code 4906-3-09(A).

{¶ 11} On March 9, 2020, the governor signed Executive Order 2020-01D (Executive Order), declaring a state of emergency in Ohio to protect the well-being of Ohioans from the dangerous effects of COVID-19. As described in the Executive Order, state agencies are required to implement procedures consistent with recommendations from the Department of Health to prevent or alleviate the public health threat associated with COVID-19. Additionally, all citizens are urged to heed the advice of the Department of Health regarding this public health emergency in order to protect their health and safety. The Executive Order was effective immediately and will remain in effect until the COVID-19 emergency no

longer exists. The Department of Health is making COVID-19 information, including information on preventative measures, available via the internet at coronavirus.ohio.gov/.

{¶ 12} Pursuant to R.C. 3701.13, the Ohio Department of Health has supervision of “all matters relating to the preservation of the life and health of the people” and the “ultimate authority in matters of quarantine and isolation.” On March 12, 2020, the Director of the Ohio Department of Health issued an Order indicating that “all persons are urged to maintain social distancing (approximately six feet away from other people) whenever possible.”

{¶ 13} On March 12, 2020, the administrative law judge (ALJ) issued an Entry to suspend the procedural schedule in this matter, in light of the guidance issued by the Executive Order and the Department of Health. Among other things, the ALJ postponed the local public and adjudicatory hearings and directed that notice of the postponement be issued by Ohio State.

{¶ 14} On May 12, 2020, a prehearing teleconference occurred during which the parties discussed a new procedural schedule for this matter, including potential dates for the local public and adjudicatory hearings, and options for proceeding with the hearings through video conferencing or other means.

{¶ 15} By Entry dated May 22, 2020, the ALJ reestablished the procedural schedule in this matter. In the Entry, the ALJ scheduled a public hearing for June 30, 2020, and an adjudicatory hearing to commence on July 14, 2020. Due to the continued state of emergency, and given the passage of Am. Sub. H.B. 197, the ALJ indicated that the public and adjudicatory hearings would both be held using remote access technology that facilitates participation by telephone and/or live video on the internet.

{¶ 16} On June 15, 2020, the Staff Report of Investigation (Staff Report) was filed.

{¶ 17} On June 23, 2020, the ALJ granted Sierra Club’s timely petition to intervene in this case.

{¶ 18} A second prehearing conference and technology test session were held through remote access technology (specifically, Webex) on June 26, 2020.

{¶ 19} A public hearing in this matter was held through Webex on June 30, 2020.

{¶ 20} On July 6, 2020, Ohio State filed the direct testimony of Serdar Tufekci (OSU Ex. A) and Scott Potter (OSU Ex. D).

{¶ 21} On July 9, 2020, Staff filed the direct testimony of Robert Holderbaum (Staff Ex. B), Andrew Conway (Staff Ex. C), Tyler Conklin (Staff Ex. D), Eric Morrison (Staff Ex. E), Grant Zeto (Staff Ex. F), Matt Butler (Staff Ex. G), Jason A. Cross (Staff Ex. H), Paul Nathan Spahr (Staff Ex. I), Jon C. Pawley (Staff Ex. J), Mark Bellamy (Staff Ex. K), and Allison DeLong (Staff Ex. L).

{¶ 22} On that same date, Sierra Club filed the direct testimony of Ranajit (Ron) Sahu (Sierra Club Ex. F).

{¶ 23} The adjudicatory hearing, which was held through Webex, commenced on July 14, 2020, and concluded on July 15, 2020.

{¶ 24} Pursuant to Entry dated July 15, 2020, a second public hearing was held on August 4, 2020, through Webex.

{¶ 25} Timely initial and reply briefs were filed by Ohio State, Staff, and Sierra Club on August 7, 2020, and August 19, 2020, respectively.

{¶ 26} On August 25, 2020, Sierra Club filed a motion to strike portions of Ohio State's reply brief or, in the alternative, a motion for leave to file a surreply, along with the proposed surreply. Ohio State filed a memorandum contra Sierra Club's motion on September 1, 2020. These pleadings are addressed further below.

III. PROJECT DESCRIPTION

{¶ 27} According to the application, Ohio State proposes to construct a natural gas-powered CHP facility to produce both thermal energy and electricity for its main campus in Columbus, Ohio, with a project site of 1.18 acres located on the western side of campus at the corner of John H. Herrick Drive and Vernon L. Tharp Street, which is currently used for greenhouse operations. The CHP facility would operate by using exhaust energy from natural gas combustion turbine generators to produce high pressure superheated steam through heat recovery steam generators (HRSG). This steam would then be used to produce power; supplement the main campus steam network; or produce heating hot water through a heat exchanger for a new district heating and cooling network to be built west of the Olentangy River. As a primary source of heating and electricity to the campus, the CHP facility would have a heating capacity of 285 kilopounds/hour of superheated steam and be capable of producing 105.5 megawatts of electricity. The CHP facility's equipment, with the exception of a water tank, would be housed within a single building of 60 feet in height, with cooling towers extending 27 feet above the roof and two steel stacks at a total height of 115 feet above ground level. In addition to the construction of the CHP facility, Ohio State seeks approval to install associated facilities, such as buried communications and electrical cables, buried water lines, and a natural gas supply line. (OSU Ex. A at Ex. 1 at 1-3.)

{¶ 28} Ohio State explains that the CHP facility is intended to fulfill several purposes and needs for its campus power supply, including increasing energy resiliency and reliability, establishing the University's microgrid, reducing the University's carbon footprint, and reducing the University's energy costs. Ohio State particularly notes that the CHP facility would increase the reliability and resiliency of power provided to critical buildings on campus, including the University's Wexner Medical Center, which includes in-patient and out-patient hospital facilities, cancer research facilities, and a wide range of community and patient services. Additionally, the CHP facility would provide heating in the form of heating hot water for buildings west of the Olentangy River and steam network integration for buildings east of the river. (OSU Ex. A at Ex. 1 at 1-2.)

IV. CERTIFICATION CRITERIA

{¶ 29} 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 pipeline;
- (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, 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 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, as well as all rules and standards adopted under those chapters and under R.C. 4561.32;¹
- (6) The facility will serve the public interest, convenience, and necessity;

¹ In determining whether the facility will comply with all rules and standards adopted under R.C. 4561.32, the Board is required to consult with the Office of Aviation of the division of multi-modal planning and programs of the Department of Transportation under R.C. 4561.341.

- (7) The impact of the facility on the viability as agricultural land or any land in an existing agricultural district established under R.C. Chapter 929 that is located within the site and alternative site of the proposed major facility; and
- (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.

V. CONSIDERATION OF CERTIFICATION CRITERIA

{¶ 30} The Board has reviewed the evidence presented by the parties and has also considered the eight criteria set forth in R.C. 4906.10(A) in evaluating Ohio State's application. Any evidence not specifically addressed herein has nevertheless been considered and weighed by the Board in reaching its final determination.

A. *Public Testimony and Comments*

{¶ 31} The Board held two public hearings to afford the public an opportunity to provide testimony regarding the proposed CHP facility. Most of the witnesses at the public hearings noted that they are either current or former Ohio State students or faculty. During the first public hearing, which was held through Webex on June 30, 2020, the Board heard testimony from 20 witnesses opposed to the CHP facility. These individuals raised objections to the siting of the proposed CHP facility on campus, in close proximity to Ohio State's students and patients at its medical facilities, or voiced broader concerns with the construction of a gas-fired plant, particularly with respect to climate change and the environmental impact associated with emissions generated by the facility and by the production of the natural gas that would fuel the plant, as well as impacts to the water and other natural resources in the portions of the state where natural gas extraction occurs. Given the COVID-19 state of emergency, several of these witnesses also urged the Board to take particular note of the health effects caused by pollutants, such as increased risk of

respiratory disease. Witnesses testified that Ohio State's plan to construct a CHP facility is contrary to the University's Climate Action Plan, which aims to achieve carbon neutrality by 2050, and the commitment of the city of Columbus to pursue an aggregation program with a 100 percent renewable energy supply by 2022. Witnesses noted that Ohio State has not sufficiently considered alternatives to the proposed CHP facility, including renewable energy and geothermal generation sources. Others stated that the CHP facility is not consistent with Ohio State's mission, as an institution of higher education, and its core values of excellence and innovation and does not facilitate resource stewardship and sustainability leadership. (Public Tr. I at 14-15, 17-21, 27-29, 34, 52, 55, 62-63, 68, 78, 83-84, 92, 102-103, 112, 114-115, 117, 119-120, 127-128, 132-133, 135, 138, 141.) Two individuals testified in support of the proposed CHP facility. The faculty director of Ohio State's Sustainability Institute, testifying in her personal capacity, noted that, although the University's Climate Action Plan calls for a mix of strategies, the CHP facility is the most significant factor within the plan to enable the University to achieve, in a cost-effective manner, its carbon emission reduction target by 2030, while affording flexibility to transition to alternative fuel types in the future and providing advanced energy efficiency in delivering electricity and heating to the campus in comparison to the University's existing operations and electric grid purchases. Additionally, the policy director for the Midwest Cogeneration Association testified that the proposed CHP facility would enable Ohio State to efficiently and reliably meet its electricity and thermal energy requirements, reduce its carbon footprint, and utilize greener fuels like hydrogen in the future. (Public Tr. I at 39-42, 95-96.)

{¶ 32} A second public hearing was held through Webex on August 4, 2020. Testimony was offered by a total of 41 witnesses. Of this group, 32 individuals, including Ohio State faculty and students, testified in opposition to the proposed CHP facility. Various objections were raised, with particular emphasis on Ohio State's continued reliance on fossil fuels rather than investment in renewable energy and geothermal resources; the environmental and public health impacts resulting from the carbon and particulate matter

emissions that would be generated by the CHP facility, as well as those resulting from the extraction of natural gas from wells in Ohio; and the project's inconsistency with the renewable energy goal set by the city of Columbus. (Public Tr. II at 16, 24-25, 34-35, 40-41, 53, 62, 65, 67-68, 74, 79, 82-83, 89-91, 94-95, 107, 109-111, 114-115, 117-119, 123-124, 128-129, 132-133, 136-137, 141-143, 144-145, 146-147, 151-153, 160-161, 165-166, 168-169, 174-175, 176, 178-180, 183-184.) Nine witnesses at the second public hearing testified in favor of the CHP facility, including three representatives from the construction trades and operating engineer local unions that noted that the facility would provide a number of construction and ongoing maintenance jobs (Public Tr. II at 19, 21, 172). Further, other supporting witnesses, including several members of the faculty at Ohio State, testified that the project is an efficient solution to meet the University's electricity and heating needs and a step in the right direction, in terms of providing cleaner energy, reducing carbon dioxide emissions, and mitigating climate change (Public Tr. II at 27-28, 30-32, 43-44, 47-48, 86, 103).

{¶ 33} In addition to the testimony provided at the public hearings, more than 40 public comments regarding the proposed CHP facility have been received and reviewed by the Board. The majority of these public comments, many of which were provided by individuals that testified at the public hearings, express opposition to the project. Additionally, the Sierra Club Beyond Coal Campaign filed, on behalf of numerous individuals, a set of identical public comments opposing the CHP facility.

