

**BEFORE  
THE OHIO POWER SITING BOARD**

In the Matter of the Ohio Power Siting	)	
Board's Review of Rule 4906-4-08 of the	)	Case No: 16-1109-GE-BRO
Ohio Administrative Code.	)	

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**INITIAL COMMENTS OF  
THE MID-ATLANTIC RENEWABLE ENERGY COALITION**

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**I. INTRODUCTION**

On September 22, 2016, the Ohio Power Siting Board ("Board") issued an entry requesting comments from interested persons on staff's proposed changes to Ohio Administrative Code ("OAC") Rule 4906-4-08 and new OAC Rule 4906-4-09. The initial comments are due on October 24, 2016, and reply comments are due on November 8, 2016. In accordance with the Board's schedule, the Mid-Atlantic Renewable Energy Coalition ("MAREC") submits the following initial comments. Those companies and/or organizations participating in MAREC's comments include: Avangrid Renewables, Inc.; EverPower Wind Holdings, Inc.; Apex Clean Energy, Inc.; American Wind Energy Association; Capital Power Corporation; and EDP Renewables North America.

In these comments, MAREC strives to assist the Board in finding a reasonable balance in regulation in order to benefit both the public interest and the need to encourage and support the growth of wind energy in Ohio. The wind industry supports Ohio's economic growth, as well as the landowners, businesses, and communities who benefit from these wind projects and the environmental benefits that comes with wind development. For example, Paulding County

receives approximately \$2.5 million in taxes annually as a result of wind farm development in its county.<sup>1</sup> Likewise, Van Wert County receives approximately \$2 million in taxes annually as a result of wind development.<sup>2</sup> It should also be noted that these local benefits do not take into consideration the annual lease payments to landowners in those counties, as well as the millions of dollars in local economic activity generated by wind farm development. For example, the *Blue Creek Farm* in Paulding and Van Wert counties provided more than 500 construction jobs, generated \$25 million in local economic activity, and involved more than 30 Ohio companies.

However, MAREC believes it is important to point out that Ohio falls behind its neighboring states in deployment of clean energy technology.<sup>3</sup> An improved regulatory environment could make Ohio a more attractive location for companies with renewable goals to site job creating and energy intensive facilities. If the regulatory environment is made stronger, Ohio will have the opportunity to capture more of the growing wind market. For example, Amazon's decision to locate in Ohio was bolstered by the availability of wind energy in Paulding County.<sup>4</sup> There are numerous other companies with renewable energy goals that may consider locating in Ohio if the regulatory environment supports fixed cost, clean energy to power their facilities.<sup>5</sup>

With this information in mind, it is more important than ever that the Board adopt and maintain sensible wind energy development regulations that will bring more investment in Ohio

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<sup>1</sup> *Paulding Wind Farm II, LLC*, Case No. 10-369-EL-BGN; *Blue Creek Wind Farm, LLC*, Case No. 09-1066-EL-BGN (*Blue Creek Farm*).

<sup>2</sup> *Blue Creek Wind Farm, LLC*, Case No. 09-1066-EL-BGN.

<sup>3</sup> The following is a comparison of wind industry capacity and investment in Ohio and its neighboring states: Ohio 444 megawatts (MW) \$900 million; Michigan 1,767 MW \$3 billion; Indiana 1,895 MW \$4 billion; Illinois 3,842 MW \$7.7 billion; and Pennsylvania 1,340 MW \$2.7 billion.

<http://www.awea.org/resources/statefactsheets.aspx?itemnumber=890>

<sup>4</sup> *Paulding Wind Farm II, LLC*, Case No. 10-369-EL-BGN; <https://aws.amazon.com/about-aws/sustainability/>

<sup>5</sup> <http://there100.org/companies>

in order to support and benefit the public interest. In this spirit, MAREC respectfully submits the following comments for the Board's consideration.

## **II. DISCUSSION AND SUGGESTED AMENDMENTS TO THE RULES**

### **A. Rule 4906-4-08 Health and safety, land use and ecological information**

#### **1. Rule 08(A)(3)(b)(i)<sup>6</sup> – Operational sound information for applications**

MAREC requests that throughout the rules the term “noise” be eliminated and replaced with the term “sound.” “Noise” has a negative connotation that indicates loud, harsh, or disturbing sound. It would be more appropriate to use a descriptive term that is not pejorative. The term “sound” more correctly denotes what is being measured in accordance with the wind farm requirements in new Rule 09.

As explained in greater detail below, it is crucial for the wind industry in Ohio that the sound level be measured at an appropriate and reasonable location. MAREC's concern is that, if the sound level is measured at the property lines (as proposed throughout the rules) wind project development in Ohio will be devastated. Therefore, sound measurements should focus on the applicable residences that could potentially be affected by the sound level, i.e., structures that are inhabited.

With regard to Rule 08(A)(3)(b)(i), MAREC requests that the sound level be measured within 4,000 feet of the turbine location. 4,000 feet represents a reasonable distance that captures the information necessary for purposes of this rule. Measuring from the turbine location provides a more precise analysis of sound impact than from “project boundary.”

