

In the Matter of the Application of Icebreaker )  
Windpower Inc., for a Certificate to Construct a ) Case No: 16-1871-EL-BGN  
Wind-Powered Electric Generation Facility in )  
Cuyahoga County, Ohio. )

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## I. INTRODUCTION

The proceedings in this matter were conducted by the Ohio Power Siting Board (“Board”) in accordance with the provisions in Ohio Revised Code (“R.C.”) Chapter 4906 and Division 4906 of the Ohio Administrative Code (“O.A.C.”).

On February 1, 2017, as supplemented on March 13, July 20, July 24, and August 18, 2017, March 22, 2018, and May 14, 2019, Icebreaker Windpower Inc. (“Applicant”) filed an application with the Board for a certificate of public convenience and necessity (“Application”) to construct the proposed 6-turbine, demonstration wind-powered electric generation facility off the shore of Lake Erie in Cuyahoga County, Ohio (the “Icebreaker Project”).

On September 4, 2018, Icebreaker, the Business Network for Offshore Wind, Inc. (“Business Network”), the Sierra Club, the Indiana/Kentucky/Ohio Regional Council of Carpenters (“Carpenters’ Council”), and the Ohio Environmental Council (“OEC”) filed a Joint Stipulation and Recommendation (“9/4 Stipulation”). The evidentiary hearing in this matter commenced on September 24, 2018. Following seven days of hearing, the Administrative Law Judge (“ALJ”) set the briefing schedule. Several extensions of the briefing schedule were granted and the parties continued their discussions regarding a possible revised stipulation in this matter.

On May 15, 2019, Icebreaker, the Board’s Staff (“Staff”), Business Network, the Sierra Club, the Carpenters’ Council, and OEC (jointly referred to herein as “Stipulating Parties”) filed a Revised Joint Stipulation and Recommendation that supersedes and replaces the 9/4 Stipulation (“Revised Stipulation”). The hearing was reconvened on August 20, 2019, and the hearing was “limited to the fifth amendment to the application [filed May 14, 2019],<sup>1</sup> modifications made between the [9/4 Stipulation] and the [Revised] Stipulation, as well as any new, relevant information that developed since the proceeding adjourned on October 2, 2018....”<sup>2</sup> At the conclusion of the half-day hearing, as reinstated on September 12, 2019, the ALJ determined that the briefs and reply briefs would be due by October 11, 2019, and November 15, 2019, respectively.<sup>3</sup> At this time, the Applicant submits its reply brief addressing items set forth in the

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<sup>1</sup> App. Ex. 57.

<sup>2</sup> *In re Application Icebreaker Windpower, Inc.*, Case No. 16-1871-EL-BGN, Entry (June 17, 2019).

<sup>3</sup> Tr. VIII at 1809; *In re Application Icebreaker Windpower, Inc.*, Case No. 16-1871-EL-BGN, Entry (Sept. 12, 2019).

brief filed by the Bratenahl residents (“Residents”).<sup>4</sup> The Residents are the only party that did not sign the Revised Stipulation.

The offshore location of this small, demonstration wind-powered electric generation facility proposed by the Applicant in this proceeding poses some unique questions that are thoroughly addressed and resolved through the comprehensive Revised Stipulation and the record in this case.

When the General Assembly created the Board almost 50 years ago, it charged the Board with finding the appropriate balance between the growth and advancement in energy development, and the preservation and protection of ecological and sociological interests. To assist the Board with its determinations in this regard, the General Assembly created a set of eight criteria to measure the impact from a proposed energy facility. Those criteria are found in R.C. Sections 4906.10 (A)(1) through (8).

There is no dispute in this proceeding that two of the eight criteria set forth in R.C. Section 4906.10(A) are not applicable to the offshore Icebreaker Project [i.e., (A)(1) the basis of need for this facility;<sup>5</sup> and (A)(7) the impact of the facility on agricultural land<sup>6</sup>]. Further, a review of the Residents’ brief reflects that there is no dispute that the Revised Stipulation and the record in this case satisfy three of the eight criteria set forth in R.C. Section 4906.10(A) [i.e., (A)(4) the facility is consistent with regional plans for expansion of the electric power grid; (A)(5) the facility complies with the air and water pollution control, withdrawal of waters of the state, solid and hazardous wastes, and air navigation requirements; and (A)(8) the facility incorporates the maximum feasible water conservation practices]. Thus, the Residents are only disputing that the Revised Stipulation and the record in this case do not satisfy three of the eight criteria in R.C. Section 4906.10(A) [i.e., (A)(2) the determination of the probable environmental impact of the facility; (A)(3) whether the facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of various alternatives; and, allegedly, (A)(6) whether the facility will serve the public interest, convenience, and

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<sup>4</sup> W. Susan Dempsey and Robert M. Maloney.

<sup>5</sup> This provision only applies to electric transmission line and gas pipeline facilities.

<sup>6</sup> The Icebreaker Project is located offshore; not on agricultural land.

necessity<sup>7</sup>]. It should also be noted that the only disputed issue with regard to R.C. Sections 4906.10(A)(2) and (3) pertains to the impact to birds and bats. It is undisputed in the Residents' brief and on the record that R.C. Sections 4906.10(A)(2) and (3) are satisfied with regard to all other environmental issues, including other wildlife, aquatic resources, and fisheries.

However, with respect to R.C. Sections 4906.10(A)(2) and (3) and the probable impact on birds and bats - as well as the multitude of safeguards established to ensure minimal adverse environmental impact on birds and bats - the Residents continue to ignore the breadth and depth of the thousands of pages of record evidence, including studies and plans, that support the Board's adoption of the Revised Stipulation. Rather, the Residents depend on unsubstantiated or irrelevant statements by their witnesses and misleading summaries of the witnesses of the Stipulating Parties to promote their position. The Residents go to great length in their brief to disparage the expertise of the Staff and, specifically, the Ohio Department of Natural Resources ("ODNR") and the agencies' efforts to review, investigate, and provide a well-justified and reasonable resolution of the case to the Board for consideration. The Residents then proceed to debase the Board's authority to enforce the conditions of the Revised Stipulation under R.C. Sections 4906.97 and 4906.99. As set forth in the Revised Stipulation and supported by precedent, the Staff, which includes ODNR's staff and its in-house and third-party experts,<sup>8</sup> is tasked with closely monitoring and tracking the Applicant's compliance with all certificate conditions as set forth through the Revised Stipulation, and committed to in the Application and record in this case. The Revised Stipulation provides that the Staff will document its findings regarding certificate compliance through written correspondence in the public record.

Contrary to the Residents' unfounded assertions, the record contains an extensive amount of documentation, studies, and plans that support a determination by the Board that this small

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<sup>7</sup> The Applicant notes that, while the Residents frame this objection as one pertaining to R.C. Section 4906.10(A)(6), it is clear on its face what the argument is really about the need for the facility as it relates to the need for additional baseload generation, a hypothetical large-scale offshore wind project, and the agreement of Cleveland Public Power ("CPP") to purchase power from the Applicant. As shown herein, those arguments are properly before the Board. The first argument falls under R.C. Section 4906.10(A)(1) and is only applicable in cases before the Board involving an electric transmission line or gas pipeline facility; but this case involves a generation facility. The other arguments regarding the fictional large-scale project and the purchase power agreement ("PPA") with CPP are not relevant for this case and the PPA issue is not within the Board's jurisdiction.

<sup>8</sup> Under R.C. Section 4906.02(D), the assistance of the ODNR staff may be called upon for the purpose of making studies, investigating applications, and preparing reports required under R.C. Chapter 4906. This section also provides that the Board may contract for third-party services.

demonstration project complies with R.C. Sections 4906.10(A)(2) and (3). Specifically, the “nature of the probable impact” of the facility and the fact that “the facility represents the minimum adverse environmental impact, *considering the state of available technology and the nature and economics of the various alternatives, and other pertinent factors*” (emphasis added), with regard to the impact to birds and bats and the mitigation responsibilities, is supported by substantial documentation throughout the record, including, but not limited to, the following documents:

1. Revised Stipulation.<sup>9</sup>
2. 2016 Icebreaker Wind: Summary of Risks to Birds and Bats (“2016 Risk Assessment”).<sup>10</sup>
3. March 20, 2018 Risk Assessment Summary (“2018 Risk Summary”).<sup>11</sup>
4. January 2017 NEXRAD Analysis (“NEXRAD Analysis”).<sup>12</sup>
5. Avian and Bat Memorandum of Understanding (“Avian and Bat MOU”).<sup>13</sup>
6. Avian and Bat Monitoring Plan.<sup>14</sup>
7. Aerial Waterfowl and Waterbird Study Plan.<sup>15</sup>
8. Aerial Waterfowl and Waterbird Survey Report (“Aerial Waterfowl Report”).<sup>16</sup>
9. 2017 Bird and Bat Monitoring Annual Report dated February 22, 2018 (“2017 Annual Report”).<sup>17</sup>
10. Final Bat Activity Monitoring Report dated February 15, 2018 (“Bat Acoustic Survey”).<sup>18</sup>

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<sup>9</sup> Jt. Ex. 2, Revised Stipulation.

<sup>10</sup> App. Ex. 1, Ex. J, 2016 Risk Assessment and NEXRAD Analysis.

<sup>11</sup> App. Ex. 6, Att. 2, 2018 Risk Summary.

<sup>12</sup> App. Ex. 1, Att. J, 2016 Risk Assessment and NEXRAD Analysis.

<sup>13</sup> App. Ex. 38, Avian and Bat MOU.

<sup>14</sup> App. Ex. 3, Avian and Bat MOU Ex. A, Avian and Bat Monitoring Plan.

<sup>15</sup> App. Ex. 5, Aerial Waterfowl and Waterbird Study Plan.

<sup>16</sup> App. Ex. 6, Att. 4, App. B, Aerial Waterfowl Report.

<sup>17</sup> App. Ex. 6, Att. 4, 2017 Annual Report.

<sup>18</sup> App. Ex. 6, Att. 4, App. A, Bat Acoustic Survey.

11. Avian and Bat Impact Mitigation Plan Draft (“Avian and Bat IMP”) (formerly, the Draft Bird and Bat Conservation Strategy).<sup>19</sup>
12. Radar Monitoring Protocol Draft (“Radar Monitoring Protocol”).<sup>20</sup>
13. March 12, 2018 United States (“U.S.”) Fish and Wildlife Service (“USFWS”) Letter to ODNR on the Project (“2018 USFWS Letter”).<sup>21</sup>
14. Applicant Exhibits 1 through 15 and 57: the Application, supplements to the Application, and responses to Staff interrogatories.
15. Applicant Exhibits 25, 30 through 33, and 58 through 59: the Applicant’s witnesses’ testimony and supplemental testimony.
16. Staff Exhibits 14 and 15: the Staff’s supplemental witness testimony.