B. Evidence and Arguments

1. BASIS OF NEED

{¶ 34} R.C. 4906.10(A)(1) requires that the Board consider the basis of the need for the facility if the facility is an electric transmission line or gas pipeline.

{¶ 35} Ohio State and Staff note that R.C. 4906.10(A)(1) is inapplicable to the proposed CHP facility, because it is not an electric transmission line or gas pipeline (Staff Ex. A at 11; OSU Br. at 7; Staff Br. at 7).

{¶ 36} Because the CHP facility is not an electric transmission line or gas pipeline, the Board finds that R.C. 4906.10(A)(1) is not applicable under the circumstances (Staff Ex. A at 11).

2. NATURE OF PROBABLE ENVIRONMENTAL IMPACT

{¶ 37} R.C. 4906.10(A)(2) requires that the Board determine the nature of the probable environmental impact of the proposed facility.

a. Socioeconomic Impacts

{¶ 38} Ohio State asserts that the proposed CHP facility is compatible with regional planning documents and will have a negligible impact on regional development and areas outside of the University's control. Ohio State further asserts that the CHP facility will have a negligible effect on land use, as it will be constructed on a previously disturbed site on its campus and the surrounding land and structures are controlled by the University. Noting that it has satisfied the requirements in Ohio Adm.Code 4906-4-08(D)(1) and (D)(2) by evaluating all cultural resources located within ten miles of the CHP facility, Ohio State also argues that the facility would have no direct impact on known cultural resources beyond a limited visual impact. Ohio State contends that it has met the requirements relative to assessing the potential visual impact of the CHP facility, by conducting a visual impact assessment in accordance with Ohio Adm.Code 4906-4-08(D)(4) through its environmental consulting firm, TRC Environmental Corporation (TRC), which concluded that the overall visual impact of the facility is minimal. Regarding the economics of the project, Ohio State expects that the CHP facility will have significant positive economic impacts in terms of jobs and local output, at a cost that falls on the low end of the range of the average cost for similar facilities. (OSU Ex. A at 13, Ex. 1 at 3, 8, 18-19, 37-38, 42-43, 118-126, Ex. T, Ex. U; OSU Br. at 8-11.)

{¶ 39} Addressing socioeconomic impacts, Staff notes that the proposed CHP facility is compatible with regional planning documents, is consistent with energy reduction goals of the city of Columbus, and will have negligible impact on regional development and

external areas outside of Ohio State's control. Staff states that the current land use of the proposed site is for educational purposes and comprised of non-permanent greenhouse and garden structures, which would be relocated to a different location on Ohio State's campus. Staff adds that areas proposed for pipelines and cabling are also categorized as an educational land use type and would be immediately returned to their pre-construction land use after installation of the facilities. With respect to cultural resources in the vicinity, Staff notes that Ohio State's cultural resources consultant determined that the project would not involve or impact any significant cultural resources or landmarks and that no further cultural resource management work was necessary; the Ohio Historic Preservation Office concurred with these findings. Staff also points out that Ohio State provided a visual impact assessment report indicating that, given the urban context of the site and its surroundings, visual impact would be minimal and compatible with the surrounding urban landscape. Finally, Staff states that the total capital and intangible costs for the proposed CHP facility are estimated at nearly \$197 million. Staff verified that the reported average cost of similar facilities is not substantially different from Ohio State's estimated cost. According to Staff, Ohio State's economic analysis indicates that the project will have a number of positive economic impacts for the state, including four long-term operational jobs and between 150 and 175 construction jobs, although there would not be an appreciable increase in tax revenue due to the University's status as a public institution of higher education. (Staff Ex. A at 12-14.)

b. Ecological Impacts

{¶ 40} Ohio State contends that its application and Subsurface Exploration report confirm that the project will have limited impacts on geology or groundwater. Ohio State adds that no streams, wetlands, lakes, reservoirs, or floodplains would be impacted by the project. Ohio State also notes that TRC completed a Site Ecological Study Report, which found very few potential impacts to any threatened or endangered wildlife species. Ohio State notes that the project area is within the range of the state- and federal-endangered Indiana bat and the state- and federal-threatened northern long-eared bat. Because a small

amount of tree clearing is proposed in the project area, Ohio State agrees with Staff's recommended condition regarding seasonal tree cutting to minimize any potential impacts, as discussed below. According to Ohio State, no sensitive plant species would be impacted by the CHP facility. (OSU Ex. A at Ex. 1 at 104-106, 115-116, Ex. Q, Ex. R, Ex. S; OSU Br. at 12-14.)

{¶ 41} With respect to the ecological impacts of the proposed CHP facility, Staff addresses the geological, soil, groundwater, and other characteristics of the project area and surrounding region. Staff states that no streams, wetlands, lakes, reservoirs, or floodplains would be impacted by the proposed CHP facility, while sedimentation that may occur as a result of construction activities would be minimized through best management practices. Staff reports that a small amount of tree clearing would be necessary within the project area. Because the project is within the range of the state- and federal-endangered Indiana bat and the state- and federal-threatened northern long-eared bat, Staff recommends that Ohio State adhere to seasonal tree cutting dates of October 1 through March 31 for all trees that are three inches or greater in diameter, unless coordination efforts with the Ohio Department of Natural Resources and the U.S. Fish and Wildlife Service result in a different course of action. Staff adds that impacts to other state- and federal-listed animal species or to sensitive plant species are not anticipated. (Staff Ex. A at 15-18.)

c. Public Services, Facilities, and Safety

{¶ 42} Ohio State asserts that no damage or other significant impact to roads and bridges is expected in the project area, although the University will restore infrastructure to its previous or to better condition, if damage should occur. During construction, Ohio State plans to provide pertinent authorities with advanced notice of any temporary disruptions to traffic. Regarding noise, Ohio State notes that the results of its Baseline Ambient Sound Survey show that noise levels from the CHP facility will be similar to the existing ambient noise levels, while the University's application describes a number of measures that will be undertaken to mitigate noise emissions. As another matter, Ohio State notes that high winds

are not expected to impact the project. (OSU Ex. A at Ex. 1 at 46-47, 88-96, 106, Ex. P; OSU Ex. D at 10; OSU Br. at 14-15.)

{¶ 43} Staff also reports on several matters related to public services, facilities, and safety. Staff states that, although no damage to roads or bridges is expected, traffic patterns would be minimally disrupted during construction, with momentary delays for the delivery and removal of large equipment from the project site. According to Staff, John H. Herrick Drive would be reduced to two lanes during construction; however, traffic would be maintained in both directions utilizing the remaining two lanes. Staff indicates that Ohio State will coordinate with the city of Columbus and the Ohio Department of Transportation (ODOT) to minimize impacts to traffic flow and infrastructure, as well as provide the pertinent authorities advanced notification and updates concerning the temporary disruptions to traffic. Regarding noise, Staff notes that adverse impact from construction would be temporary and intermittent, away from residential structures, limited to daytime working hours, and minimized through equipment mitigation measures. Upon operation, Staff states that Ohio State would continue to employ noise reduction mitigation. In order to minimize adverse impacts associated with increased noise levels, Staff recommends that Ohio State use the mitigation measures described in the application or similar measures, as well as include procedures in its complaint resolution process for resolving noise complaints. Finally, Staff advises that there are no anticipated adverse impacts due to high wind velocities, as the CHP facility would be constructed in accordance with engineering standards and use diagonal steel bracing to account for wind and seismic loads. (Staff Ex. A at 18-20.)

{¶ 44} In sum, following its review of the socioeconomic, ecological, and other impacts, Staff recommends that the Board find that Ohio State has demonstrated the nature of the probable environmental impact for the proposed CHP facility, provided that any certificate issued by the Board include the conditions specified in the Staff Report (Staff Ex. A at 20; Staff Br. at 7-8).

{¶ 45} Based on the evidence in the record, we agree that the nature of the probable environmental impact associated with the CHP facility has been determined, in accordance with R.C. 4906.10(A)(2) (Staff Ex. A at 12-20; OSU Ex. A at 11-13, Ex. 1 at 37-47, 87-126).

3. MINIMUM ADVERSE ENVIRONMENTAL IMPACT

{¶ 46} 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.

a. Summary of the Parties' Arguments

{¶ 47} Staff states that Ohio State conducted a feasibility study site analysis that included five potential sites for the proposed CHP facility, which compared configuration options, power capacity, carbon dioxide emission reductions, resiliency, expansion capability, facility footprint, costs, and efficiencies associated with the five options. Staff notes that the site that was ultimately selected by Ohio State is centrally located on campus, minimizes the footprint of the CHP facility, is distant from the majority of the student facilities on campus, is near State Route 315, and is close to existing utility infrastructure and an existing duct bank underneath the Olentangy River that could be utilized for crossing the river without impact to it. According to Staff, the proposed project layout was designed to minimize disruption to the location and to existing facilities adjacent to the proposed site, while minimizing the footprint of the CHP facility through a multi-story vertical design and placement of the cooling towers on the roof, and without disruption to any roads or neighboring buildings. Staff believes that Ohio State followed a reasonable process for site selection and its determination of a proposed layout for the CHP facility. (Staff Ex. A at 21.)

{¶ 48} Staff finds that Ohio State has sited and designed the CHP facility in a way that minimizes potential adverse impacts. Noting that the site is surrounded by previously developed campus infrastructure, a highway, and dense urban development, Staff indicates that the site has no known cultural resources within it and that construction of the proposed

CHP facility would not directly impact any streams, wetlands, lakes, reservoirs, or floodplains. Staff further indicates that impacts to state- and federal-listed species can be avoided by following seasonal restrictions for the limited amount of tree clearing required on the project site. Addressing noise, Staff states that the adverse impact of construction noise would be temporary and intermittent, would occur away from all residential structures, and would be limited to daytime working hours, while Ohio State would be required to adhere to noise mitigation measures during operation. Although local and state roads would experience a temporary increase in truck traffic during construction, Staff advises that no damage to roads and bridges is expected and a final traffic plan will be developed with local officials and submitted to Staff for review. Addressing the visual impact of the CHP facility, Staff notes that, due to existing viewshed impacts from other nearby campus buildings, a cell tower, and State Route 315, and given that tree clearing would be limited, the aesthetic impacts are expected to be minimal. Staff concludes that the project represents the minimum adverse environmental impact, based on low potential impacts to land use, cultural resources, surface water resources, and wildlife, as well as Staff's recommended conditions to further mitigate these impacts. Staff, therefore, recommends that the Board find, in accordance with R.C. 4906.10(A)(3), that the proposed CHP facility represents the minimum adverse environmental impact, provided that any certificate issued by the Board includes the conditions specified in the Staff Report. (Staff Ex. A at 21-22; Staff Br. at 8-9.)