With regard to the appropriate computer software to be used for modeling, the standard model that is typically used in the industry is the International Organization of Standardization

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<sup>6</sup> For ease of readability, rule numbers will be referred to without reference to the chapter or division number.

(ISO) ISO 9613.<sup>7</sup> Therefore, MAREC recommends that the rule point to this modeling standard as an example of the type of modeling that would be acceptable.

Accordingly, with regard to Rule 08(A)(3)(b)(i), MAREC recommends that this rule be revised to provide that the operational sound level description for a wind farm address:

...cumulative operational ~~sound~~<sup>noise</sup><sup>8</sup> levels from all of the project's proposed turbines ~~at the property boundary for each non-participating residence-property adjacent to or within 4,000 feet of the turbine location~~<sup>project area</sup>, under both day and nighttime operations. Non-participating residence~~property~~, for the purpose of this rule, refers to ~~residences~~<sup>properties</sup> not under lease or agreement with the applicant ~~regarding any components of the facility or project~~. The applicant shall use generally accepted computer modeling software (~~develop~~<sup>appropriate</sup> for wind turbine ~~sound~~<sup>noise</sup> modeling, such as those based on the International Organization for Standardization ISO 9613~~measurement~~) or similar wind turbine ~~sound~~<sup>noise</sup> assessment methodology, including consideration of broadband, tonal, and low- frequency ~~sound~~<sup>noise</sup> levels.<sup>9</sup>

## **2. Rules 08(C)(2) and (C)(2)(c) – Wind farm maps**

Rule 08(C)(2) requires an applicant to provide a map of the setbacks for wind turbines in relation to several structures, including “gas pipelines.” While MAREC has no objection to the amendments in Rule 08(C)(2) proposed by staff that pertain to the inclusion of roadways on the maps, the inclusion of gas distribution lines in the mapping requirement would be problematic due to the absence of information necessary to locate the gas utilities’ low pressure distribution lines. Thus, identifying and mapping gas distribution lines would be extremely difficult.

The current Board rules became effective in December 2015. Prior to that time, there was no requirement that wind farm applicants provide a map that identifies the distance from a turbine to electric transmission lines, gas pipelines, or hazardous liquid pipelines. MAREC

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<sup>7</sup> [http://www.iso.org/iso/catalogue\\_detail.htm?csnumber=20649](http://www.iso.org/iso/catalogue_detail.htm?csnumber=20649).

<sup>8</sup> Consistent with MAREC’s request that the term “noise” be replaced with the word “sound,” throughout the comments, MAREC will include that proposed revision in the edits to the rules mentioned.

<sup>9</sup> In order to clearly present MAREC’s proposed edits to this rule, the redlining contained in staff’s proposed new rule, which was in Attachment A of the Board’s September 22, 2016 entry, have been removed so that the redlining in this comment reflects MAREC’s proposal.

supports the Board's requirement that utility structures be identified, measured, and included in the maps. However, gas pipelines should be treated in the same fashion as electric lines, and only the identification and measurement of the transmission lines should be required.

Therefore, MAREC requests that Rule 08(C)(2) be revised to read:

...Include on the map the setbacks for wind turbine structures in relation to property lines, habitable residential structures, electric transmission lines, high pressure gas transmission pipelines, and state and federal highways....

Likewise, MAREC requests that Rule 08(C)(2)(c) be revised to read:

The distance from a wind turbine base to any electric transmission line, high pressure gas transmission pipeline, hazardous liquid pipeline....

### **3. Rule 08(C)(3) – Setback waivers**

MAREC is supportive of staff's endeavor to clarify the current waiver process and to provide more specifics on the content of the waiver and the procedure to be followed. It is clear that this rule, as amended, merely lays out the process to obtain a waiver, but does not vary from the prior interpretation in terms of from whom a waiver is required. MAREC agrees that the current intent of the rule should be preserved. To that end, MAREC recommends that the initial paragraph in this rule be revised, as follows, to more closely track the language in the statute:<sup>10</sup>

...[t]he owner(s) of property adjacent to any the wind farm property may waive the application of the minimum setback to that property pursuant to the procedures set forth in this rule~~requirements by signing a waiver of their rights....~~<sup>11</sup>

This recommendation preserves the directive in the statute and supports staff's clarification of and amendments to the setback waiver provisions in the current rules.

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<sup>10</sup> Ohio Revised Code ("RC") 4906.20(B)(2)(c).

<sup>11</sup> In order to clearly present MAREC's proposed edits to this rule, the underlining contained in staff's proposed rule, which was in Attachment A of the Board's September 22, 2016 entry, has been removed so that the redlining in these comments reflects MAREC's proposal.

**4. Rules 08(D)(1), (3) - (4), and (4)(d) – Landmark mapping, recreation and scenic areas, and visual impact of facility**

These rules set forth the information an applicant must provide regarding cultural and archaeological resources, and establishes the distance from the project area that must be considered and evaluated by the applicant in its application. In its proposal, staff recommends that the current 5-mile study area be increased to 10 miles. MAREC respectfully requests that the 5-mile study area be retained.