In support of their assertions that the Revised Stipulation does not satisfy the criteria in R.C. Sections 4906.10(A)(2) and (3), the Residents rely heavily on testimony from Dr. Jeff Gosse, which is essentially comprised of several broad sweeping statements with no reference to any supporting documentation. Further, the Residents grossly misconstrue the testimony of ODNR’s witness, Erin Hazelton, in an attempt to discredit the expertise of the Staff and the Board’s authority to enforce the conditions of the Revised Stipulation.

The Revised Stipulation and the record in this case provide the information necessary for the Board to determine the nature of the probable environmental impact in accordance with R.C. Section 4906.10(A)(2), and that the facility represents the minimum adverse environmental impact, considering the state of available technology and the nature of the economics of the various alternatives and other pertinent considerations under R.C. Section 4906.10(A)(3). With respect to the latter provision, it must be noted that the Residents seemingly discount the language in R.C. Section 4906.10(A)(3), which requires the Board to consider: the state of available technology; the nature of the economics of the various alternatives; and other pertinent considerations. The Revised Stipulation and the resulting conditions set forth therein, however, recognize the distinctiveness of the Icebreaker Project, including that it is a small, demonstration offshore

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<sup>19</sup> App. Ex. 31, Att. REG-2, Avian and Bat IMP draft. This document will be updated to comply with all requirements in the Revised Stipulation.

<sup>20</sup> App. Ex. 32, Att. TJM-2, Radar Monitoring Protocol draft. This document will be updated to comply with all requirements in the Revised Stipulation.

<sup>21</sup> App. Ex. 6, Att. 6, 2018 USFWS Letter.

project. Though not the first of its kind in the world, it is indeed the first of its kind in North America.

Moreover, the Residents purposefully misrepresent the record evidence and ignore the important conditions set forth in the Revised Stipulation that support the Board's determination that the facility presents the minimum adverse environmental impact, given the state of available technology. The bottom line is the Revised Stipulation includes numerous meaningful, important conditions, including that:

1. Before construction can commence, the Applicant must collect viable radar data for both bird and bat migratory seasons (April 1 to November 15).<sup>22</sup>
2. Before construction can commence, the Applicant must finalize all avian and bat monitoring plans, including the Avian and Bat IMP and the Collision Monitoring Plan.<sup>23</sup>
3. Before construction can commence, the collision monitoring technology must be tested and the results of the lab and field testing must be accepted.<sup>24</sup>
4. Prior to commencement of operation, the collision monitoring technology must be installed and fully functioning.<sup>25</sup>
5. Once operational, if it is determined the collision technology is not working as set forth in the Collision Monitoring Plan such that there is a defect preventing accurate detection of collisions, ODNR and Staff may require that turbines be feathered.<sup>26</sup>
6. Once operational, there is a catch-all provision that requires the Applicant to immediately report a significant mortality event<sup>27</sup> to ODNR. If there is a significant mortality event the Applicant is further required to modify operation activities that could adversely affect the identified animals to minimize risk.<sup>28</sup>

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<sup>22</sup> Jt. Ex. 2 at 7, Condition 21.

<sup>23</sup> *Id.* at 6, Condition 18.

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> App. Ex. 57.

<sup>27</sup> Jt. Ex. 2 at 9, Condition 23. A significant mortality event is defined in Condition 23 of the Revised Stipulation as 21 or more detected collisions at the facility within a 24-hour period based on a detection probability of 59% - with the number of detected collisions that trigger a significant mortality event being adjusted based on the demonstrated detection probability of the collision detection technology.

<sup>28</sup> Jt. Ex. 2 at 9, Condition 23; *See also* App. Ex. 31, Att. REG-2, Avian and Bat IMP.



With these provisions in the Revised Stipulation, along with the many commitments set forth in the Application and record in this case, there is no doubt that the Board has all the information necessary to determine that the appropriate safeguards are in place to support a determination of minimal adverse environmental impact under the statute and that all of the applicable criteria in R.C. Section 4906.10(A) have been satisfied.

## **II. ARGUMENT**

### **A. The Board has sufficient evidence to determine the nature of the probable environmental impact of the facility under R.C. Section 4906.10(A)(2).**

The record contains a significant amount of information and documentation that support a finding by the Board as to the nature of the probable environmental impact by the facility. As detailed in the Applicant's brief, this support covers all potential impacts of the Icebreaker Project, including socioeconomic, ecological, and public interest impacts.<sup>29</sup> The Residents do not contest that a review of the record and the Revised Stipulation reflects that the Board can determine the probable environmental impact of the facility on the overwhelming majority of potential impacts. However, the Residents continue to feign concern about the impact of this low risk small demonstration project on migrating birds and bats. As detailed in the Applicant's brief and shown herein, the Revised Stipulation, as supported by the record in this case, eliminates any doubt that the Board can determine the facility's overall probable environmental impact.

#### **1. The record provides sufficient information to determine the risk to birds and bats that migrate through the project area.**

Contrary to the assertions of the Residents, the record contains the data and information needed to determine the risk to birds and bats that migrate through the project area. It is important to note that the risks and impacts of a wind project to avian and bat species are determined by many sources of data. The data and information included in this Application and the record in this proceeding include, but are not limited to, the site specific waterfowl surveys reflected in the Aerial Waterfowl Report, the NEXRAD Analysis, and information about the actual impacts included in regional fatality studies.<sup>30</sup> The regional fatality studies support a determination that the Icebreaker Project is a low risk project.

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<sup>29</sup> App. Br. at 21-40.

<sup>30</sup> App. Exs. 30 and 31.

A large amount of data and information was available to assess risks to birds and bats, which information derives from existing fatality studies in the region, all of which provide accurate indications of expected impacts. Those 42 studies were on land, where the migration traffic rate was similar or higher than the proposed project site, including some sites that are close to the shore.<sup>31</sup> The Applicant does not dispute that millions of birds migrate over the Great Lakes, nor does it dispute that large concentrations of migrating birds exist along the Great Lakes. However, it should be noted that peer-reviewed studies completed by some of the nation's leading radar ornithologists conclude that fewer birds migrate over the Great Lakes relative to areas on land.<sup>32</sup>

The Residents contend, "...Icebreaker and its hired experts attempt to foist upon the Board the preposterous notion that most birds and bats migrate around Lake Erie."<sup>33</sup> (emphasis in original). To the contrary, the Applicant's witness Wally Erickson clarified, that "[i]t's actually...the Diehl study,<sup>34</sup> as well as our NEXRAD study suggested there's actually fewer songbirds migrating over that area, not that no songbirds are migrating."<sup>35</sup> The Applicant acknowledges that birds migrate over Lake Erie in great numbers, but the evidence presented demonstrates that they migrate over the project site in lower densities than on land and other portions of Lake Erie. "Many nocturnal birds will pass over the site, but we know, from NEXRAD analysis, it will be fewer than what passes through the average spot in the Great Lakes region."<sup>36</sup> Dr. Gordon further explained:

That means that the project area itself was a cold spot of nocturnal migration relative to the other comparison areas. Not that no migration activity occurred. Certainly it did. Again, this is a broad-front migration pattern. At some level, they are going everywhere. But in terms of relative comparisons, hot spots and cold spots, actually the project site area was—showed the least bird migration activity of any of our seven areas and that pattern was consistent across years and seasons.<sup>37</sup>

The determination that the project site is a relative cold spot is based on three years' of site-specific data from the spring and fall. The same findings are echoed in the 2003 Diehl Report, which

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<sup>31</sup> Tr. III at 507-508.

<sup>32</sup> App. Ex. 1, Ex. J, 2016 Risk Assessment; App. Ex. 30, Att. CEG-7; App. Ex. 32, Att. WPE-3, Radar Observations of Bird Migration Over the Great Lakes ("2003 Diehl Report").

<sup>33</sup> Res. Br. at 3.

<sup>34</sup> App. Ex. 37, Evaluation of Icebreaker Wind Project Vendor Proposals for Radar-Based Monitoring of Flying Animals, Dr. Robert H Diehl, December 2017 ("2017 Diehl Report").

<sup>35</sup> Tr. V at 1025-1026.

<sup>36</sup> Tr. III at 510.

<sup>37</sup> *Id.* at 514.

determined that for the Central Lake Erie basin and the Great Lakes region, migratory activity was consistently lower over water than on land.<sup>38</sup> In addition to Icebreaker's experts, Dr. Diehl, a neutral party and recognized radar expert, determined that more birds do migrate over land than water in the Great Lakes region.<sup>39</sup>

As set forth in the record and detailed in the Applicant's brief, the conclusion that this project is low risk is the result of numerous factors: site-specific waterfowl surveys; site-specific NEXRAD data; fatality data collected from operating wind farms in the region; lack of habitat for resident birds and raptors; the small number of turbines; and low waterfowl densities.<sup>40</sup> For example, this project is unique in that, unlike land-based projects, there is no habitat for birds that nest on the ground such as songbirds and there is no habitat for raptor nests; thus, this offshore project does not have those same risk factors that are in land-based projects.<sup>41</sup> In addition, the site-specific Bat Acoustic Survey includes the results of studies from buoys at the project site that reflect low levels of bat activity at the project site.<sup>42</sup>

The experts who testified on behalf of the Applicant have decades of experience with hundreds of wind projects, have designed and implemented numerous radar studies, and have completed countless risk assessments. In contrast to the vast experience of Dr. Gordon, Mr. Mabee, Mr. Good, and Mr. Erickson, the Residents' proffered expert, Dr. Henry Streby, possessed only a general understanding of how NEXRAD works and did not understand how MERLIN radar systems functioned.<sup>43</sup> Dr. Streby admitted that prior to his service as an expert in this proceeding, he was not qualified to implement a NEXRAD study.<sup>44</sup> Prior to his engagement in this proceeding, Dr. Streby had no experience with birds and their impacts with wind turbines other than reading literature.<sup>45</sup> Dr. Streby has not conducted a pre-construction monitoring program related to birds and wind farms, and has never been engaged to determine the probable environmental impact of any wind project on birds or bats.<sup>46</sup> Dr. Streby has also never conducted or designed a risk

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<sup>38</sup> *Id.* at 517-518.