{¶ 49} Sierra Club argues that Ohio State has not met its burden under Ohio law to show that the proposed CHP facility represents the minimum adverse environmental impact as compared to feasible alternatives. Sierra Club notes that the Ohio Supreme Court found that an identical statutory requirement pertaining to the approval of proposed hazardous waste facilities requires an applicant to "produce evidence of alternative technologies in order to prove that its facility represents the minimum adverse environmental impact" and requires the reviewing board to "evaluate the nature and economics of alternative technologies to determine whether a more advanced, more

environmentally protective technology can and should be utilized.” *State of West Virginia v. Ohio Hazardous Waste Facility Approval Board*, 28 Ohio St.3d 83, 84, 502 N.E.2d 625 (1986) (considering R.C. 3734.05(C)(6)(c), now R.C. 3734.05(D)(2)(c)). Sierra Club claims that more advanced, more environmentally protective technology is available and should be utilized to serve Ohio State’s needs – specifically, a heated hot water system that uses heat exchangers and geothermal wells for heating and renewable generation resources for electricity. (Sierra Club Br. at 1-3.)

{¶ 50} Noting that the proposed CHP facility is premised on Ohio State’s continued use of its existing steam heating system, Sierra Club contends that heated hot water systems provide an alternative to steam that is more efficient, causes much less harm to the environment in terms of air pollutants, and produces long-term cost savings, as confirmed by the testimony of Sierra Club’s witness, large-scale projects undertaken at numerous other universities that have retired steam generation in favor of heated hot water, and the CHP Feasibility Study conducted by Ohio State’s own contractor, Ohio State Energy Partners (OSEP). With respect to the CHP Feasibility Study in particular, Sierra Club emphasizes that the study recognizes that the replacement of Ohio State’s current steam system with a heated hot water system is preferable on nearly every metric and will be done at some point in the future. Sierra Club adds that Ohio State witness Tufekci² testified that heated hot water is preferable to steam with respect to its ability to facilitate heat recovery and generation efficiency; can be used in conjunction with heat storage, unlike steam; and is the “clear choice” for new construction. (Sierra Club Ex. F at 24-26, 29, 35; OSU Ex. A at Ex. 4 at App. N; Tr. I at 48, 60-61; Sierra Club Br. at 3-7.)

{¶ 51} Additionally, Sierra Club contends that Ohio State failed under R.C. 4906.10(A)(3) to investigate alternatives to the proposed CHP facility. Emphasizing that Ohio State assumed that it would first proceed with a CHP facility and then convert to heated hot water at some point in the future, Sierra Club states that the University did not

² Mr. Tufekci is OSEP’s chief executive officer and an employee of ENGIE North America (OSU Ex. A at 2).

conduct, aside from the CHP Feasibility Study, any investigation to determine the costs and benefits associated with conversion to heated hot water or the installation of geothermal wells or system-wide heat exchangers; did not investigate the cost of the steam to heated hot water conversion projects at other universities that have completed or initiated such projects; and did not analyze the University's actual heating needs to determine the amount of energy that a geothermal system would need to provide. (Tr. I at 65, 77-78, 81-82, 84, 195; Sierra Club Br. at 8-12.)

{¶ 52} In terms of Ohio State's electricity needs, Sierra Club argues that the University has not met its burden to show that no alternative technology exists that can provide the electrical generation benefits provided by the proposed CHP facility with less adverse environmental impact. According to Sierra Club, Ohio State's rejection of solar or wind generation was based on an overstatement of both solar costs and CHP capacities. Sierra Club notes that Ohio State did not issue a request for proposal or otherwise investigate the cost of off-site solar or wind power purchase agreements, or consider constructing its own on-site renewable generation resources. Sierra Club also asserts that the proposed CHP facility shares many of the same insufficiencies that Ohio State attributes to wind and solar generation. Further, Sierra Club contends that Ohio State did not evaluate the scope of its actual reliability needs or conduct any studies of the reliability of grid electricity to establish the comparative advantage of on-campus steam turbine generation. Sierra Club adds that the Board should not adopt Staff's conclusion that the CHP facility represents the minimum adverse environmental impact, as Staff did not consider any other technological alternative. (Tr. I at 19, 30-35, 88, 97-99; Tr. II at 374-375, 381, 389-390; Sierra Club Ex. F at 22-23; Sierra Club Br. at 12-16.)

{¶ 53} Finally, Sierra Club argues that Ohio State has proposed a facility with significant adverse environmental impacts in the form of greenhouse gas emissions and has failed to account for the full extent of those impacts. Although Ohio State claims that the CHP facility will reduce the University's carbon footprint, Sierra Club contends that the University's position is based on an outdated and faulty analysis of the PJM generation mix,

as well as efficiencies from reduced reliance on its McCracken power plant that may not materialize, given that only one of its five boilers will be retired prior to 2035. With respect to nitrogen oxide and particulate matter emissions, Sierra Club asserts that Ohio State's modeling to estimate the effects of these emissions on ambient concentrations suffers from significant defects and, therefore, the full impact is unknown. Among other alleged defects, Sierra Club claims that Ohio State's model uses meteorological data from a weather station several miles from the proposed CHP facility at a non-representative location that lacks distinctive attributes affecting the flow of air and pollutants. Sierra Club also emphasizes that neither Ohio State nor Staff investigated or attempted to characterize the adverse environmental impacts associated with the extraction of natural gas for use in the proposed CHP facility, such as emissions of fugitive methane at the point of extraction. For all of these reasons, Sierra Club urges the Board to deny Ohio State's application. (Sierra Club Ex. F at 13-15, 17-18, 19-20; Tr. I at 17, 36, 95-96, 127, 130-131, 144-146, 159, 161, 196-197, 286-287; Tr. II at 373, 391; Sierra Club Br. at 16-25.)

{¶ 54} In its reply brief, Ohio State contends that Sierra Club has misstated, in several respects, the relevant legal standard for the Board's consideration of this case – specifically, by focusing solely on environmental impact, without consideration of whether proposed alternatives are feasible or economically viable; by repeatedly claiming that the University should have conducted additional formal studies of alternatives or other matters of interest to Sierra Club; by relying on the Ohio Supreme Court's interpretation of hazardous waste facility permitting requirements in R.C. 3734.05; and by suggesting that the Board must take fuel extraction impacts into account. (OSU Reply Br. at 4-14.)

{¶ 55} Additionally, Ohio State argues that the record evidence supports approval of its application, as the proposed CHP facility complies with Ohio law and is the best possible solution to meet the University's objectives, based on cost considerations, thermal needs, electricity needs, and reliability benefits. With respect to cost, Ohio State asserts that, as confirmed by the testimony of its witnesses, the CHP Feasibility Study, and the Climate Action Plan, the University considered a variety of alternatives, including those proposed

by Sierra Club, and concluded that each option is not as advantageous as the CHP facility. Specifically, Ohio State determined that it is not feasible to immediately replace its extensive steam network with a heating hot water system, which would cost several hundred million dollars. Ohio State adds that it already utilizes heat recovery chillers in some campus buildings; however, they cannot fully meet the load for the new hospital facilities that would be served by the CHP facility. Noting that it also uses geothermal generation to serve some of the heating and cooling load of several campus buildings, Ohio State contends that the use of geothermal technology at a scale comparable to the thermal output of the CHP facility would require extensive real estate that the University's urban environment does not provide. Ohio State adds that on- or off-site renewable generation is more costly, is intermittent, and fails to meet the University's thermal needs. Further, Ohio State asserts that Sierra Club failed to provide projected costs for its proposed options, with the exception of a flawed cost estimate for solar generation that fails to account for transmission and distribution charges. Finally, Ohio State argues that Sierra Club's position ignores the reality of budget constraints, which require the University to adhere to an annual allocation of approximately \$110 to \$135 million for comprehensive energy management. (OSU Ex. A at Ex. 4; OSU Ex. C; Sierra Club Ex. C; Sierra Club Ex. F at 22-23; Tr. I at 70-72, 76-77, 88, 102-105, 177-178, 190-191, 194, 199, 207-208, 221, 241-243; OSU Reply Br. at 14-26.)

{¶ 56} Ohio State also emphasizes that the proposed CHP facility will enable the University to meet its considerable thermal needs, as well as to rely less upon, and begin to retire, the less efficient McCracken boilers. According to Ohio State, the McCracken power plant is expected to provide only 15 percent of the annual steam capacity on campus once the CHP facility is operational, with the possibility that the new facility may provide all of the steam needed on campus in the future. Noting that there are few alternatives to meet its thermal needs, Ohio State argues that there is insufficient land to construct geothermal generation, while the CHP facility will enable the University to further expand its heating hot water deployment. Although Sierra Club points to heating hot water system

conversions at other universities, Ohio State contends that Sierra Club witness Sahu³ was unfamiliar with the specifics of these projects and with the University's campus and, therefore, the purported comparison does not bolster Sierra Club's position. Ohio State also maintains that off-site renewable resources would not provide any of the steam needed to meet its thermal load. Addressing the electricity benefits of the proposed CHP facility, Ohio State believes that the project will enable it to use gas efficiently to produce both electricity and heat, while reducing carbon emissions due to the planned switch from the more carbon intensive grid to natural gas generation. (Tr. I at 38-41, 70, 92-93, 120, 124-126, 167, 190-191, 194, 227-228, 238-239, 302-310; OSU Reply Br. at 26-32.)

{¶ 57} As to reliability, Ohio State asserts that the CHP facility, as an additional source of on-site generation capability, will provide reliable heat and electricity to the campus system, with additional benefits in the form of islanding capacity, less reliance on diesel backup generators for medical and other critical locations, and limited reliance on the PJM grid and the local distribution utility for electricity. Ohio State adds that Sierra Club's preferred renewable resources would not offer the same reliability benefits due to the intermittent nature of solar and wind generation, as well as the physical limitations associated with siting on-site renewable resources with sufficient capacity. (Tr. I at 30, 88, 101, 104-105, 108, 168-169, 170, 172, 174-175, 239-240; OSU Reply Br. at 33-36.)

{¶ 58} Finally, Ohio State insists that there are no environmental concerns associated with the CHP facility, as confirmed by modeling and analysis completed by TRC in response to Sierra Club's objections. Ohio State notes that TRC concluded that the CHP facility will have a negligible impact on the existing air quality in Franklin County and will not affect its attainment status for any pollutant, with project impacts of less than one percent above the background concentration and well below the Primary National Ambient Air Quality Standards. With respect to carbon emissions in particular, Ohio State asserts

³ Dr. Sahu is an independent engineering, environmental, and energy consultant (Sierra Club Ex. F at 1, Ex. RS-A).

that the CHP facility will reduce such emissions for the campus by 35 percent in its first year of operation. Ohio State adds that, although Sierra Club argues that any increase in particulate matter emissions should be prohibited, the CHP facility complies with the primary standard for such emissions. Further, Ohio State claims that the model employed by TRC is utilized by the Ohio Environmental Protection Agency (Ohio EPA), among other agencies, and was appropriately used in this case, contrary to Sierra Club's position. Ohio State also notes that the Ohio EPA has already examined the environmental impacts of the CHP facility's emissions and granted the requisite permit, without imposing any limit on the capacity factor at which the facility must operate. (Sierra Club Ex. E at 2; Tr. I at 11, 294; OSU Reply Br. at 36-45.)