<sup>39</sup> App. Ex. 32, Att. WPE-3, 2003 Diehl Report, Radar Observations of Bird Migration Over the Great Lakes.

<sup>40</sup> Tr. IV at 994-995, 1002.

<sup>41</sup> Tr. V at 1025.

<sup>42</sup> App. Ex. 6, Att. 4, App. A, Bat Acoustic Survey.

<sup>43</sup> Tr. VI at 1430.

<sup>44</sup> *Id.*

<sup>45</sup> *Id.* at 1432.

<sup>46</sup> *Id.* at 1434.

assessment.<sup>47</sup> In fact, other than the 2016 Risk Assessment and the 2018 Risk Summary completed by the Applicant, Dr. Streby has not reviewed any other risk assessments.<sup>48</sup> In short, Dr. Streby lacks the experience to render an opinion as to the probable risk associated with the Icebreaker Project.

Despite Dr. Streby's lack of qualifications or experience, the Residents contend credence should be given to his opinion that sufficient data is not available to assess risk.<sup>49</sup> Dr. Streby's opinion is based upon his hypothesis that greater densities of songbirds equate to greater risk. Dr. Streby admits he is not aware of any study that correlates pre-construction passage rates with post-construction mortality.<sup>50</sup> Further, this hypothesis was contradicted by each and every one of the Applicant's experts who testified that no correlation has been shown between pre-construction passage rates from radar and post-construction fatalities. For example, Mr. Mabee confirms "[i]t hasn't done that, pre-construction radar has not quantified collision risk in a post-construction setting...I'm saying today the research has shown that that's correct, it does not—preconstruction radar does not predict risk or fatalities in a post-construction setting."<sup>51</sup> The notion that simply because more birds are present means more birds will suffer fatalities is not backed by any science or studies. In fact, Mr. Erickson testified that mortality rates are consistent across North America, even when you look at mortality rates for places like the Texas Gulf Coast, which experiences very high bird migration.<sup>52</sup> Moreover, USFWS confirmed that pre-construction radar is not a predictor of risk.<sup>53</sup>

Dr. Streby's overarching opinion is also not supported by experience or any studies. Dr. Streby stated, "[p]assage rates **should** correlate with risk if you are talking about the passage rates of birds flying through the rotor-swept zone...[t]hat would be the hypothesis but, as I said, no one has conducted an adequately-designed study to address the question."<sup>54</sup> While the Applicant relies on scientific studies and the vast actual experience of its experts, the Residents rely on the

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<sup>47</sup> *Id.* at 1436.

<sup>48</sup> *Id.* at 1437.

<sup>49</sup> Res. Br. at 25.

<sup>50</sup> Tr. VI at 1454.

<sup>51</sup> Tr. IV 763.

<sup>52</sup> Tr. V at 1030.

<sup>53</sup> App. Ex. 36 at 30, USFWS Land-Based Wind Energy Guidelines.

<sup>54</sup> Tr. VI at 1456.

hypothesis of an individual who has no prior experience with the interaction of wind projects and wildlife.

In addition, we cannot lose sight of the fact that the size of the Icebreaker Project is small, a fact that naturally reduces any relevant impact and makes it the perfect demonstration project for this purpose. While the Residents devote a significant portion of their Brief to outdated comments made by USFWS in 2017,<sup>55</sup> they ignore USFWS's most recent and final position on the Icebreaker Project. In March 2018, USFWS stated, "The Service acknowledges that Icebreaker is a relatively small-scale demonstration project consisting of six turbines and as such has limited direct risk to migratory birds and bats."<sup>56</sup>

As noted by the Residents, for the past ten years, in preparation for submitting the Application in this matter and since submittal of the Application, the Applicant has been communicating with, providing information to, and receiving feedback from the experts at ODNR and USFWS. Over this time period, the communications have evolved and information has been shared resulting in USFWS's final determination set forth in the 2018 USFWS Letter and concluding that the project is a "relatively small-scale demonstration project consisting of six turbines and as such *has limited direct risk to migratory birds and bats*" (emphasis added).<sup>57</sup> However, the Residents refuse to acknowledge the end result of USFWS's expert review of this project. Rather, in their brief, they continue to cite to former communications that were part of the ongoing review and communications at the time they were issued, but have since been superseded and replaced by the 2018 USFWS Letter that represents USFWS's final determination in this matter. Prior comments and positions of USFWS relative to the project are irrelevant. USFWS's definitive position is that the project is low risk.

The impacts of land-based wind projects on birds and bats in the Great Lakes is well documented, including projects located within Important Bird Areas and near the coast. Therefore, it can be concluded with scientific certainty that the impacts from the project will be lower than land-based projects and will be minimal. Thus, the documentation on the record enables the Board to determine the probable impact of the facility.

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<sup>55</sup> Res. Br. at 17-18.

<sup>56</sup> App. Ex. 6, Att. 6, 2018 USFWS Letter.

<sup>57</sup> *Id.*

**2. The record provides data and information to determine the risk to birds and bats relative to the altitude that birds and bats migrate through the project area.**

The Residents inaccurately assert that there is no data or information in the record regarding the number or density of birds and bats that migrate through the rotor swept zone (“RSZ”).<sup>58</sup> Dr. Streby claims that NEXRAD does not measure altitude. However, as reflected in the NEXRAD Analysis, Dr. Streby’s claim is incorrect.<sup>59</sup> Past marine radar studies and NEXRAD radar studies have confirmed that most of the migrating songbirds fly at high altitudes, outside of the RSZ and above the typical turbine heights.<sup>60</sup> Further, USFWS acknowledges, “[f]or most of their flight, songbirds and other nocturnal migrants are above the reach of wind turbines, but they may pass through the altitudinal range of wind turbines during ascents and descents and may also fly closer to the ground during inclement weather.”<sup>61</sup> The studies have also shown that nocturnal migration occurs over a very broad front (i.e., the “spatial and temporal pattern of nocturnal bird migration...[where the migration is] more distributed in a broad, spatially-dispersed cloud, rather than channelized lines) and that weather and wind conditions influence timing and altitude of migration.”<sup>62</sup>

Contrary to the Residents’ assertions with regard to the information pertaining to the RSZ, there is sufficient information on the record to support the Board’s determination of Icebreaker Project’s probable environmental impact to birds and bats. While all wildlife studies and risk assessments have some level of uncertainty, as detailed in the Applicant’s brief, the information available in the record in this case negates any uncertainty alleged by the Residents. That is, the risk will be lower than existing wind projects located on land where post-construction monitoring data is available. The 2016 Risk Assessment clearly shows that the risk associated with the project will be lower than projects on land based on site-specific data.<sup>63</sup> The evidence reflects that the facility will be located in a cold spot on the lake where use of the project area will be lower than other existing areas on land.<sup>64</sup> In addition, the 2016 Risk Assessment takes into consideration the

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<sup>58</sup> Res. Br. at 2-4.

<sup>59</sup> App. Ex. 1, Ex. J, 2016 Risk Assessment and NEXRAD Analysis.

<sup>60</sup> App. Ex. 32 at 12, Att. WE-2.

<sup>61</sup> App. Ex. 36 at 30, USFWS Land-Based Wind Energy Guidelines; (Able, 1970; Richardson, 2000).

<sup>62</sup> Tr. III at 504-505.

<sup>63</sup> App. Ex. 1, Ex. J, 2016 Risk Assessment.

<sup>64</sup> Tr. III at 517.

small size of the Icebreaker Project.<sup>65</sup> Moreover, land-based projects have migrant and resident birds and bats; however, this offshore project will not have any resident species. Thus, the risk at this offshore wind project is even less than the risk at land-based projects.<sup>66</sup> Dr. Streby did not dispute this conclusion: “I am unaware of a place within that—within the water or 1 to 3 miles around the water that would be a lower-risk area.”<sup>67</sup>

The Residents further misconstrue the record evidence with regard to the RSZ by taking the Applicant’s expert testimony out of context. In quoting from the 2016 Risk Assessment, the Residents state that “[f]or many bird species, susceptibility appears to be most closely related to species’ overall abundance, and the amount of time a species spends flying within rotor swept altitudes.”<sup>68</sup> However, they omitted the remainder of the sentence ...., “with an additional influence of behavioral and morphological factors.”<sup>69</sup> Behavior and the attraction or avoidance of birds to turbines is important to consider, in addition to the number of birds flying in rotor swept areas.

The Residents, in their brief, repeatedly cite to statements from ODNR witness Ms. Erin Hazelton, in her October 2, 2018 testimony, which has since been supplemented in support of the Revised Stipulation. The Residents refuse to acknowledge the important conditions set forth in the Revised Stipulation and, instead, continue to pretend that the Revised Stipulation does not exist. For example, the Residents cite to a previous communication regarding the project from ODNR and USFWS back in 2017, as well as Ms. Hazelton’s testimony in October 2018, for the proposition that the Applicant has refused to place an avian radar unit at the project site to determine the volume and density of birds migrating through the RSZ.<sup>70</sup> These assertions are false. Condition 21 in the Revised Stipulation explicitly requires the Applicant to collect pre-construction radar data for both bird and bat migratory seasons (April 1 to November 15). Moreover, the “[r]adar must be able to determine flight altitude of migrants at altitudes near and entirely within the [RSZ] at the project site to quantify the number of targets in the [RSZ] to inform the potential for collision.”<sup>71</sup>

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<sup>65</sup> App. Ex. 1, Ex. J, 2016 Risk Assessment.

<sup>66</sup> App. Ex. 33 at 10; Tr. III at 507-508.

<sup>67</sup> Tr. VI at 1461.

<sup>68</sup> Res. Br. at 4.

<sup>69</sup> Strickland et al. 2011.

<sup>70</sup> Res. Br. at 2-4.

<sup>71</sup> Jt. Ex. 2 at 8.

In addition, the Residents believe that pre-construction radar is necessary prior to construction to determine the probable impact of the facility on birds and bats. This is also not true. As stated by USFWS, pre-construction radar is not a predictor of risk.<sup>72</sup> The Residents' expert, Dr. Streby, agreed with USFWS on this point.<sup>73</sup> Risk determinations at land-based wind projects do not include the use of radar monitoring as a pre-construction tool, as required for this project.<sup>74</sup> Rather, the studies completed to date in the Icebreaker Project (e.g., the 2016 Risk Assessment, NEXRAD Analysis, and studies from the Aerial Waterfowl Report) are comparable to those performed at land-based projects to determine the risk of the facilities. While a radar study is not needed to determine probable environmental impact on birds prior to construction, the Applicant has committed in the Revised Stipulation (and as outlined in the Radar Monitoring Protocol draft, which will be updated to comply with the conditions in the Revised Stipulation) to perform pre-construction radar monitoring to provide a baseline to compare with the post-construction radar studies. This comparison will provide the information necessary to enable the Board, through the monitoring efforts of its Staff, including ODNR, to review and ensure that the Applicant is complying with the conditions and requirements imposed through the Avian and Bat IMP required by Condition 18 of the Revised Stipulation.

**B. The record reflects that the Revised Stipulation ensures that the facility represents the minimum adverse environmental impact considering the state of available technology and the nature and economics of various alternatives, and other pertinent considerations satisfying R.C. Section 4906.10(A)(3).**

The Revised Stipulation contains certificate conditions that are significantly revised from the 9/4 Stipulation. The proposed conditions in the Revised Stipulation enhance the mandates previously proposed, take into consideration the unique location of the project eight to ten miles off the shore of Lake Erie<sup>75</sup> and the fact that this is a small demonstration project, and further ensure that the facility will result in minimum adverse environmental impact. It is important to

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<sup>72</sup> App. Ex. 36 at 30, USFWS Land-Based Wind Energy Guidelines.

<sup>73</sup> Tr. VI at 1470-1471.

<sup>74</sup> App. Ex. 40 at 1, ODNR On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio, stating "These studies are meant to document the level and timing of species activity, diversity and abundance."

<sup>75</sup> The Applicant notes that the Icebreaker Project has some unique challenges because it is located off the shore of Lake Erie, rather than on land. However, as pointed out by Mr. Karpinski, from the water level up, the Icebreaker Project is no different than any other wind project constructed on land. Tr. 1 at 86-87.



note that the statute does not require zero impacts – it requires that the Board be able to determine that all measures have been taken to ensure the minimal environmental impact “considering the state of available technology and the nature and economics of various alternatives, and other pertinent considerations.”<sup>76</sup> “ODNR, Division of Wildlife...recognizes that it is unreasonable to expect wind turbines in Ohio to have no impact on wildlife....”<sup>77</sup>

The Residents refuse to acknowledge the material differences between the 9/4 Stipulation and the Revised Stipulation, and instead continue to assert that the Staff had no basis to revise its position and support the Revised Stipulation.<sup>78</sup> However, there are several major differences, including, but not limited to: Condition 22, that the radar-monitoring program must be successfully completed prior to commencement of construction; Condition 18, that the collision detection technology must be scientifically proven as evidenced in lab and field testing, and that it must be installed and fully functioning at the time the turbines commence operation; Condition 23, the catch-all condition if there is a significant mortality event; and the Collision Monitoring Plan, which will contain a feathering provision that may be implemented if the collision technology is not operating properly.<sup>79</sup>

**1. The Revised Stipulation and the record identify the technology and methodology to determine the number and density of birds and bats that migrate through the project area.**

The Residents maintain that the Applicant has not identified the technology or methodology that will be used to determine the number and density of birds and bats that migrate through the project area.<sup>80</sup> Such is not the case. As demonstrated at great length in the Applicant’s brief and summarized further herein, the numerous studies and analyses conducted for this project, including, but not limited to, the 2016 Risk Assessment coupled with the 2018 Risk Summary and the information and data documented therein, provide the certainty needed to determine the risk and probable impact of the facility to migrating birds and bats.

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<sup>76</sup> R.C. Section 4906.10(A)(3).

<sup>77</sup> App. Ex. 40 at 13, ODNR On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio.

<sup>78</sup> Res. Br. at 30.

<sup>79</sup> Jt. Ex. 2 at 6-7, 9; App. Ex. 57.

<sup>80</sup> Res Br. at 2, 4-5.

In addition, the Revised Stipulation provides that the Applicant will employ a radar monitoring program for three seasons – spring, summer, and fall prior to construction and for another period post-construction, which will verify the number and density of birds and bats that migrate through the project area. The plans required by the Revised Stipulation, including the Avian and Bat IMP (of which an initial draft has already been presented by the Applicant for consideration), as well as the Avian and Bat MOU and the Monitoring Plan, set forth the parameters for the monitoring. Further, the Applicant has presented the Radar Monitoring Protocol draft as part of the record in this case, which will adhere in all respects to the conditions agreed to by the Stipulating Parties in the Revised Stipulation.<sup>81</sup>

The Residents would have the Board believe radar monitoring technology is untested<sup>82</sup> – that is not the case. Similarly, contrary to the record evidence, the Residents maintain that vessel-based radar (“VBR”) has never been used.<sup>83</sup> As attested to by Dr. Diehl in the 2017 Diehl Report, “there is ample precedent for radar-based scientific data collection on floating platforms at sea,” as marine radars have consistently been used for “many years” to collect scientific data.<sup>84</sup> The record supports the fact that any movement caused by the vessel can be measured and accounted for after data collection.<sup>85</sup> Moreover, the Revised Stipulation requires that, regardless of whether the radar monitoring is accomplished on a fixed platform or a vessel, the “[r]adar must suppress false detections from insect, wave clutter, and weather and without downtime bias with respect to biological periods producing viable data 75 percent or greater of the hours of survey.”<sup>86</sup> The condition further requires that the 75 percent calculation includes all potential scenarios, including force majeure events such as heavy precipitation or high seas.<sup>87</sup> The Applicant must meet all the conditions mandated by the Revised Stipulation regarding radar performance; if those requirements are not met, then the project cannot move forward with construction. The radar studies agreed to in the Revised Stipulation are in addition to the studies already conducted and provided in the record in this case. The statute does not require radar studies – and, in fact, Board precedent in terrestrial wind energy cases have not required radar studies.

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<sup>81</sup> App. Ex. 32, TJM-2, Radar Monitoring Protocol draft.

<sup>82</sup> Res. Br. at 27-28.

<sup>83</sup> Res. Br. at 5

<sup>84</sup> App. Ex. 37 at 9, 2017 Diehl Report.

<sup>85</sup> App. Ex. 32 at 6-7, Radar Monitoring Protocol draft.

<sup>86</sup> Jt. Ex. 2 at 7, Condition 21(c).

<sup>87</sup> *Id.*

The Residents downplay the “[e]valuation of Icebreaker Wind project vendor proposals for radar-based monitoring of flying animals” contained in the 2017 Diehl Report.<sup>88</sup> The Residents mischaracterize Staff’s reasoning for requesting information in 2017 regarding the radar protocol from Dr. Diehl, by asserting that Staff requested the information because Staff believed the documentation provided to date at that point in 2017 was not sufficient to determine the probable environmental impact of the facility.<sup>89</sup> However, such is not true. As stated in the Avian and Bat Monitoring Report, which was finalized and filed prior to Staff’s request, “ODNR, USFWS and [the Applicant] ...retained an objective third party radar expert (Dr. Robb Diehl, [U.S. Geological Survey (“USGS”)]) to determine whether collection of pre-construction radar data at the project site on a vessel is feasible and will achieve the study objectives....[a] recommendation on the viability and precise design of any pre-construction radar is expected by the Fall of 2017.”<sup>90</sup> Thus, as part of their thorough review and investigation of all aspects of the Application and specifically on the issues pertaining to the impacts of the facility on avian and bat species, the Staff requested more information on VBR, which had been referenced in the Avian and Bat Monitoring Plan that the Staff reviewed as part of their investigation in this case.

The 2017 Diehl Report, provided Dr. Diehl’s evaluation of the potential viability of VBR for establishing the pre-construction baseline that would be used to compare with the post-construction monitoring of bird and bat impacts by the facility. The Staff’s request was prompted by the Applicant’s interest in potentially utilizing VBR for the pre-construction radar monitoring baseline studies. The 2017 Diehl Report, as contemplated in the Avian and Bat Monitoring Plan, was the product of discussions between the Applicant and ODNR, as well as USFWS, to enlist a third-party radar expert.<sup>91</sup> Further, the content of the request for information provided to potential radar vendors was agreed to by the Applicant, ODNR, and USFWS.<sup>92</sup>

Ultimately, Dr. Diehl determined that “Vendor A proposes the approach most likely to succeed among the vendor responses and other information provided that forms the basis of this evaluation.”<sup>93</sup> Dr. Diehl went on to offer suggestions that might improve the ability of Vendor A

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<sup>88</sup> App. Ex. 37, 2017 Diehl Report.

<sup>89</sup> Res. Br. at 19.

<sup>90</sup> App. Ex. 3, Avian and Bat MOU Ex. A at 11, Avian and Bat Monitoring Plan.

<sup>91</sup> App. Ex. 38, Avian and Bat MOU.

<sup>92</sup> Tr. III at 678

<sup>93</sup> App. Ex. 37 at 24, 2017 Diehl Report.

(Accipiter) to gather meaningful data.<sup>94</sup> Mr. Mabee testified that these suggestions were communicated to Accipiter, which agreed to incorporate them into its proposal.<sup>95</sup>

While the Residents attempt to portray VBR as novel, boat-based radar has been used for decades to study bird migration in Europe.<sup>96</sup> Dr. Diehl similarly acknowledged that “there is ample precedent for radar-based scientific data collection on floating platforms at sea.”<sup>97</sup> Regardless, Mr. Mabee, the only radar expert to testify in this proceeding, stated the VBR monitoring protocol is likely to produce sufficient data to meet the study’s objectives.<sup>98</sup>

The Residents correctly point out that the Staff Report set forth seven recommended certificate conditions that should be required for the radar- monitoring program.<sup>99</sup> However, they incorrectly go on to contend that the Staff abandoned these recommendations in favor of the provisions in the Revised Stipulation.<sup>100</sup> The Revised Stipulation does not specify whether the radar-monitoring will be done via a vessel or on a fixed platform. Rather, as is appropriate, the Revised Stipulation focused on the necessary parameters and results from the monitoring and specifies what those parameters must be. Condition 21 of the Revised Stipulation (which essentially adopts the seven certificate conditions recommended in the Staff Report)<sup>101</sup> sets forth very specific and detailed parameters that must be included in the radar monitoring protocol, including, in part, that the radar must:

1. Be able to detect and track directional movement and altitude of individual 10-gram and larger vertebrates.
2. Have the ability to collect data continuously.
3. Suppress false detections from insects, wave clutter, and weather and without downtime bias with respect to biological periods producing viable data 75% or greater of the hours of the survey time (dusk to dawn spring, summer, and fall April 1 to November 15). For purposes of calculating the 75 percent, all potential scenarios, including force majeure events, i.e., heavy precipitation and high

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<sup>94</sup> *Id.*

<sup>95</sup> Tr. IV at 924-926.