{¶ 59} Staff offers two contentions in response to Sierra Club's position. First, Staff asserts that Sierra Club's arguments regarding environmental impact are irrelevant to this proceeding. According to Staff, Sierra Club's concerns are more appropriately directed to the U.S. Environmental Protection Agency, which establishes national ambient air quality standards for pollutants. Staff also asserts that Ohio State, as a non-profit educational institution, was properly granted an exemption from major stationary source modeling and other conditions required for an Ohio EPA permit, in accordance with Ohio Adm.Code 3745-31-13(D)(1). Staff notes that Sierra Club did not appeal or even comment on the final permit issued by the Ohio EPA on October 25, 2019. Staff further notes that there is no rule of the Ohio EPA that requires review of the alleged impacts from natural gas extraction for permitting purposes. (Staff Reply Br. at 1-4.)

{¶ 60} Additionally, Staff believes that Sierra Club's arguments concerning alternative technologies have no relevance to this proceeding. Staff contends that it must only investigate the application that is before it and recommend conditions necessary to minimize the adverse impacts of the proposed facility, as Staff has done in this case. Staff states that Sierra Club's reading of R.C. 4906.10(A)(3) results in an impossible standard that would require Staff's continual investigation of comparative evidence and analysis, as well as the preparation of numerous reports of investigation. (Staff Reply Br. at 5-6.)

{¶ 61} In its reply brief, Sierra Club asserts that Ohio State did not offer, in its initial brief, any discussion of R.C. 4906.10(A)(3) or summary of any evidence that the Board has before it to show that the proposed project minimizes any adverse environmental impact; refused to address the adverse environmental impact from emissions; and failed to provide any comparative analysis of alternatives as required by the statute. Further, Sierra Club claims that, although Ohio State may have satisfied the legal requirements to obtain the relevant permits through its use of a discretionary exemption from the Ohio EPA, the University has failed to adequately and accurately characterize the adverse environmental impacts from particulate matter and nitrogen oxide pollution. Noting that Ohio State focuses on the increased payroll and jobs that would be created by the project, Sierra Club responds that the University could construct a heated hot water system with less environmental impact and similar economic benefits to the surrounding community as the proposed CHP facility, while also furthering the energy goals of the city of Columbus. Finally, Sierra Club argues that Staff has cited no evidence or even addressed the state of available technology or alternatives, as required by R.C. 4906.10(A)(3). (Sierra Club Reply Br. at 3-11.)

b. Sierra Club's Motion to Strike

{¶ 62} On August 25, 2020, Sierra Club filed a motion to strike or, in the alternative, a motion for leave to file a surreply, along with its proposed surreply. As its primary request, Sierra Club seeks to strike portions of Ohio State's reply brief that cite as evidence materials outside of the record or that rely on claims unsupported by evidence in the record. First, Sierra Club asserts that it has been prejudiced by Ohio State's reply brief, as it relies on a document referred to as the Sierra Club Energy Resources Policy, which, according to Sierra Club, was not introduced into the record before or during any of the hearings, was not authenticated, and was not subject to examination by a witness who could testify to its content or context, but which was instead submitted in a comment from a member of the public after the conclusion of the hearings. Sierra Club further asserts that Ohio State has misrepresented the contents of the policy document and advanced new arguments

regarding the relative merits of the proposed CHP facility in relation to statements in the document. If Ohio State is permitted to rely on the policy document, Sierra Club requests that it be provided an opportunity to introduce it into evidence in its entirety and explain how the University has misrepresented its contents. As another matter, Sierra Club argues that Ohio State's reply brief introduces, for the first time in this proceeding, several factual claims that have no basis in the record evidence. According to Sierra Club, Ohio State has no evidentiary support for its claims that it has conducted extensive, detailed analysis of hourly thermal load; that the cost of replacing its steam network would be \$500 million; that it needs significant, yet unspecified, volumes of steam at campus hospitals and medical research facilities; and that there is insufficient campus land on which to construct geothermal generation to meet its thermal needs.

{¶ 63} In its memorandum contra Sierra Club's motion, Ohio State argues that the motion should be denied, with one exception. Ohio State notes that it does not object to the Board's consideration of the portion of Sierra Club's offered surreply that relates to the Sierra Club Energy Resources Policy, because the policy document was offered at the public hearing on August 4, 2020, after the evidentiary hearing had already occurred. As to that document, Ohio State asserts that, although it was referenced by a witness at the public hearing on August 4, 2020, Sierra Club failed to question the witness on the document or to object to the witness's testimony. Ohio State adds that the witness submitted the entire document to the Board, which is part of the record in this proceeding. As to Sierra Club's contention that Ohio State failed to support portions of its reply brief with evidentiary support, the University responds that it provided citations to the record and that, accordingly, there is no basis for the motion to strike or for the motion for leave to file a surreply.

c. Conclusion

{¶ 64} As an initial matter, the Board finds that Sierra Club's motion to strike portions of Ohio State's reply brief should be denied. As to the Sierra Club Energy Resources Policy, the document was referenced by a witness at the August 4, 2020 public

hearing and, following a question from the Board's chairman, was subsequently provided by the witness in its entirety and filed in the docket. Sierra Club raised no objections to the testimony of the witness or the filing of the document in the docket on August 5, 2020, for the Board's consideration, along with all of the other public comments and supporting documents. (Public Tr. II at 44-45.) Because the policy document was filed as a public comment in the docket, we do not find it appropriate to strike Ohio State's reference to the document in its reply brief. We find that Sierra Club's objections to Ohio State's use of the contents of the policy document in its reply brief pertain more to the weight, if any, that the Board should afford to the document in this case. As confirmed by our analysis below, we have not found it necessary to consider the policy document in reaching our conclusion as to R.C. 4906.10(A)(3).

{¶ 65} Regarding Sierra Club's assertion that other portions of Ohio State's reply brief fail to include evidentiary support for some of the University's factual claims, we find that the University has offered citations to the record throughout its reply brief. To the extent that Ohio State has not fully supported its claims with evidence in the record, we find that this is not a sufficient basis for the motion to strike. Rather, the Board will consider Ohio State's factual claims, evaluate the evidence of record, and determine whether there is sufficient evidentiary support for the University's position. As to Sierra Club's alternative request, we find that the motion for leave to file a surreply should also be denied, with one exception. Because the portion of the surreply related to the Sierra Club Energy Resources Policy is not opposed by any party, we find that it should be permitted to stand.

{¶ 66} The Board will now consider the evidence of record and the parties' arguments with respect to R.C. 4906.10(A)(3). In order to facilitate the Board's review of a proposed project's adverse environmental impact as required by the statute, Ohio Adm.Code 4906-4-04 provides that an applicant must describe the selection of the project area and the process for designing the facility layout. In this case, we find that Ohio State conducted a reasonable site selection process and provided information regarding the project area selection and site design for the proposed CHP facility, consistent with the rule.

Five sites in three areas of the Columbus campus, all of which are on land controlled by Ohio State in previously disturbed areas, were considered as part of the CHP Feasibility Study: two sites on campus adjacent to the existing McCracken power plant, two sites west of the Olentangy River and east of State Route 315 (one of which was ultimately selected), and a site west of Kenny Road and south of Lane Avenue. Numerous factors were considered by Ohio State in selecting the project location, including proximity to serve both the University's existing buildings and future growth; environmental, noise, and visual impacts; ability to minimize disruption of campus operations during construction; ability to minimize reduction of existing natural or developed green spaces on campus; avoidance of loss of student recreational spaces on campus; land value for other development possibilities; constructability and cost; and protection from possible flooding from the Olentangy River. Ohio State concluded that its chosen site at the corner of John H. Herrick Drive and Vernon L. Tharp Street is optimal for several reasons. It is centrally located on campus; relatively small; distant from the academic center, athletics district, and student recreational facilities; and close to State Route 315. The selected site will also facilitate the CHP facility's electrical connection to the Buckeye Substation by way of the existing duct bank under the Olentangy River, while also serving all buildings west of the river via a new district heating and cooling network and to the east of the river via the campus steam network. We agree with Staff's conclusion that Ohio State followed a reasonable process for selecting a site and determining a proposed layout for the CHP facility. (OSU Ex. A at 4-5, Ex. 1 at 26-34; OSU Ex. D at 6-7; Staff Ex. A at 21.)

{¶ 67} The record also supports Staff's conclusion that the proposed CHP facility represents the minimum adverse environmental impact. The application indicates that the project site was studied for potential land use, ecological, cultural, and other types of impacts, with study results showing minimal impacts from disturbance and negligible expected impacts to soil, water, vegetation, cultural resources, and wildlife. Along with the application, Ohio State provided numerous reports to the Board, including the Acentech Baseline Ambient Sound Survey, CTL Geotechnical Report, Surface Water Survey Report,

Ecological Resources Report, and Visual Impact Assessment Report. In accordance with R.C. 4906.07(C), Staff reviewed this information as part of its investigation of the application and offered its findings and recommendations in the Staff Report. In its analysis of the potential adverse environmental impacts, Staff noted that the proposed CHP facility was designed and sited in a way that minimizes such impacts, particularly given that it is surrounded by previously developed campus infrastructure, a highway, and dense urban development. Staff reported that, as confirmed by the Ohio Historic Preservation Office, there are no known cultural resources within the project site. Staff also highlighted that the construction of the CHP facility would not directly impact any streams, wetlands, lakes, reservoirs, or floodplains, while Ohio State would obtain the necessary permit for stormwater discharges. According to Staff, potential impacts to state- and federal-listed species can be avoided by following seasonal restrictions for the limited amount of tree clearing required on the project site. Staff noted that Ohio State has also proposed measures to mitigate noise, traffic, and aesthetic impacts in the project area, while Staff has recommended a number of conditions as a means to further mitigate potential adverse impacts. Ultimately, Staff advised that, because the CHP facility is expected to have little impact on land use, cultural resources, surface water resources, and wildlife, and with Staff's recommended conditions in place to further mitigate potential adverse environmental impact, the standard set forth in R.C. 4906.10(A)(3) has been satisfied. Further, Ohio State witness Potter⁴ testified that the CHP facility has been designed to minimize or eliminate potential environmental impacts. Mr. Potter provided a thorough explanation of how the design and siting of the CHP facility will minimize disruption to the project location and surrounding area. Upon review of the record, the Board finds that Ohio State and Staff have fully assessed the potential impacts of the proposed project and provided evidence demonstrating that the CHP facility represents the minimum adverse

⁴ Mr. Potter is employed by Ohio State as the Senior Director of Comprehensive Energy Management (OSU Ex. D. at 2).

environmental impact. (Staff Ex. A at 21-22; Staff Ex. B at 2-3; OSU Ex. A at 5, 14, Ex. 1 at 3-4, 87-126, Ex. P, Ex. Q, Ex. R, Ex. S, Ex. U; OSU Ex. D at 7, 8-11.)