<sup>96</sup> *Id.* at 758.

<sup>97</sup> App. Ex. 37 at 16, 2017 Diehl Report.

<sup>98</sup> Tr. IV at 885-886.

<sup>99</sup> Res. Br. at 21-22; Staff Ex. 1 at 48.

<sup>100</sup> *Id.* at 28.

<sup>101</sup> Staff Ex. 1 at 48.

seas, shall be included.<sup>102</sup> During any such force majeure event, the Applicant shall summarize NEXRAD data to provide a large scale assessment of nocturnal migrant passage rates.

4. Be able to determine flight altitude of migrants at altitudes near and entirely within the RSZ at the project site to quantify the number of targets in the RSZ to inform the potential for collision.
5. Be able to provide information that can be used to determine and quantify behavioral avoidance or attraction to turbines in the open water setting.
6. Collect data for both bird migratory seasons and bat migratory seasons (April 1 to November 15) pre-construction.
7. Collect data for at least two spring/summer/fall migratory seasons post-construction to determine behavioral changes that make collision more or less likely, unless the Applicant demonstrates to the ODNR's satisfaction that a second spring/summer/fall post-construction radar survey is unlikely to result in the collection of additional data to inform the question of avoidance/attract effects.<sup>103</sup>

In addition, Condition 22 mandates that, prior to construction, the Applicant shall demonstrate that the requirements for radar monitoring set forth in Condition 21 have been satisfied for one spring/summer/fall migration season.<sup>104</sup>

In their brief, the Residents cite to testimony from Ms. Hazelton for the position that the protocols for the pre- and post-construction radar study have not been agreed to or memorialized.<sup>105</sup> However, once again, the Residents are citing to testimony from September 2018, submitted prior to the filing of the Revised Stipulation. The Residents' arguments are out of date and totally disregard the fact that the necessary protocols have been agreed to by the Stipulating Parties and have been memorialized through the Revised Stipulation wherein the radar monitoring protocols are explicitly set forth in Condition 21. The Residents refuse to accept the merit of the conditions in the Revised Stipulation and the possibility of VBR. Instead, they erroneously contend that it is an untested methodology that is likely to induce errors in the

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<sup>102</sup> The Applicant notes that, contrary to the Residents' assertion in their brief (Res. Br. at 11, FN 10), the 75% standard includes the collection of data from times of high seas and heavy precipitation.

<sup>103</sup> Jt. Ex. 2 at 7-8, Condition 21.

<sup>104</sup> *Id.* at 8.

<sup>105</sup> Res. Br. at 7.

collection of data.<sup>106</sup> This is in spite of the fact that Condition 21 of the Revised Stipulation calls for a radar study with 75% viable data.<sup>107</sup> Whether it is on a barge or on a fixed platform that 75% measure of certainty must be met.

The Residents have no scientific basis for any contention that the 75% standard will not result in data sufficient to characterize migration at the project site, or, put another way, that an 80% standard is necessary to obtain sufficient data. Mr. Mabee, the only radar expert to testify in this matter, stated that 80% is “just a number that doesn’t have any scientific basis” and that adherence to an 80% standard is not necessary to obtain useful data to characterize migration and avoidance.<sup>108</sup> Mr. Mabee published studies in peer-reviewed publications with much less data.<sup>109</sup> In fact, as pointed out by Mr. Erickson, the studies published by USFWS have used 67% as the measurement for viable data – which is far less than 80% and USFWS indicates that those studies are valid.<sup>110</sup>

**2. The record identifies collision technology and methodology that may be used to determine fatalities at the project post-construction.**

The Residents maintain that neither the technology nor the methodology for monitoring collision with the facility and the number of birds and bats killed by the turbines have been identified.<sup>111</sup> The Residents seem to be confusing the fact that the Applicant has not yet named which technology will be utilized with their claim that there is no such technology to choose from. As listed in the record, there are a variety of technologies and methodologies that the Applicant may choose from. Moreover, the Residents once again ignore the Revised Stipulation and cite to outdated testimony from the Staff for the proposition that the 9/4 Stipulation is not in the public interest because the conditions did not identify a suitable technology.<sup>112</sup> The terms of the stipulation have changed since that time and the Revised Stipulation provides the surety to determine that the facility will provide the minimum adverse environmental impact.

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<sup>106</sup> *Id.* at 5.

<sup>107</sup> *Jt. Ex. 2* at 7, Condition 21(c).

<sup>108</sup> *Tr. IV* at 866-867.

<sup>109</sup> *Id.* at 892.

<sup>110</sup> *Tr. V* at 1050-1051; *App. Ex. 32, Att. 7*, USFWS Great Lakes Avian Radar Technical Report Lake Erie Shoreline, Spring 2012.

<sup>111</sup> *Res. Br.* at 2, 6.

<sup>112</sup> *Id.* at 6-7.

Initially, it is important to note that the Avian and Bat MOU, Monitoring Plan, and IMP were all created to ensure that the minimum adverse environmental impact was achieved at the project. In recognition of the unique offshore location of this project and the fact that technological advances will continue to evolve right up until construction begins, the Applicant presented several potential options for post-construction collision monitoring.<sup>113</sup> The goal being to utilize the best available technology and wait until closer to construction before finalizing a plan in order to make use of the best available technology.

As noted in the Avian and Bat Monitoring Plan, since this is “a pilot project, it may be necessary to explore the use of experimental technologies or methods to collect the data necessary to assess behavioral impacts and mortality.”<sup>114</sup> The Applicant and Staff have long-recognized the challenges of collecting fatality data in an offshore environment. Mr. Good testified that the Applicant is currently considering impact detection systems, camera systems, radar systems, and combinations of the foregoing.<sup>115</sup> These technologies are not merely theoretical. Mr. Good explained that WTBird has been deployed at an offshore windfarm in the Netherlands and has successfully documented collisions; impact detection technology has been subject to outdoor lab testing; the MUSE system has been deployed at the Block Island wind project; and the TADS system has also been used at an offshore wind project. Further, thermal cameras have been used to document actual collisions. Mr. Good noted that these technologies are capable of documenting collisions with an assessment of what species or guild was the subject of the collision, and numerous technologies have been deployed in commercial settings.<sup>116</sup> Mr. Erickson similarly testified that he reviewed studies of collision detection systems and that he worked with some of the technologies designed to detect collisions; he confirmed that these technologies are able to document collisions, affirming that he has worked with some of these technologies and seen them detect collisions.<sup>117</sup> Again, the technology is not theoretical; rather, “the technology is already available.”<sup>118</sup>

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<sup>113</sup> App. Ex. 31, Att. REG-2 at 18, Avian and Bat IMP draft.

<sup>114</sup> App. Ex. 3, Avian and Bat Ex. A at 3, Avian and Bat Monitoring Plan.

<sup>115</sup> App. Ex. 31 at 16-17; (Horn et al. 2008, Cryan et al 2014).

<sup>116</sup> Tr. III at 669-671.

<sup>117</sup> Tr. IV at 958-963.

<sup>118</sup> Tr. III at 672.

Icebreaker has not made a final determination as to what technology, or combination thereof, set forth in the record it will utilize for post-construction collision monitoring. The Residents attempt to portray this in a negative light and suggest a certificate should not be issued because a specific technology has not been identified. Not selecting at specific technology at this juncture, however, is actually prudent. As noted by Mr. Good, “[t]here is a lot of effort being placed right now toward developing offshore collision-monitoring technologies. So the idea is to hold off to make sure we took advantage of the latest technologies that were available.”<sup>119</sup> That was the intent of the Avian and Bat MOU and is the current intent of the Stipulating Parties to the Revised Stipulation.<sup>120</sup> Further, Condition 18 of the Revised Stipulation does not permit the Applicant to begin construction until the collision monitoring technology has been proven and accepted, and it does not permit the Applicant to begin operations until the collision monitoring technology is fully functioning.<sup>121</sup> Requiring firm affirmation and demonstration of collision monitoring technology before construction can commence was a pivotal condition agreed to by Staff and the other Stipulating Parties.

The Residents note that birds and bats will be killed by the facility, and then go on to assert that a fatal defect in the Application and the Revised Stipulation that prevents the Board from making the determinations required for R.C. Sections 4906.10(A)(2) and (3) is that the “extent of the killing is completely unknown at this point” (emphasis in original).<sup>122</sup> The Residents’ rationale in this regard is totally nonsensical – of course the extent of the mortality rates for birds and bats at the Icebreaker Project is not currently known – the facility has not been built. Under the Residents’ logic, the Board will never be able to approve any project until the applicant can show the number of bird and bats that are killed at the facility, which obviously is impossible unless the facility is operational.

The goal of the Stipulating Parties through the Revised Stipulation is to finalize and implement the plans to guarantee that moving forward with the project will comply with the conditions in the Revised Stipulation, as supported by the record documentation, and produce the minimal environmental impact. However, should something unexpected occur, Condition 23 of

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<sup>119</sup> *Id.* at 623.

<sup>120</sup> *Id.*

<sup>121</sup> Jt. Ex. 2 at 6, Condition 18.

<sup>122</sup> Res. Br. at 7.



the Revised Stipulation provides a catch-all provision, which requires the Applicant to immediately report a significant mortality event to ODNR.<sup>123</sup> A significant mortality event is defined as “21 or more detected collisions at the facility within a 24-hour period based on a facility-wide detection probability of 59%.”<sup>124</sup> Mr. Erickson affirmed that the threshold of 21 or more detected collisions at the facility within a 24-hour period, based on a facility-wide detection probability of 59%, “is very low and conservative number for defining a significant mortality event when considering mortality events at tall structures or mortality sources and the fact that it includes both birds and bats.”<sup>125</sup>

The Residents further state that, despite the fact that Condition 20 of the Revised Stipulation purports to require the Applicant to report to Staff if a turbine kills any threatened and endangered (“T&E”) species ODNR has no idea how to determine the species of a bird or bat killed by the turbines.<sup>126</sup> In support of their assertions, the Residents point to testimony from Ms. Hazelton where she noted that this is a first of its kind project and she does not know of any surveys that have been done regarding carcasses over water and she is not sure if avian radar will pick up the species as it is under development and not a proven technology<sup>127</sup> At the outset it should be clear that the Residents’ assertions are unfounded and disregard the totality of the record.

First, the Residents disregard the findings of experts in this field and the fact that USFWS and the U.S. Department of Energy agree that the Icebreaker Project is not likely to adversely affect T&E species protected under the Endangered Species Act or the Bald & Golden Eagle Protection Act.<sup>128</sup> Second, as the record reflects, some carcasses that fall will be recoverable if they fall on the support structure that will surround each turbine. Third, as noted previously, the cameras and acoustic detectors that will be installed at the project will also be used to help determine if T&E species are impacted.

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<sup>123</sup> Jt. Ex. 2 at 9, Condition 23.

<sup>124</sup> *Id.*

<sup>125</sup> App. Ex. 59 at 3.

<sup>126</sup> Res. Br. at 11, 30.

<sup>127</sup> *Id.*

<sup>128</sup> App. Ex. 31 at 20; App. Ex. 6, Att. 6, 2018 USFWS Letter.

**3. Staff and ODNR have the expertise and resources necessary to monitor and enforce the Applicant's compliance with the conditions in the Revised Stipulation.**

The Residents incorrectly assert that Staff and ODNR do not have the expertise to determine, without Board oversight or review in a public hearing, whether the technologies or methodologies will accurately identify either the volume/density of birds or bats migrating through the RSZ or the number of birds and bats killed by the turbines.<sup>129</sup>

The Residents continue to disparage the Staff and push for further litigation, assuming that the Residents' experts are the only ones that are independent and can provide an unbiased review. The Residents admit that their goal is to continue the adversarial process in this case so that they "may present (expert) testimony and evidence to controvert any proposed Staff approval of Icebreaker's proposed technologies as scientifically-valid."<sup>130</sup> (emphasis in original). The Residents have made it clear that there is nothing that will suffice for compliance with the statutory criteria under R.C. Section 4906.10(A). Certainly, the Residents' experts, who are paid by Murray Energy Corporation ("Murray Energy"),<sup>131</sup> cannot be considered to be unbiased and independent. It is the Residents' plan to ignore the record evidence in this case in order to continue the "adversarial process" and in fact supplant their opinions for those of the expert's employed by the Board.

Contrary to the assertions of the Residents, it is the normal course of the process for board and commissions in the state to reply and authorize their staffs to monitor projects to ensure compliance with the agencies' mandates and regulations. For the Residents to infer otherwise calls to question the mandates imposed by statute on all state agencies and their staffs.

The Staff, which includes ODNR, are government employees and all documents they create are public records – nothing is done behind closed doors. Most importantly, should the Board or an interested stakeholder believe that the Applicant is not complying with the conditions of its certificate, R.C. Sections 4906.97 and 4906.99 provide a process for addressing those concerns. The Residents disregard Ms. Hazelton's affirmation that ODNR consults with third-

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<sup>129</sup> Res. Br. at 2.

<sup>130</sup> *Id.* at 12.

<sup>131</sup> App. Exs. 42, 47, and 48; Tr. V at 1192-1197; Tr. VI at 1281, 1396-1397, 1487. Murray Energy is the largest privately-owned coal company in the U.S. and a well-known opponent of clean energy.

party experts who possess the requisite expertise to make informed decisions on technical issues.<sup>132</sup> ODNR is the state agency responsible for investigating and protecting the wildlife in the state and, as evidenced by the thoroughness of the Staff's investigation on wildlife issues and the length of the investigation and negotiation processes, it is clear that ODNR takes its responsibility seriously and will employ the necessary means to carry out its mission.

The Staff is responsible for monitoring, for enforcement purposes, the certificate conditions on behalf of the Board.<sup>133</sup> Such delegation of responsibility is necessary and appropriate for purposes of ensuring that applicants comply with the Board's mandates. R.C. Section 4906.03(B) provides that the Board shall "conduct any studies and investigations that it considers necessary or appropriate to carry out its responsibilities." In addition, R.C. Section 4906.02(D) specifically provides that the Chairman of the Board may contract for special third-party service outside the expertise of the state agencies themselves.

As detailed below, for almost 50 years, the Board has issued certificates for the siting of energy projects in the state of Ohio and has, in accordance with the statute, relied upon the expertise of the staff at the member agencies, including ODNR, to monitor developers' progress on the projects and ensure that all provisions of the conditions are strictly met. The Board has consulted with numerous agencies on various issues addressed in the power siting process, including USFWS when it comes to compliance and expertise on ecological bird and bat issues. If necessary, the Board may contract with a third-party expert to lend guidance. For example, in this case, the Board reached out to Dr. Diehl for his expertise in radar monitoring and the viability of VBR.

The Revised Stipulation is thorough and detailed, and encompasses all requirements necessary for the issuance of the certificate, including, but not limited the Application itself, and all commitments and plans submitted in this case.<sup>134</sup> The Board has the statutory authority to enforce all provisions in the Revised Stipulation. The Residents attempt to minimize the Board's role and its authority to task the Staff with monitoring all aspects of the certificate to ensure compliance with all conditions, commitments, and plans. Rather, the Residents are looking for continued litigation every step of the way through construction and operation so that they can

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<sup>132</sup> Res. Br. at 12; Tr. VIII at 1777.

<sup>133</sup> See O.A.C. Chapter 4906-7.

<sup>134</sup> Jt. Ex. 2 at 3, Condition 1.

review and approve every detail of the process, with the stated goal of opposing everything – even before they have seen it.

The truth of the matter is, short of not building the project, there is no condition, plan, or enforcement strategy that would convince the Residents to support this project – they are quite simply opposed to the Icebreaker Project and are straining for any argument that will prevent construction.

**4. The Revised Stipulation’s direction for Staff and ODNR to ensure compliance with the certificate conditions and to document their review does not constitute a delegation of the Board’s decision-making authority.**

As set forth previously, the Revised Stipulation and the record in this matter support the Board’s findings and determinations with regard to the probable environmental impact of the facility and that the facility will represent the minimum adverse environmental impact as required by the statute. However, the Residents assert that a few of the provisions in the Revised Stipulation directing Staff to monitor and review all aspects of the plans and conditions is somehow a delegation of the Board’s decision-making authority. The Residents assert that these provisions result in the unlawful delegation of the Board’s authority to approve a certificate under R.C. Section 4906.10.<sup>135</sup> To the contrary, these provisions and the plans referenced therein have been presented, and the Applicant is directed though the conditions to work with Staff and ODNR to ensure that all provisions of the Revised Stipulation and all of the commitments and plans set forth in the record are met.

The Residents identify Conditions 15, 17, 18, and 19 as purportedly shifting decision-making authority regarding environmental impacts of the project to ODNR without any opportunity for public input. However, these conditions – and all other conditions in the Revised Stipulation that provide for review by Staff or member state agencies – constitute a valid and reasonable mechanism for the Board to set forth clear boundaries on the environmental impacts of the Icebreaker Project to satisfy R.C. Sections 4906.10(A)(2) and (3), while recognizing that some details must be reviewed closer to when construction actually begins. These conditions also fit within a regulatory framework that provides a process for addressing concerns the Board may have

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<sup>135</sup> Res. Br. at 31.

through the statutory enforcement mechanism in R.C. Sections 4906.97 through 4906.99. The Board has regularly carried out its duties by approving similar certificate conditions, and should likewise issue a certificate for this project as proposed in the Revised Stipulation.

The language of R.C. Sections 4906.10(A)(2) and (3) allows the Board to determine the types of environmental impacts likely to result from the project and approve plans to reasonably minimize those impacts as certificate conditions, while leaving implementation details to occur after the issuance of the certificate. Foremost, the Board should recognize that the Residents' argument regarding impermissible delegation to ODNR is not grounded in the actual language of R.C. Section 4906.10. That statutory language does not, in fact, prohibit the issuance of a certificate followed by the Staff's review and written acceptance documenting whether the Applicant has complied with all requirements in the certificate. Rather, R.C. Section 4906.10(A)(2) directs the Board to determine "the *nature* of the *probable* environmental impact" of a facility, not the exact impact down to each blade of grass or bird disturbed (emphasis added). According to the dictionary definition of these terms, this requires only a determination regarding the "the type or main characteristic" of the environmental impacts that are "likely to be true or likely to happen."<sup>136</sup> The evidentiary record and the Applicant's brief thoroughly lay out the types of environmental impacts that the project is likely to cause. The Board can confidently rely on this extensive evidence to make the required determination under R.C. Section 4906.10(A)(2).

Similarly, R.C. Section 4906.10(A)(3) states the Board must determine that the "facility represents the minimum adverse environmental impact" in light of various relevant considerations, without any directive to precisely quantify the ultimate environmental impact that results from construction and operation of the facility. There is detailed evidence before the Board as set forth in the Applicant's brief and herein showing that the conditions in the Revised Stipulation, once implemented, will have the result of minimizing the environmental impacts identified under R.C. Section 4906.10(A)(2).

Thus, the record in this case and the conditions in the Revised Stipulation satisfy the Board's obligation under R.C. Sections 4906.10(A)(2) and (3) to assess the likely types of environmental impacts from the Icebreaker Project, and to put in place conditions that require the

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<sup>136</sup> <https://dictionary.cambridge.org/us/dictionary/english/nature;>  
<https://dictionary.cambridge.org/us/dictionary/english/probable>

Applicant to adhere to a process that Staff and other experts have testified will reasonably minimize those impacts. All that is left is the implementation and enforcement of the certificate conditions describing that process.

Consistent with this statutory language, the Supreme Court of Ohio, in considering the Board's issuance of a certificate for an onshore wind facility, recognized the Board's authority to delegate implementation of certificates and accompanying conditions issued under R.C. Section 4906.10 in *In re Application of Buckeye Wind, L.L.C.*, 131 Ohio St.3d 449, 452, 2012-Ohio-878. Even the Residents acknowledge the holding of the Court in *Buckeye* that "[s]imply because certain matters are left for further review and possible public comment does not mean that they have been improperly delegated to staff."<sup>137</sup> Recognizing that "proper facility siting is subject to modification as the process continues— [as] proposals are tested and matched to the defined conditions," *Buckeye* explained that the Ohio siting statutes:

authorize a dynamic process that does not end with the issuance of a construction certificate. The General Assembly vested the board with authority to allow its staff to monitor . . . compliance with conditions that the board has set, conditions upon which the [project opponents] already had the chance to be heard.<sup>138</sup>

The Revised Stipulation here is an example of exactly that dynamic process, presenting the Board with extensive evidence of the probable environmental impacts of the Icebreaker Project, along with a defined process. The Revised Stipulation was negotiated with Staff, which includes ODNR, and contains provisions for documenting and minimizing impacts as actual construction commences, by finalizing and carrying out certain pre- and post- construction monitoring and mitigation plans.