{¶ 68} Before the Board addresses the issues raised by Sierra Club, we note that the parties disagree as to the scope of the review that the Board must undertake pursuant to R.C. 4906.10(A)(3). The statute requires the Board to evaluate whether a major utility 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.” R.C. 4906.10(A)(3). The statute is clear that the Board must consider “various alternatives” as part of its evaluation of a proposed facility’s adverse environmental impact, and nothing in the statute limits the Board’s review solely to the project proposed in the application before it. In prior cases, the Board has considered evidence offered by the applicant or other parties of alternatives to the proposed project, as part of the Board’s environmental analysis under R.C. 4906.10(A)(3). *See, e.g., In re Duke Energy Ohio, Inc.*, Case No. 16-253-GA-BTX, Opinion, Order, and Certificate (Nov. 21, 2019) at ¶ 120 (considering non-pipeline alternatives to proposed pipeline); *In re American Municipal Power-Ohio, Inc.*, Case No. 06-1358-EL-BGN, Opinion, Order, and Certificate (Mar. 3, 2008) at 12-15 (considering generating alternatives to proposed pulverized coal facility). At the same time, we recognize that the word “alternative” implies a viable choice or substitute that is functionally equivalent to the proposed facility and capable of fully meeting the applicant’s need for the facility.

{¶ 69} In opposing Ohio State’s application, Sierra Club raises two primary arguments. First, Sierra Club asserts that Ohio State has not satisfied its burden under R.C. 4906.10(A)(3) to show that the proposed CHP facility represents the minimum adverse environmental impact as compared to feasible alternatives. The record, however, is clear that there is no viable alternative that will as fully and efficiently meet Ohio State’s unique needs as a CHP facility. As Mr. Potter explained, the CHP facility has been designed and sized to optimally serve Ohio State’s heating and electrical loads. With respect to heating, the CHP facility will provide both steam and heating hot water, in order to serve a large

number of existing buildings that are connected to the existing campus steam distribution network and planned new buildings that will be heated via a new heating hot water network. In terms of electrical needs, the CHP facility will enable Ohio State to establish a microgrid for the Columbus campus to strengthen its energy resiliency and reliability; provide better control of its system demand to minimize demand costs for purchased power; and reduce its levelized cost of energy by reducing the amount of power that the University purchases from the market. Mr. Potter also emphasized that Ohio State is preparing to construct several new hospital and cancer treatment facilities that must have sufficient quantities of steam, heating hot water, and power that the CHP facility would reliably provide. (OSU Ex. D at 4, 5.)

{¶ 70} Further, upon review of the record, the Board finds that Ohio State reasonably considered and rejected various alternatives to the CHP facility proposed in the application. Mr. Tufekci testified that, as a general matter, Ohio State and OSEP consider any technology that is commercially available to be implemented on campus at any given time. For this project, Ohio State considered different options with respect to facility layout and site design. Both Mr. Potter and Mr. Tufekci testified that Ohio State evaluated a number of different configuration and combustion turbine generator models, in light of the University's objectives of providing the needed output capacities; fitting the facility within a defined footprint to minimize impact on the surrounding roads, infrastructure, and buildings during construction; providing the highest level of thermal efficiency; enabling combustion of green hydrogen blended into natural gas; and avoiding disruption to existing facilities once operational. Mr. Tufekci added that the proposed site will enable Ohio State to grow efficiently and economically because each new building can be connected to the CHP facility. To support its application, Ohio State also offered the CHP Feasibility Study, in which OSEP evaluated multiple CHP cases to ensure an optimized solution for the University, based on an analysis of comparative configuration options, power capacity, carbon dioxide emissions reduction, resiliency, expansion capability, facility footprint, costs, and efficiencies. (OSU Ex. A at 5-6, Ex. 1 at 26, Ex. 4; OSU Ex. D at 6; Tr. I at 70.)

{¶ 71} Sierra Club argues that a heated hot water system that uses heat exchangers and geothermal wells for heating and renewable generation resources for electricity would have less environmental impact than the CHP facility. There are several flaws in this argument. Although Sierra Club characterizes its preferred option as a feasible alternative, the evidence of record indicates that it is not, in fact, a viable solution to meet Ohio State's needs for both electricity and thermal energy. In terms of its heating needs, Ohio State acknowledged that it is transitioning its extensive steam system to a hot water system for heating. Mr. Tufekci projected, however, that a complete steam to hot water conversion at present would cost a few hundred million dollars, which places this option outside of Ohio State's current budget constraints. Aside from cost considerations, a full heating hot water system requires a heating source like geothermal wells or chillers. As Mr. Tufekci explained, while Ohio State already uses geothermal heating for certain buildings on campus, it is not an alternative to the CHP facility due to lack of available land on campus and the scale of heating required. Similarly, Mr. Tufekci noted that, while Ohio State makes use of heat recovery from chillers in some campus buildings, chillers are not a feasible or cost-effective option for every building. From the CHP Feasibility Study, it appears that a steam to hot water conversion is essentially dependent upon the construction and operation of the CHP facility. With respect to its electricity needs, although Ohio State already relies upon renewable energy to some extent, an on-site renewable generation resource would require a substantial amount of land that is not available on campus. Further, a renewable energy generating resource, whether on- or off-site, would be less cost-effective and would not meet Ohio State's heating needs, unless used in conjunction with geothermal heating, which, again, is not a feasible way to serve the heating load of the new hospital facilities and other new and existing buildings on campus. As the CHP Feasibility Study noted, "[a]n on-site CHP facility can simultaneously generate heat (steam and/or hot water) and power in the most efficient thermodynamic cycle that cannot be matched by any other alternative technology." Sierra Club appears itself to acknowledge that the evidence does not definitely establish that Ohio State's needs can be met through conversion to a heated hot water system, with thermal generation provided through heat exchangers and supplemented by

geothermal wells. (OSU Ex. A at Ex. 4 at 3-19, App. N at A-24; OSU Ex. C; OSU Ex. D at 5-6; Sierra Club Ex. C at 11; Tr. I at 50, 70-72, 76, 88, 92-93, 102-105, 176-180, 190-192, 199; Sierra Club Br. at 12.)

{¶ 72} Sierra Club also contends that the proposed CHP facility does not represent the minimum adverse environmental impact, in light of the carbon and other emissions that would be associated with the facility. The record, however, reflects that the impact from emissions will be negligible. According to the independent analysis conducted by TRC, the “CHP project will have negligible impact on the existing air quality in Franklin County and will not affect its attainment status for any pollutant.” Using conservative assumptions, the highest concentration for any pollutant at the nearest sensitive location is less than two percent of the relevant air quality standard. Further, following its consideration of the environmental impact associated with the CHP facility’s air emissions, the Ohio EPA granted the necessary permit, without any limit on the capacity factor at which the facility must operate. The record also reflects that Ohio State will take appropriate steps to mitigate the negligible environmental impact through pollution control equipment and will employ best available technology to control air emissions. With respect to Sierra Club’s assertion that Ohio State should have addressed the potential adverse environmental impact associated with the extraction of the natural gas that would power the CHP facility, nothing in R.C. 4906.10(A)(3) or the Board’s rules requires an analysis of the environmental impact associated with the production of the fuel or other materials to be used in the construction or operation of a major utility facility under review. (Sierra Club Ex. E at 2-4; OSU Ex. A at Ex. 1 at 50-53, 70-71; Tr. I at 294; Staff Ex. A at 25-27.)

{¶ 73} Having fully considered the parties’ arguments, in light of the evidence in the record, the Board finds, in accordance with R.C. 4906.10(A)(3), that the CHP facility represents 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.

4. ELECTRIC POWER GRID

{¶ 74} R.C. 4906.10(A)(4) provides that, in the case of an electric transmission line or generating facility, the Board must ensure that such 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 such facility will serve the interests of electric system economy and reliability.

{¶ 75} Ohio State contends that it has satisfied R.C. 4906.10(A)(4), because the proposed CHP facility would not be connected to the regional grid, would not be subject to the regulations of PJM Interconnection, LLC (PJM), and would not result in any reliability issues, as confirmed by American Electric Power. Ohio State adds that it will employ measures to prevent the export of energy to the bulk power system. (OSU Ex. A at Ex. 1 at 35-36, Ex. E; OSU Br. at 16.)

{¶ 76} Staff reports that the proposed CHP facility would not be connected to the regional grid and would instead entirely serve the load of Ohio State's campus facilities. Staff adds that, because the CHP facility is considered behind the meter, it is not subject to regulation by PJM, the regional transmission organization charged with planning for upgrades and administering the generation queue for the regional transmission system in Ohio. According to Staff, Ohio State would ensure that energy cannot flow to the bulk power system by using metering and protection, such as reverse power relaying. Staff notes that, if Ohio State plans to export power to the bulk power system in the future, a filing must be made with the Board, in addition to a new service request for generation interconnection with PJM. Staff recommends that the Board find that the proposed CHP facility complies with the requirements in R.C. 4906.10(A)(4), provided that any certificate issued by the Board for the facility includes the conditions specified in the Staff Report. (Staff Ex. A at 23-24; Staff Br. at 9.)

{¶ 77} As Staff recommends, the Board finds that the proposed CHP facility complies with R.C. 4906.10(A)(4), to the extent that it is applicable to this project (Staff Ex. A at 23-24; OSU Ex. A at 6, Ex. 1 at 35-36).

5. AIR, WATER, SOLID WASTE, AND AVIATION

{¶ 78} Pursuant to R.C. 4906.10(A)(5), the facility must comply with Ohio law regarding air and water pollution control, withdrawal of waters of the state, solid and hazardous wastes, and air navigation.

a. Air

{¶ 79} With respect to air quality, Ohio State contends that it has demonstrated that the project complies with Ohio law relative to air pollution and control. Ohio State notes that, in coordination with TRC, the University undertook a comprehensive study of the ambient air quality data for Franklin County and the potential impact of the proposed CHP facility on air quality during construction and operation. Ohio State further notes that the CHP facility was designed to ensure best available technology to control air emissions. According to Ohio State, the CHP facility's state-of-the-art pollution control equipment will significantly reduce emissions of carbon monoxide and nitrogen oxide, each by at least 85 percent, as well as volatile organic compounds and organic hazardous air pollutants by a minimum of 50 percent. Ohio State adds that the project was reviewed for applicability of regulatory requirements and was granted an Air Permit to Install by the Ohio EPA. Ohio State also notes that, to address concerns raised by Sierra Club, TRC undertook additional air quality analysis and modeling, using a conservative approach with respect to location, weather, and operational configuration, and concluded that the CHP facility will have a negligible impact on the existing air quality in Franklin County and will not affect its attainment status for any pollutant; will have a negligible impact on sensitive receptor locations in the vicinity of the project site, including the OSU Wexner Medical Center; and will meet the Ohio EPA's definition of de minimis impacts for air permitting. (OSU Ex. A

at 7-10, Ex. 1 at 48-71, Ex. I; OSU Ex. D at 10; Sierra Club Ex. E; Tr. I at 115, 148-149; OSU Br. at 17-20.)

{¶ 80} Staff states that the construction of the proposed CHP facility would result in minor emissions from the construction equipment and vehicles, with no expectation of significant adverse impacts to air quality. Staff adds that fugitive dust from construction-related activities would be minimized through a combination of vehicle speed control, surface improvement with crushed stone or gravel, routine watering, or spraying with dust suppressants. In terms of the operation of the CHP facility, Staff describes a number of air pollution controls that are proposed for the facility to minimize impacts to air quality, including dry low nitrogen oxide burners within the combustion turbines, an oxidation catalyst bed and selective catalytic reduction system within the HRSG stacks, and high efficiency water mist drift eliminators and impingement baffles for the cooling towers. Staff indicates that these established technologies are reliable, safe, and effective. According to Staff, Ohio State will perform regularly scheduled preventive maintenance and demonstrate compliance with emission limits by conducting annual compliance testing in accordance with its air permit, while the Ohio EPA will continue to monitor the impact of the CHP facility during its operation based on multiple regional air quality monitoring stations. Staff finds that, with these measures in place, the construction and operation of the CHP facility would comply with the requirements of R.C. Chapter 3704 and the rules adopted under that chapter. (Staff Ex. A at 25-27; Staff Br. at 10.)

b. Water

{¶ 81} Addressing water impacts, Ohio State notes that it has identified all required permits and programs for the installation and operation of the proposed CHP facility. Ohio State also asserts that no water will be withdrawn from lakes, ponds, rivers, streams, or groundwater to construct or operate the CHP facility and no significant amount of fresh water will be needed during construction. According to Ohio State, it modeled the CHP facility's peak water consumption and confirmed that capacity is available within the University's existing domestic water infrastructure to support the facility's operation.

Further, Ohio State claims that no impacts to public or private water supplies are expected from pollution control device failures, no discharges into drinking water sources are possible, and no impact is expected to the nearest body of water, the Olentangy River, or any other bodies of water. (OSU Ex. A at 10, Ex. 1 at 71-72, 100-101, Ex. J, Ex. K; OSU Ex. D at 11; OSU Br. at 20-21.)

{¶ 82} Staff notes that, among other permits and plans, Ohio State would develop a Stormwater Pollution Prevention Plan and a Spill Prevention Control and Countermeasures (SPCC) plan between 60 to 90 days before the start of construction. Staff states that Ohio State's operation of the proposed CHP facility would require the use of significant amounts of water, approximately 550 gallons per minute on average, to be obtained through the University's existing domestic water distribution system supplied from the city of Columbus, while effluent wastewater from the CHP process is expected to be of a quality that will enable discharge into the University's existing wastewater system. Staff adds that the construction and operation of the CHP facility are not anticipated to result in any impacts to wetlands or other waters of the United States. Staff believes that Ohio State has measures in place to ensure that construction and operation of the CHP facility will comply with the requirements of R.C. Chapter 6111 and the rules adopted under that chapter. (Staff Ex. A at 27-28; Staff Br. at 10-11.)

c. Solid Waste

{¶ 83} Ohio State asserts that, in coordination with TRC, the University assessed the nature of solid waste associated with construction and operation of the proposed CHP facility, as well as appropriate plans to deal with waste during both construction and operation, and concluded that the project will result in limited impacts from solid waste (OSU Ex. A at 11, Ex. 1 at 79-82; OSU Br. at 21).

{¶ 84} Staff indicates that solid waste that cannot be recycled or reused would be stored in on-site containers for disposal and that Ohio State would develop procedures to ensure that potentially hazardous wastes are separated from normal waste, including

segregation of storage areas and proper labeling of containers. Staff also notes that all solid waste would be transported by truck off site by licensed contractors in accordance with applicable regulatory requirements and managed in licensed facilities. According to Staff, Ohio State would have a SPCC plan in place for any spill cleanup. Staff finds that Ohio State's solid waste disposal plans comply with the requirements in R.C. Chapter 3734 and the rules adopted under that chapter. (Staff Ex. A at 28; Staff Br. at 11.)

d. Aviation

{¶ 85} Ohio State asserts that no filing with the Federal Aviation Administration (FAA) is required for this project due to its height of 115 feet, while the University has exceeded requirements to provide notice to public- and private-use airports within a five-mile radius of the proposed CHP facility (OSU Ex. A at 7, Ex. 1 at 3, 82, Ex. M; OSU Ex. D at 4; OSU Br. at 21-22).

{¶ 86} Staff reports that the tallest parts of the CHP facility are the HRSG stacks at 115 feet. Staff and the ODOT Office of Aviation consulted to determine potential impacts on local airports and concluded that, because no part of the CHP facility would exceed 199 feet, the project does not meet notification criteria or require a filing with the FAA. Additionally, Staff notes that Ohio State will obtain a temporary construction permit from the FAA to utilize a 170-foot tower crane during the construction of the CHP facility. (Staff Ex. A at 28-29; Staff Br. at 11.)

{¶ 87} Having addressed the issues of air, water, solid waste, and aviation, Staff recommends that the Board find that the CHP facility complies with the requirements specified in R.C. 4906.10(A)(5), provided that any certificate issued by the Board includes the conditions listed in the Staff Report (Staff Ex. A at 29; Staff Br. at 10).

{¶ 88} Consistent with R.C. 4906.10(A)(5), the Board finds that the CHP facility, subject to the conditions set forth in this Opinion, Order, and Certificate, will comply with R.C. Chapters 3704, 3734, and 6111 and all rules and standards adopted under those chapters

and, following consultation with the ODOT Office of Aviation, under R.C. 4561.32 (Staff Ex. A at 25-29; OSU Ex. A at 7-11, Ex. 1 at 48-83, 86-87).

6. PUBLIC INTEREST, CONVENIENCE, AND NECESSITY

{¶ 89} Pursuant to R.C. 4906.10(A)(6), the Board must determine that the facility will serve the public interest, convenience, and necessity.

{¶ 90} Ohio State asserts that the proposed CHP facility will provide significant benefits to the local economy and citizens, in the form of payroll and employment during construction and operation. Ohio State also notes that the CHP facility will affect local commercial and industrial activities via direct and indirect purchases and labor related to construction, operation, and maintenance activities. Further, Ohio State contends that the CHP facility is expected to significantly reduce the University's levelized cost of energy, which will assist in keeping the cost of obtaining an education affordable. (OSU Ex. A at Ex. 1 at 42-43; OSU Ex. D at 7-8; OSU Br. at 22-23.)

{¶ 91} Addressing public safety, Staff states that the proposed CHP facility would be designed in accordance with applicable safety regulations, including Occupational Safety and Health Administration and National Fire Protection Association requirements, as well as industry standards, and that facility personnel would be trained to operate the equipment in a safe and reliable manner. Staff adds that Ohio State has a number of emergency plans and will develop an emergency response program in coordination with local fire, medical, and emergency responders to supplement its existing on-site capabilities. Staff also notes that a complete fire protection and detection system would be provided for the CHP facility. (Staff Ex. A at 30; Staff Br. at 12.)

{¶ 92} With respect to public interaction and participation, Staff states that, on September 26, 2019, Ohio State held a public informational meeting that afforded attendees the opportunity to view project maps, speak with University representatives, and provide feedback. Staff further states that, in addition to maintaining a website about the proposed

CHP facility, Ohio State provided copies of its application to the Franklin County Board of Commissioners, Franklin County Economic Development and Planning Commission, Franklin County Soil and Water Conservation District, Franklin County Engineer, city of Columbus, Clinton Township Board of Trustees, and Columbus Metropolitan Library. Noting that Ohio State intends to notify affected property owners and tenants at least seven days prior to the start of construction, Staff recommends that the University provide similar notice at least seven days prior to the commencement of operation. Staff further recommends that the Board find that the proposed CHP facility would serve the public interest, convenience, and necessity, provided that any certificate issued by the Board for the facility includes the conditions specified in the Staff Report. (Staff Ex. A at 30-31; Staff Br. at 12.)

{¶ 93} As recommended by Staff, the Board finds that the CHP facility will serve the public interest, convenience, and necessity, as required under R.C. 4906.10(A)(6) (Staff Ex. A at 30-31; OSU Ex. A at Ex. 1 at 44-45, 84-86; OSU Ex. D at 12-13).

7. AGRICULTURAL DISTRICTS

{¶ 94} 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 established under R.C. Chapter 929 that is located within the project area of the proposed major utility facility.

{¶ 95} Ohio State notes that this statutory criterion is not applicable, as there is no agricultural land within the project site (OSU Ex. A at Ex. 1 at 126; OSU Br. at 23).

{¶ 96} Noting that the area surrounding the location of the proposed CHP facility is highly developed, Staff reports that no agricultural district land was identified within the vicinity, including the laydown area. Staff adds that no agricultural district land would be disturbed in association with the construction of the proposed CHP facility and that no impacts to field operations, irrigation, or field drainage systems associated with agricultural

district land would occur as a result of the construction, operation, or maintenance of the proposed facility. Accordingly, Staff recommends that, because the proposed CHP facility would not impact the viability of agricultural district land, the Board find that the application complies with R.C. 4906.10(A)(7). (Staff Ex. A at 32; Staff Br. at 13.)

{¶ 97} Because there is no agricultural district land within the area of the CHP facility, the Board finds that no agricultural district land would be impacted by the facility. The Board further finds that the requirements of R.C. 4906.10(A)(7) have been met. (Staff Ex. A at 32; OSU Ex. A at 14, Ex. 1 at 126.)

8. WATER CONSERVATION PRACTICE

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

{¶ 99} Ohio State contends that the proposed CHP facility will, by design, incorporate significant water conservation measures, will be included as a component of the University's water conservation goal, and will utilize reclaimed waste streams to the cooling towers to minimize makeup of domestic water from the city of Columbus (OSU Ex. A at Ex. 1 at 76-77, 79, Ex. L; OSU Br. at 23-24).

{¶ 100} Staff reports that, while construction of the proposed CHP facility would not require much water, its operation would require the use of a significant amount of water, approximately 550 gallons per minute on average. According to Staff, the water would be used for process water, fire protection, and sanitary uses and would be obtained through the University's existing domestic water distribution system, which is ultimately supplied from the city of Columbus. Staff reviewed Ohio State's proposed water balance and water consumption analysis for the CHP facility's operation. Staff finds that the proposed CHP facility design incorporates significant water conservation measures, which include maximizing the cycles of concentration to reduce water intake requirements, a cooling tower

drift elimination system, and reclamation of the wastewater streams. Staff notes that the proposed CHP facility would also be incorporated into Ohio State's resource stewardship water conservation goals, which include reducing potable water consumption by five percent per capita every five years and resetting its baseline every five years. As a result of its review, Staff recommends that the Board find that the proposed CHP facility would incorporate maximum feasible water conservation practices and that it, therefore, complies with R.C. 4906.10(A)(8), provided that any certificate issued by the Board for the facility includes the conditions specified in the Staff Report. (Staff Ex. A at 33; Staff Br. at 13.)