The Residents assert that, because the Revised Stipulation identifies ODNR as a principal entity involved in reviewing these plans, the Revised Stipulation calls for an improper delegation of the Board's authority.<sup>139</sup> However, as identified in *Buckeye*, two aspects of the power siting statutes ensure this implementation discretion does not impinge on the Board's role of determining the nature of probable environmental impacts and a plan to reasonably mitigate those impacts: (1)

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<sup>137</sup> *Buckeye* at ¶ 17 (cited in Res. Br. at 33-34).

<sup>138</sup> *Id.* at ¶¶ 16-17; *See also Id.* at ¶ 19 (Certificate conditions requiring certain actions after certificate issuance, such as additional submissions to Staff, are permissible when "designed to ensure compliance with the conditions already ordered by the board.").

<sup>139</sup> Res. Br. at 32.

the requirement under R.C. Section 4906.07 for a hearing on any modification to a certificate that “*would result in any material increase in any environmental impact of the facility or a substantial change in the location of all or a portion of such facility*” (emphasis added); and (2) the requirement for an applicant to “continue to abide by the conditions as presently set by the board in the certificate.”<sup>140</sup> The Court noted that R.C. Sections 4906.97 to 4906.99 provide an avenue for public complaints if there are reasonable grounds to believe that a certificate holder is not complying with the conditions of that certificate, including a hearing and enforcement action if necessary.<sup>141</sup> The Court specifically noted that any submissions to Staff would be public records, enabling public scrutiny of the implementation process.<sup>142</sup>

In other words, stakeholders concerned about decisions made in implementing the certificate conditions set forth in the Revised Stipulation can seek enforcement of those conditions if there are reasonable grounds to do so. This process ensures that the Board – once it has set “clear directions” for implementation through certificate conditions – will maintain an active role and avoid “unreasonably or unlawfully giv[ing] the staff general discretion.”<sup>143</sup>

Meanwhile, the precedent cited by the Residents’ from Public Utilities Commission of Ohio (“PUCO”) cases has no bearing on the question of valid delegation under R.C. Section 4906.10. The Residents point to a Supreme Court of Ohio case affirming a PUCO order under R.C. Section 4928.143, specifically the PUCO’s decision to defer application of a statutorily required cost-benefit test until a later PUCO proceeding.<sup>144</sup> However, the provisions of R.C. Section 4906.10(A) are completely different. They do not require the application of a specific quantitative test at the time of Board approval. Rather, R.C. Section 4906.10(A) directs the Board to make holistic determinations as to the “nature” of probable environmental impacts and a reasonable plan to mitigate those impacts in the future. However, even if the Board were to view the PUCO’s precedent as relevant, the discussion below shows that the Revised Stipulation does lay the groundwork for future Board review if the Applicant goes beyond the bounds of its certificate - exactly the same type of process approved by the Supreme Court of Ohio in *Buckeye*.

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<sup>140</sup> *Buckeye* at ¶ 17.

<sup>141</sup> *Id.* at ¶ 32.

<sup>142</sup> *Id.* at ¶ 25.

<sup>143</sup> *Id.* at ¶ 22.

<sup>144</sup> Res. Br. at 32 (citing *In re Application of Ohio Power Co.*, 155 Ohio St.3d 320, 2018-Ohio-4697).

The conditions to which the Residents object – Conditions 15, 17, 18, and 19 – do provide the required “clear directions” regarding the probable adverse environmental impacts of the project and the steps needed to reasonably minimize those impacts. These conditions relate to potential impacts of the project on avian and bat species, as well as fisheries and aquatic resources, and are grounded on plans and requirements that have been discussed at great length with the Staff and parties, and have been made a part of the record in this proceeding.<sup>145</sup>

It is notable that the Residents’ brief does not focus on the specific language of these conditions in arguing that they constitute an improper “delegation to ODNR of final decision-making authority to determine probable environmental impact and minimum adverse impact.”<sup>146</sup> In fact, these conditions show that there is more than sufficient evidence before the Board to determine “the nature of the probable environmental impact” of the project, and they also provide clear boundaries for the project’s path forward to ensure minimization of its environmental impacts.

First, these conditions refute the Residents’ contention that the issuance of a certificate for the project would come “before the board can make any findings or determinations as to the Project’s probable environmental impact.”<sup>147</sup> The parties to the Revised Stipulation specifically negotiated these conditions in response to the Applicant’s provision of a range of studies describing the project’s “probable environmental impact” on certain avian and bat species, and fisheries and aquatic resources, as set forth herein and described in documents such as the 2016 Risk Assessment,<sup>148</sup> the 2018 Risk Summary,<sup>149</sup> the NEXRAD Analysis,<sup>150</sup> the Aerial Waterfowl Report,<sup>151</sup> and the Bat Acoustic Survey.<sup>152</sup> Those studies are more than sufficient to inform the Board as to the probable environmental impact of the project – which the USFWS characterized as posing “limited direct risk to migratory birds and bats”<sup>153</sup> – without performing the impossible task of accounting for those impacts in exact detail or precise quantity before the “dynamic

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<sup>145</sup> Jt. Ex. 2 at 5-7.

<sup>146</sup> Res. Br. at 32.

<sup>147</sup> *Id.* at 31.

<sup>148</sup> App. Ex. 1, Att. J, 2016 Risk Assessment and NEXRAD Analysis.

<sup>149</sup> App. Ex. 6, Att. 2, 2018 Risk Summary.

<sup>150</sup> App. Ex. 1, Att. J, 2016 Risk Assessment and NEXRAD Analysis.

<sup>151</sup> App. Ex. 6, Att. 4, App. B, Aerial Waterfowl Report.

<sup>152</sup> App. Ex. 6, Att. 4, App. A, Bat Acoustic Survey.

<sup>153</sup> App. Ex. 6, Att. 6, 2018 USFWS Letter.



process” of construction even begins.<sup>154</sup> As noted previously, the Applicant committed to conduct additional pre-construction avian and bat monitoring with radar that is much more extensive than what has been required by other applicants to date, in order to establish a specific baseline for post-construction analysis given the unique location of this small demonstration project. That commitment was not intended as a mechanism to fill in informational gaps regarding the “nature of the probable environmental impact” of the project, which are already well documented in the extensive record before the Board. To penalize the Applicant for going above and beyond would disincentivize any future exploration of innovative new approaches to electricity generation.

Second, these conditions ensure that the Applicant will – under the supervision of Staff, which includes ODNR – take reasonable steps to minimize the actual adverse environmental impacts of the project. Conditions 15 and 17-19 relate to Avian and Bat Monitoring Plan, Aquatic Monitoring Plan, and the Avian and Bat IMP that already exist in final or near final form and are before the Board in the record.<sup>155</sup> These conditions simply provide for finalization and implementation of these documents in a process visible to both Staff and the public, just as contemplated in *Buckeye*, allowing for further Board scrutiny should the Applicant depart from the bounds of its approved certificate.

The Residents’ assertion that implementation of these conditions will be left to “ODNR, with unbounded discretion and subject to no Board review, as the product of future negotiations between the Applicant and ODNR,”<sup>156</sup> is simply not consistent with the facts. As detailed in Conditions 15 and 17-19, Staff will work alongside ODNR in reviewing the details of the monitoring and mitigation plans to ensure compliance with the certificate conditions. The results of those reviews will be written documents either available as public records or specifically filed in this docket. If the Residents believe the final plans that the Applicant seeks to implement represent a departure from what was approved by the Board, they may seek enforcement of the relevant conditions under R.C. Sections 4906.97 through 4906.99. Accordingly, this Revised Stipulation is entirely consistent with the approach endorsed in *Buckeye*, where even more

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<sup>154</sup> *Buckeye* ¶¶ 16, 17; See also *Id.* ¶ 19 (Certificate conditions requiring certain actions after certificate issuance, such as additional submissions to Staff, are permissible when “designed to ensure compliance with the conditions already ordered by the board.”).

<sup>155</sup> App. Ex. 3, Ex. A, Avian and Bat Monitoring Plan and Aquatic Monitoring Plan; App. Ex. 31, Att. REG-2, Avian and Bat IMP. This document will be updated to comply with all requirements in the Revised Stipulation.

<sup>156</sup> Res. Br. at 33.

significant issues were left for review prior to construction, yet the Supreme Court of Ohio was confident that Staff review and public scrutiny would call the Board's attention to any implementation deviating from the approved certificate.<sup>157</sup>

Finally, it is important to note that approval of the conditions contested by the Residents is consistent with the Board's own implementing regulations, which in several places lay out a process where certain implementation details will be left until after issuance of a facility certificate. For example, as recently as May 2019, the Board approved a certificate amendment for a natural gas combined cycle plant with a condition for the applicant to develop a Stormwater Pollution Prevention Plan for a new temporary laydown area under the auspices of the Ohio Environmental Protection Agency.<sup>158</sup> On May 16, 2019, the Board approved certificates for two solar facilities with conditions requiring post-issuance finalization of public information programs, landscape and lighting plans, vegetation management plans, frac-out contingency plans for horizontal directional drilling, cultural resources survey programs, and more.<sup>159</sup> On February 21, 2019, the Board approved an overhead transmission line project with a condition providing that, post-approval, the applicant would retain a herpetologist approved by ODNR to determine if the project route included suitable habitat for the timber rattlesnake and, if so, develop an avoidance/minimization plan.<sup>160</sup>

Nor is this a recent trend: a natural gas plant certificate approved by the Board in 2013 provided for post-issuance development of a cultural resources mitigation plan;<sup>161</sup> a 2000 certificate for another natural gas facility contained a condition requiring post-issuance design of a fire protection system and engagement of an independent consultant to survey for existence of the Indiana bat and the American burying beetle followed by avoidance/mitigation measures as directed by USFWS and Staff;<sup>162</sup> a 1991 certificate for a pumped storage hydroelectric project included a condition requiring the applicant to, post-issuance, conduct additional vegetative field studies, and submit a deep drilling program plan to determine conditions in areas underlying a

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<sup>157</sup> *Buckeye* ¶ 25.

<sup>158</sup> *In re Application of South Field Energy LLC*, Case No. 19-638-EL-BGN, Order (May 16, 2019).

<sup>159</sup> *In re Application of Hecate Energy Highland LLC*, Case No. 18-1334-EL-BGN, Order (May 16, 2019); *In re Application of Hardin Solar Energy II, LLC*, Case No. 18-1360-EL-BGN, Order (May 16, 2019).

<sup>160</sup> *In re Application of AEP Ohio Transmission Co., Inc.*, Case No. 18-30-EL-BTX, Order (Feb. 21, 2019).