{¶ 101} Consistent with Staff's recommendation, the Board finds that the CHP facility incorporates maximum feasible water conservation practices, considering the available technology and the nature and economics of the various alternatives, as required under R.C. 4906.10(A)(8) (Staff Ex. A at 33; OSU Ex. A at Ex. 1 at 78-79).

VI. CONDITIONS

{¶ 102} The Ohio Supreme Court has recognized that the Board is vested with the authority to issue certificates upon such conditions as the Board considers appropriate. As acknowledged by the Court, the construction of power siting projects subject to the Board's authority necessitates a dynamic process that does not end with the issuance of a certificate. The Court concluded that the Board has the authority to allow Staff to monitor compliance with the conditions that the Board has set. *In re Buckeye Wind, LLC*, 131 Ohio St.3d 449, 2012-Ohio-878, 966 N.E.2d 869. Such monitoring includes the convening of preconstruction conferences and the submission of final construction plans by an applicant. Additionally, as with all certificates, the Board emphasizes that, if Staff should discover, through its continued monitoring and review of the progress of the CHP facility, that Ohio State is not complying with any of the conditions adopted below, Staff should bring such concern to the attention of the Board. If Ohio State fails to comply with any of the established conditions, the Board may take appropriate action to ensure compliance, in accordance with R.C. Chapter 4906.

{¶ 103} In the Staff Report, Staff recommended that ten general, ecological, and public service conditions be made part of any certificate issued by the Board for the CHP facility (Staff Ex. A at 35-36). Staff reiterates in its initial and reply briefs that any certificate issued by the Board for the CHP facility should incorporate and require compliance with these conditions. Staff notes that Ohio State objects to one of the proposed conditions, Condition 7, which would require the University to submit to Staff a quarterly complaint summary report during each year of the construction and operation of the facility. Although Ohio State seeks to modify Condition 7, Staff believes that the condition, which has been recommended by Staff in recent electric generation cases, is reasonable, as it ensures that any concerns of those who may be affected by the operation of the facility are appropriately and adequately addressed. (Staff Ex. G at 2; Staff Br. at 13-15; Staff Reply Br. at 6.)

{¶ 104} Ohio State notes that it has no objection to reporting complaints from neighboring property owners or residents during the construction process and in the quarter immediately following the completion of the construction process. With respect to the portion of Condition 7 that would require complaint reporting indefinitely, Ohio State asserts that it is not aware of any rule that requires Ohio generation facilities to report every complaint that they receive to the Board. Ohio State also claims that it is unaware of any precedent supporting this requirement for new generation facilities, as Staff contends. Ohio State adds that there is no factual basis for the requirement, as there are no neighboring property owners that would be impacted by the CHP facility. Finally, proposing specific language for a revised condition, Ohio State requests that its reporting obligation extend only to neighboring property owners or residents and not to any complainant such as Sierra Club. (OSU Ex. D at 14-15; OSU Br. at 24-25.)

{¶ 105} Upon review of the testimony and briefs, the Board finds that Condition 7 should be adopted, with modifications. As Staff witness Butler testified, the complaint reports required by this condition provide useful information that enables Staff to monitor the responsiveness and effectiveness of an applicant's complaint resolution process. With respect to the CHP facility, Mr. Butler explained that the condition is intended to ensure that

Staff has access to complaints from members of the University community and their campus neighbors, which Staff believes is particularly important in light of the concerns that have been expressed by students and others impacted by the project. (Staff Ex. G at 2.) Further, Mr. Butler noted that this condition has become standard in recent cases involving proposed electric generation facilities. *In re Hardin Solar Energy LLC*, Case No. 17-773-EL-BGN, Opinion, Order, and Certificate (Feb. 15, 2018) at ¶ 69; *In re Vinton Solar Energy LLC*, Case No. 17-774-EL-BGN, Opinion, Order, and Certificate (Sept. 20, 2018) at ¶ 91; *In re Hillcrest Solar I, LLC*, Case No. 17-1152-EL-BGN, Opinion, Order, and Certificate (Feb. 15, 2018) at ¶ 67; *In re Harrison Power, LLC*, Case No. 17-1189-EL-BGN, Opinion, Order, and Certificate (June 21, 2018) at ¶ 112; *In re Paulding Wind Farm IV LLC*, Case No. 18-91-EL-BGN, Opinion, Order, and Certificate (Feb. 21, 2019) at ¶ 146; *In re Willowbrook Solar I, LLC*, Case No. 18-1024-EL-BGN, Opinion, Order, and Certificate (Apr. 4, 2019) at ¶ 61; *In re Hecate Energy Highland LLC*, Case No. 18-1334-EL-BGN, Opinion, Order, and Certificate (May 16, 2019) at ¶ 59; *In re Hardin Solar Energy II, LLC*, Case No. 18-1360-EL-BGN, Opinion, Order, and Certificate (May 16, 2019) at ¶ 61; *In re Nestlewood Solar I LLC*, Case No. 18-1546-EL-BGN, Opinion, Order, and Certificate (Apr. 16, 2020) at ¶ 72.

{¶ 106} We agree with Staff's position that a similar condition should be imposed here. In the recent cases cited by Staff, the applicants agreed, pursuant to stipulations with Staff, to provide complaint summary reports over various periods of time past the completion of construction (first year of operation, first five years of operation, or indefinitely). In this case, the Board finds that Ohio State's quarterly reporting obligation under Condition 7 should be in effect during construction and for the first five years of the CHP facility's operation, as reflected in the modified condition below. We find that, for this type of generating facility, five years is a reasonable duration that will enable Staff to ensure that Ohio State has implemented a responsive and effective complaint resolution process. The Board declines to narrow the scope of Ohio State's reporting obligation to complaints received from neighboring property owners. We find that Ohio State's proposed limitation would unnecessarily restrict Staff's ability to monitor the University's complaint resolution

process and could be construed to preclude all complaints, given that the University controls all of the land and structures surrounding the CHP facility.

{¶ 107} Consistent with the above findings, the Board finds that Ohio State's certificate for the construction, operation, and maintenance of the CHP facility shall be subject to the following ten conditions. As Ohio State satisfies the conditions specified below, the University shall timely file, in this proceeding, documentation sufficient to demonstrate such compliance.

- (1) Ohio State shall comply with the applicable requirements established by Ohio Adm.Code Chapter 4906-1, et seq., and shall install the facility, utilize equipment and construction practices, and implement 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 (Staff Ex. A at 35).
- (2) Ohio State shall docket a detailed construction project schedule within seven days of the date of journalization of the certificate (Staff Ex. A at 35).
- (3) The certificate authority provided in this case shall not exempt the facility from any other applicable and lawful local, state, or federal rules or regulations nor be used to affect the exercise of discretion of any other local, state, or federal permitting or licensing authority with regard to areas subject to their supervision or control (Staff Ex. A at 35).
- (4) Prior to the commencement of construction activities in areas that require permits or authorizations by federal or state laws and regulations, Ohio State shall obtain and comply with such permits or authorizations. Ohio State shall provide copies of permits and authorizations, including all supporting documentation, to Staff within

seven days of issuance or receipt by the University. Ohio State shall provide a schedule of construction activities and acquisition of corresponding permits for each activity at the preconstruction conference. (Staff Ex. A at 35.)

- (5) Ohio State shall coordinate with local building code enforcement officials with regard to the construction of any new structures, or modification of any existing structures, not directly related to the operation of the generation facility (Staff Ex. A at 35).
- (6) At least 30 days prior to the preconstruction conference, Ohio State shall submit to Staff, for review and acceptance, one set of detailed engineering drawings of the final project design and mapping in the form of PDF, which the University shall also file on the docket of this case, and geographically referenced data (such as shapefiles or KMZ files) based on final engineering drawings to confirm that the final design is in conformance with the certificate. Mapping shall include the limits of disturbance, permanent and temporary infrastructure locations, and areas of vegetation removal and vegetative restoration, as applicable, and specifically denote any adjustments made from the siting detailed in the application. All final geotechnical study results shall be included in this submission. (Staff Ex. A at 35-36.)
- (7) During the construction and first five years of operation of the facility, Ohio State shall submit to Staff a complaint summary report by the fifteenth day of April, July, October, and January of each year. The report should include a list of all complaints received through Ohio State's complaint resolution program, a description of the actions taken toward a resolution of each complaint, and a status update if the complaint has yet to be resolved. (Staff Ex. A at 36; Staff Ex. G at 2.)

- (8) Ohio State shall adhere to seasonal cutting dates of October 1 through March 31 for removal of any trees greater than or equal to three inches in diameter, unless coordination efforts with the Ohio Department of Natural Resources and the U.S. Fish and Wildlife Service allow a different course of action (Staff Ex. A at 36).
- (9) Ohio State shall submit to Staff the final traffic plan that provides details of coordination with the pertinent government authorities, prior to the preconstruction conference, for Staff's review and confirmation that it complies with the requirements of the certificate. Ohio State shall also file a copy of the final traffic plan on the docket of this case. (Staff Ex. A at 36.)
- (10) Ohio State shall not have a physical or electrical interconnection with the Transmission System pursuant to the PJM Open Access Transmission Tariff (OATT) Part IV or OATT Part VI (Staff Ex. A at 36).

VII. CONCLUSION

{¶ 108} Based on the record in this proceeding, the Board concludes that all of the elements established in accordance with R.C. Chapter 4906 are satisfied for the construction, operation, and maintenance of the CHP facility, as described in Ohio State's application, as amended and supplemented, subject to the conditions set forth in this Opinion, Order, and Certificate. Accordingly, based upon all of the above, the Board hereby issues a certificate to Ohio State in accordance with R.C. Chapter 4906.

VIII. FINDINGS OF FACT AND CONCLUSIONS OF LAW

{¶ 109} Ohio State is a person under R.C. 4906.01(A).

{¶ 110} The proposed CHP facility is a major utility facility as that term is defined in R.C. 4906.01(B).

{¶ 111} On September 4, 2019, Ohio State filed its confirmation of notification to property owners and affected tenants of the date of a public informational meeting regarding the CHP facility.

{¶ 112} On September 11, 2019, Ohio State filed a preapplication notification letter informing the Board of the public informational meeting for its proposed CHP facility.

{¶ 113} On September 20, 2019, Ohio State filed proof of its publication of the notice regarding the public informational meeting in accordance with Ohio Adm.Code 4906-3-03.

{¶ 114} Ohio State held the public informational meeting regarding the CHP facility on September 26, 2019.

{¶ 115} On November 6, 2019, Ohio State filed its application for a certificate of environmental compatibility and public need to construct the CHP facility.

{¶ 116} On November 27, 2019, Ohio State supplemented its application for a certificate of environmental compatibility and public need.

{¶ 117} By letter dated January 6, 2020, the Board notified Ohio State that its application had been found to be sufficiently complete pursuant to Ohio Adm.Code Chapter 4906-1, et seq.

{¶ 118} On January 23, 2020, Ohio State filed correspondence indicating that it had submitted the application fee to the Board pursuant to Ohio Adm.Code 4906-3-07(A). On that same date, Ohio State filed its proof of compliance with the requirements for service of its accepted and complete application, consistent with Ohio Adm.Code 4906-3-07(A).

{¶ 119} On January 29, 2020, the ALJ issued an Entry establishing the effective date of the application as January 29, 2020, and adopting a procedural schedule for this case, including dates for a local public hearing and adjudicatory hearing.

{¶ 120} On February 18, 2020, Ohio State filed proof of service of notice regarding the date, time, and location of the public hearing and adjudicatory hearing, including notice to affected property owners and elected officials.

{¶ 121} By Entry dated March 12, 2020, the procedural schedule was suspended, in light of the guidance issued by the Executive Order and the Department of Health. Ohio State filed proof of publication of notice of the suspension on March 25, 2020.

{¶ 122} A prehearing conference occurred by telephone on May 12, 2020.

{¶ 123} By Entry dated May 22, 2020, the procedural schedule was reinstated, including dates for public and adjudicatory hearings. In the Entry, Ohio State was also directed to issue public notice of the hearings.

{¶ 124} On June 8, 2020, Ohio State filed proof of service of notice regarding the date, time, and location of the public hearing and adjudicatory hearing, including notice to affected property owners and elected officials.

{¶ 125} The Staff Report of Investigation was filed on June 15, 2020.

{¶ 126} By Entry dated June 23, 2020, Sierra Club was granted intervention in this case.

{¶ 127} A second prehearing conference and technology test session were held through Webex on June 26, 2020.

{¶ 128} A public hearing was held through Webex on June 30, 2020.

{¶ 129} Ohio State filed its direct testimony on July 6, 2020. Staff and intervenor testimony was filed on July 9, 2020.

{¶ 130} The adjudicatory hearing commenced on July 14, 2020, and concluded on July 15, 2020, through Webex.

{¶ 131} A second public hearing was held through Webex on August 4, 2020.

{¶ 132} Initial and reply briefs were filed by Ohio State, Staff, and Sierra Club on August 7, 2020, and August 19, 2020, respectively.

{¶ 133} Adequate data on the proposed CHP facility has been provided to make the applicable determinations required by R.C. 4906.10(A). The record evidence in this matter provides sufficient factual data to enable the Board to make an informed decision.

{¶ 134} The record establishes that the CHP facility is not an electric transmission line or gas pipeline and that R.C. 4906.10(A)(1) is, therefore, inapplicable.

{¶ 135} The record establishes the nature of the probable environmental impact from construction, operation, and maintenance of the CHP facility, consistent with R.C. 4906.10(A)(2).

{¶ 136} The record establishes that the CHP facility, subject to the conditions set forth in this Opinion, Order, and Certificate, represents the minimum adverse environmental impact, considering the available technology and nature and economics of the various alternatives, and other pertinent considerations, consistent with R.C. 4906.10(A)(3).

{¶ 137} The record establishes that the CHP facility complies with R.C. 4906.10(A)(4), to the extent that it applies to the project.

{¶ 138} Consistent with R.C. 4906.10(A)(5), the record establishes that the CHP facility, subject to the conditions set forth in this Opinion, Order, and Certificate, will comply with R.C. Chapters 3704, 3734, and 6111 and all rules and standards thereunder and, following consultation with the ODOT Office of Aviation, under R.C. 4561.32.

{¶ 139} The record establishes that the CHP facility, subject to the conditions set forth in this Opinion, Order, and Certificate, will serve the public interest, convenience, and necessity, consistent with R.C. 4906.10(A)(6).

{¶ 140} The record establishes that the CHP facility will not be located on or near any agricultural land or agricultural district parcels and the Board has, therefore, determined the facility's impact on the agricultural viability of any land in an existing agricultural district, in accordance with R.C. 4906.10(A)(7).

{¶ 141} The record establishes that the CHP facility incorporates maximum feasible water conservation practices, considering the available technology and the nature and economics of the various alternatives, in accordance with R.C. 4906.10(A)(8).

{¶ 142} The evidence supports a finding that all of the criteria in R.C. 4906.10(A) are satisfied for the construction, operation, and maintenance of the CHP facility as proposed by Ohio State, subject to the conditions set forth in this Opinion, Order, and Certificate.

{¶ 143} Based on the record, the Board should issue a certificate of environmental compatibility and public need, pursuant to R.C. Chapter 4906, for the construction, operation, and maintenance of the CHP facility, subject to the conditions set forth in this Opinion, Order, and Certificate.

IX. ORDER

{¶ 144} It is, therefore,

{¶ 145} ORDERED, That a certificate be issued to Ohio State for the construction, operation, and maintenance of the CHP facility, subject to the conditions set forth in this Opinion, Order, and Certificate. It is, further,

{¶ 146} ORDERED, That Sierra Club's motion to strike be denied and that its motion for leave to file a surreply be granted, in part, and denied, in part. It is, further,

{¶ 147} ORDERED, That a copy of this Opinion, Order, and Certificate be served upon all parties and interested persons of record

SJP/

SEPTEMBER 17 AGENDA - DRAFT - 9/8/2020 4:09 PM
THE OHIO POWER SITING BOARD

**IN THE MATTER OF THE APPLICATION OF
THE OHIO STATE UNIVERSITY FOR A
CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED TO
CONSTRUCT A COMBINED HEAT AND
POWER FACILITY IN FRANKLIN COUNTY,
OHIO.**

CASE NO. 19-1641-EL-BGN

CONCURRING OPINION OF CHAIRMAN SAM RANDAZZO

Entered in the Journal on September 17, 2020

I write separately to commend The Ohio State University (OSU) for advancing the project certificated in the foregoing order.

In these times, almost any proceeding involving a proposed generation facility using natural gas to produce electricity and other forms of energy is likely to inspire passionate opposition even if, as is the case here, the proposal will allow for credible and significant emissions reductions and put waste heat (a renewable resource in Ohio) to useful work.

But passionately held views of one or more opponents of a project do not necessarily mean that the positions held by the developer are not reasonable, are without merit or incapable of being sustained by the Board. And, as importantly, passionately advanced opposition does not license the use of our evidentiary proceedings to fish for things that might appear to make the passion logical, rational or, when accompanied by credible evidence, compelling.

OSU plans to invest substantial dollars to construct and operate a combined heat and power (CHP) facility to meet a significant portion of the main campus's thermal and electricity needs. As a matter of law, the CHP facility falls within Ohio's definition of an Advanced Energy Resource¹ and, accordingly, the CHP project is an Advanced Energy Project.² The CHP facility will be behind OSU's purchased electricity meter, will (as already

¹ R.C. 4928.01(A)(34).

² R.C. 4928.01(A)(25).

stated) put waste heat to work, produce electricity, produce steam and hot water to meet the needs of various campus buildings and position OSU to reduce the use of and potentially retire a portion or all of OSU's existing natural gas fired boilers.

The passionately advanced views of the opponents of the proposed CHP facility clash with Ohio's placement of behind the meter or distributed CHP facilities with waste heat recovery systems on Ohio's preferred resources eligibility list.³ Yet, the opponents here made repeated efforts to demean CHP technology, would have the Board overlook the potential efficiency gains and emissions reductions and diminish the quantity and quality of the evaluation homework that was completed by OSU prior to bringing this proposal to the Board for certification.

I commend OSU for sticking with its CHP proposal and bringing it to the Board for the Board's consideration. In today's environment, lesser institutions might have been bullied off course by the passionate advocacy from stakeholders attached unyieldingly to their beliefs.

This CHP project is good for OSU, it is good for the environment and the issuance of a certificate to construct and operate the proposed facility is the right thing to do based on the law as applied to the facts in this case.

THE OHIO POWER SITING BOARD

/s/Sam Randazzo

By: Sam Randazzo
Chairman

³ See R.C. 4928.02(K) and R.C. 4928.01(A)(37)(a)(xi).

SEPTEMBER 17 AGENDA - DRAFT - 9/8/2020 3:50 PM
THE OHIO POWER SITING BOARD

**IN THE MATTER OF THE LETTER OF
NOTIFICATION APPLICATION FILED BY
AEP OHIO TRANSMISSION COMPANY,
INC. FOR THE CULBERTSON 138 KV
TRANSMISSION LINE EXTENSION
PROJECT.**

CASE NO. 20-909-EL-BLN

ENTRY

Entered in the Journal on September 17, 2020

I. SUMMARY

{¶ 1} The Ohio Power Siting Board dismisses this matter at the request of the applicant, AEP Ohio Transmission Company, Inc.

II. DISCUSSION

{¶ 2} AEP Ohio Transmission Company, Inc. (AEP Transco or Company) is a person as defined in R.C. 4906.01.

{¶ 3} R.C. 4906.04 provides that no person shall construct a major utility facility in the state without obtaining a certificate for the facility from the Ohio Power Siting Board (Board).

{¶ 4} R.C. 4906.03(F) instructs the Board to adopt rules that provide for an accelerated review and automatic certification of an electric transmission line and associated facilities under certain circumstances. In accordance with R.C. 4906.03(F), the Board has adopted Ohio Adm.Code Chapter 4906-6 addressing accelerated and expedited accelerated certificate applications.

{¶ 5} Ohio Adm.Code 4906-6-02 identifies the types of accelerated applications as either letter of notification or construction notice applications. Accelerated applications are subject to a 90-day automatic approval process.

{¶ 6} On April 29, 2020, AEP Transco filed a letter of notification application seeking accelerated Board approval to construct the Culbertson 138 kilovolt (kV) transmission line extension (Project) in Washington Township, Muskingum County, Ohio. The Project consists of constructing a new 0.5 mile double-circuit extension between the Company's existing Ohio Central-Philo 138 kV #1 circuit and the Culbertson Station in order to serve a customer's new facility and operations in the area.

{¶ 7} By Entry issued March 17, 2020, in response to the governor's March 9, 2020 Executive Order 2020-01D declaring a state of emergency in Ohio to protect the well-being of Ohioans from the dangerous effects of COVID-19, the administrative law judge (ALJ), among other things, tolled the automatic approval of accelerated cases subject to Board jurisdiction.

{¶ 8} The tolling order was terminated effective June 1, 2020, by ALJ Entry issued May 20, 2020. As a result, the 90-day automatic approval of accelerated cases recommenced on June 1, 2020, making this matter subject to automatic approval on August 30, 2020.

{¶ 9} By letter docketed on August 24, 2020, AEP Transco sought permission to withdraw this matter at this time. In support, AEP Transco submits that, following discussions with Staff, the Company has agreed to withdraw its application, without prejudice, to update the filing with additional information. The Company will re-file the application for the Project in a separate docket.

{¶ 10} The Board finds that AEP Transco's request to withdraw the letter of notification application filed in Case No. 20-909-EL-BLN should be granted and this case should be dismissed and closed of record.

III. ORDER

{¶ 11} It is, therefore,

{¶ 12} ORDERED, That Case No. 20-909-EL-BLN be dismissed and closed of record.

It is, further,

{¶ 13} ORDERED, That a copy of this Entry be served upon AEP Transmission Company, Inc. and all interested persons of record.

BOARD MEMBERS:

Approving:

JRJ/hac