<sup>161</sup> *In re Application of Oregon Clean Energy, LLC*, Case No. 12-2959-EL-BGN, Order (May 1, 2013).

<sup>162</sup> *In re Application of Rolling Hills Generating, LLC*, Case No. 00-1616-EL-BGN, Order (June 18, 2001).

proposed reservoir and power house;<sup>163</sup> and a nuclear generation facility was approved by the Board in 1977 with regard to how to store or dispose of spent fuel.<sup>164</sup> There are many more such examples over the last few decades.

Both before and since the *Buckeye* decision, the Board has approved certificates under R.C. Section 4906.10 that contain exactly the same type of conditions about which the Residents complain here – ones that are based on a detailed understanding of probable adverse environmental impacts, but that leave specific monitoring and mitigation details for after issuance of the certificate. Not only is that approach consistent with R.C. Section 4906.10, it is also vital to enabling applicants to reasonably invest in the state of Ohio. Requiring an applicant to carry out extensive studies and map out every final detail of a project before certificate issuance, down to “whether white or gray screws are used in the control room,” would, as the Supreme Court of Ohio has recognized in *Buckeye*, be “unworkable”<sup>165</sup> – especially for a small demonstration project such as the one proposed by the Applicant. The Revised Stipulation draws the line in a reasonable place, with the “nature of the probable environmental impact” of the project clearly described in the existing studies and testimony in the record, and enforcement of the certificate conditions after the issuance of the certificate. The results of the Staff’s review and acceptance will be publicly known and noncompliance will be subject to enforcement by the Board if the actions are not consistent with the certificate and its conditions. That process satisfies R.C. Section 4906.10, which was designed to provide a reasonable process for project siting, not as a mechanism to erect artificial obstacles to project approval.

**5. The Applicant presented expert witnesses who provided objective scientifically-based studies and testimony that support a determination by the Board that the criteria in R.C. Sections 4906.10(A)(2) and (3) have been satisfied.**

According to the Residents, Dr. Gosse was the “only independent avian radar expert who has testified in this case.”<sup>166</sup> However, they tend to forget that their expenses, as well as those of their experts, are being paid for by Murray Energy.<sup>167</sup> Needless to say, Murray Energy has made

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<sup>163</sup> *In re Application of Summit Energy Storage, Inc.*, Case No. 89-1302-EL-BGN, Order (June 17, 1991).

<sup>164</sup> *In re Application of Toledo Edison Co.*, Case No. 01-00002, Order (Aug. 22, 1977).

<sup>165</sup> *Buckeye* ¶ 30.

<sup>166</sup> Res. Br. at 13.

<sup>167</sup> App. Exs. 42, 47, and 48; Tr. V at 1192-1197; Tr. VI at 1281, 1396-1397, 1487.

its position on renewable energy clear and it is determined to oppose projects such as the Icebreaker Project - no matter the cost.<sup>168</sup> Thus, it is hypocritical for the Residents to assert that the expert witnesses presented by the Applicant are not adhering to their code of ethics by presenting their objective professional opinions regarding the avian and bat assessment for the project, while claiming that their experts, who are paid by Murray Energy, are independent.

As reflected in the record, the Applicant's witnesses that testified on avian and bat issues have also worked for and provided expert opinions on behalf of USFWS, USGS, and other government agencies, as well as public universities and environmental conservation organizations.<sup>169</sup> In addition, Dr. Gordon worked on behalf of and provided expertise with regard to wildlife issues in the area of offshore wind for the U.S. Bureau of Ocean Energy Management ("BOEM"), and the U.S. Department of Interior ("USDO"). In fact, Dr. Gordon's research for BOEM and USDO resulted in a number of government technical reports, peer-reviewed scientific publications, and professional presentations.<sup>170</sup>

It is notable that Dr. Gosse's testimony consists of 2 pages of broad, unsubstantiated assertions that generically assert that the criteria set forth in R.C. Sections 4906.10(A)(2) and (3) are not satisfied. He cites to no facts or documents on the record to support his attempt to discount the voluminous record, including well-documented and supported testimony for the Applicant's expert witnesses that provides validation for the Board's determination and issuance of a certificate to the Applicant. Dr. Gosse's bald statements without reference to any record support are not sufficient to rebut the authenticated expert testimony presented by the Applicant. While Dr. Gosse is a former employee of USFWS, that tie alone does not give his statement credence – especially in light of the fact that his statements contradict the final findings of USFWS, which concluded that the Icebreaker Project has “limited direct risk to migratory birds and bats.”<sup>171</sup>

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<sup>168</sup> Counsel for the Residents filed a request on behalf of the Campaign for American Affordable and Reliable Energy, LLC (“CAARE”) to be added to the service list in this docket. CAARE, a coal industry interest group, made previous unsuccessful attempts to intervene in proceedings before this Board in order to “preserve and protect the coal industry..., to challenge renewable portfolio standards and financial and tax incentives for alternative energy sources on both a state and federal level.” *In re Application of Paulding Wind Farm, LLC*, Case No. 15-2030-EL-BGA, et al., Entry (Apr. 6, 2016) at 5. Note that both Murray Energy and CAARE are well-known opponents of clean energy. See e.g., Dave Anderson, *Murray Energy's War on Clean Energy in Ohio*, (Mar. 10, 2019), <https://pv-magazine-usa.com/2018/03/10/murray-energys-war-on-clean-energy-in-ohio/>

<sup>169</sup> App. Ex. 33 at 2, Att. WPE-1; App. Ex. 32 at 2, Att. TJM-1; App. Ex. 31 at 2, Att. REG-1.

<sup>170</sup> App. Ex. 30 at 2, Att. CEG-1.

<sup>171</sup> App. Ex. 6, Att. 6, 2018 USFWS Letter.

The Residents continue to ignore the documentation and information on the record that pertain to the impact on birds and bats. Specifically, the 2016 Risk Assessment, the 2018 Risk Summary and all of the supporting studies and plans provide a strong basis for the issuance of a certificate in this matter. Further, the material differences between the 9/4 Stipulation and the Revised Stipulation, coupled with the record evidence supported by experts from the Applicant and ODNR, provide a solid basis that enables the Board to make the necessary determinations under the statute. Contrary to the Residents' assertions, the record in this case and the Revised Stipulation do set forth scientifically-valid data and identify scientifically-validated technologies and methodologies sufficient for the Board to make the statutorily-mandated findings and determinations under R.C. Section 4906.10, including the determination of the probable environmental impact of the facility and that the facility represents the minimum adverse environmental impact considering the state of available technology and the nature and economics of various alternatives and other pertinent considerations.

**C. The record establishes that the facility will serve the public interest, convenience, and necessity and satisfies R.C. Section 4906.10(A)(6).**

Dr. Richard E. Brown testified on behalf of the Residents for the purported purpose of disputing the "public need" for the facility under R.C. Section 4906.10(A)(1). However, as stated previously, R.C. Section 4906.10(A)(1) is not applicable to this generation facility, as that statutory provision only applies to gas pipeline and electric transmission facilities. The Residents' attempt to frame Dr. Brown's testimony as addressing R.C. Section 4906.10(A)(6) and the question of whether the facility will serve the public interest, convenience and necessity is false. However, a review of his testimony reflects that Dr. Brown is actually testifying regarding whether or not PJM Interconnection, LLC ("PJM") needs the facility for baseload generation and whether the price to be paid through the Applicant's PPA with CPP would be higher than the PJM prices.<sup>172</sup> Dr. Brown states that "[t]he facility is not needed for renewable energy; renewable energy can be currently purchased for a fraction of the PPA price."<sup>173</sup> As stated in the brief filed by the Residents, in his testimony, Dr. Brown opines:

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<sup>172</sup> Res. Br. at 38-39; Res. Ex. 21 at 4-6.

<sup>173</sup> Res. Br. at 39; Res. Ex. 21 at 6.

1. The facility is not economically viable.
2. Large-scale wind facilities are also not financially viable in the Great Lakes.
3. The development of offshore wind facilities will not eliminate the need for new traditional baseload generation.
4. Production tax credits for wind generation facilities result in market distortions that directly conflict with the performance and operational needs of the electric system.
5. CPP ratepayers should not be forced to subsidize the facility through the PPA.

Contrary to the Residents' assertions, these arguments are not well-made in this proceeding. This is a proceeding considering the Application for a generation facility. The vast majority of Dr. Brown's testimony addresses the first provision in R.C. Section 4906.10(A) that is only applicable to gas pipeline and electric transmission facilities – not the Icebreaker generation project. Further, this case does not involve a large-scale wind facility, as mentioned by the Residents. This case only addresses the proposed small-scale, 6-turbine project proposed by the Applicant. The Residents' attempt to broaden the scope of this proceeding beyond the proposal presented by the Applicant is inappropriate. The remainder of Dr. Brown's opinions refer to the decision made by CPP to enter into the PPA with the Applicant – which is not relevant for this proceeding.

The Residents' attempt to frame Dr. Brown's opinions as a review of whether the facility is in the public interest, convenience and necessity under R.C. Section 4906.10(6) is deceiving and reprehensible. Therefore, as thoroughly documented and supported in the Applicant's brief, the Applicant's September 21, 2018 Motion in Limine to strike portions of Dr. Brown's testimony that are outside the scope of this proceeding and include material that goes beyond the scope of concerns raised by the Residents should be granted.<sup>174</sup>

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<sup>174</sup> See App. Br. at 10-15.

### III. CONCLUSION

As thoroughly set forth in the Applicant's brief and supported herein, all of the criteria in R.C. Section 4906.10 have been addressed by the Stipulating Parties in the Revised Stipulation and on the record in this matter. In addition, all 3 prongs of the test utilized by the Board in its consideration of a stipulation have been met.<sup>175</sup> Therefore, for the foregoing reasons, the Board should adopt the Revised Stipulation without modification and issue a certificate to Icebreaker.

Respectfully submitted,

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<sup>175</sup> See *Id.* at 53-55.

## CERTIFICATE OF SERVICE

The Ohio Power Siting Board's e-filing system will electronically serve notice of the filing of this document on the parties referenced in the service list of the docket card who have electronically subscribed to this case. In addition, the undersigned certifies that a copy of the foregoing document is also being served upon the persons listed below via electronic mail this 15th day of November, 2019.

/s/ Christine M.T. Pirik

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Summary: Brief - Reply Brief of Icebreaker Windpower Inc. electronically filed by Christine M. T. Pirik on behalf of Icebreaker Windpower Inc.