MAREC appreciates and supports the importance of applicants providing sufficient information in their applications so that the Board is able to view the full picture of the project site and the surrounding resources. However, the proposal to double the required distance for the study of resources appears to be unwarranted and arbitrary - considering that for over a decade there were no measurement requirements for visual impact and scenic quality, and the measurement for recreational areas was just 1 mile. As shown in the chart below, prior to December 2015 when the current rules went into effect, all of the required measurements for these resources have been between 0 and 5 miles.

Rule Numbers Effective December 2015	Resource	Prior to December 2015 <sup>12</sup>	Effective December 2015	Staff's Proposed Distance
08(D)(1)	Landmarks	5 miles	5 miles	10 miles
08(D)(3)	Recreation and scenic areas	1 mile	5 miles	10 miles
08(D)(4)	Visual impact	No measurement	5 miles	10 miles
08(D)(4)(d)	Visual impact and scenic quality	No measurement	10 miles	10 miles

<sup>12</sup> The following are the corresponding rule numbers for the current rules and the previous rules set forth in the chart: current Rule 08(D)(1) and previous Rule 4906-17-08 (D)(1); current Rule 08(D)(3) and previous Rule 4906-17-08(D)(5); current Rules 08(D)(4), (D)(4)(d) and previous Rule 4906-17-08(D)(6).



While there may be a rare situation where the staff may request that the measurements be slightly broader than 5 miles, MAREC is unaware of any situation where the applicant has not worked with staff to ensure that staff receives all of the necessary information. As such, MAREC believes that the increase to a 10-mile requirement is unwarranted. MAREC believes it would be more appropriate to handle any issues on a case-by-case basis, rather than establishing a requirement that mandates a more costly study up front.

MAREC points out that the expansion of the measurement for these resources is contrary to the Governor's Common Sense Initiative,<sup>13</sup> because it fails to balance the objectives of the regulation, is unnecessary, and needlessly burdensome. MAREC also notes that, in accordance with RC 121.82, a business impact analysis ("BIA")<sup>14</sup> regarding the proposed rules was included as Attachment C to the Board's September 22, 2016 entry requesting comments. Item 14 of the BIA asked for the estimated cost of compliance with the rules and the scope of the impacted business community. In light of the potential cost consequences to the wind industry to comply with the extend study area, the statement in the BIA that costs with this revised rule will not vary and the business community will not be affected is incorrect. The wind developers will be negatively affected by these amendments and, by doubling the study distance, additional costs will be incurred.

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<sup>13</sup> "Establishing the Common Sense Initiative," Executive Order 2011-01K (Jan. 10, 2011).

<sup>14</sup> Under RC 121.82, the Board must conduct a BIA regarding the rules and provide the draft rules and the BIA to Ohio's Common Sense Initiative office. Led by Lt. Governor Mary Taylor, this office was "established to create a regulatory framework that promotes economic development, is transparent and responsive to regulated businesses, makes compliance as easy as possible, and provides predictability for businesses."  
<http://governor.ohio.gov/PrioritiesandInitiatives/CommonSenseInitiative.aspx>

Therefore, MAREC requests that the 5-mile radius for the measurements for cultural and archaeological resources be retained in Rules 08(D)(1), (3) - (4), and (4)(d), and that the proposed revisions pertaining to the measurements be rejected.

**5. Rule 08(E)(2)(c)(ii) – Agricultural information**

MAREC recommends that this rule be revised to acknowledge that some agreements provide for the repair of field tile systems to be paid for in an alternative manner than at the applicant's expense. In addition, the rule should confirm that the landowner's right to manage the property is supported and preserved. Therefore, MAREC requests that the rule be revised as follows:

Timely repair of damaged field tile systems to at least the original conditions, at the applicant's expense, unless otherwise agreed to by the property owner.

**B. Rule 4906-4-09<sup>15</sup> Regulations associated with wind farms**

**1. Rule 09(A)(5)(c)– Change, reconstruction, alteration, or enlargement**

Rule 09 only applies to wind farms and new Rule 09(A)(5)(a) affirms that wind farm applicants should follow the amendment process set forth in the rules. Rule 09(A)(5) further clarifies that minimal modifications that pose no significant additional adverse environmental impacts and substantially comply with the conditions of a certificate are not considered to be amendments to the certificate. Therefore, with regard to Rules 09(A)(5)(a) and (b), MAREC supports staff's clarification of the amendment process.

However, MAREC disagrees with new proposed Rule 09(A)(5)(c), which establishes a brand new procedure for the review of modifications proposed by wind farm applicants. This

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<sup>15</sup> In order to clearly present MAREC's proposed edits to new Rule 09, the underlining contained in staff's proposed new rules, which were contained in Attachment B of the Board's September 22, 2016 entry, has been removed so that the redlining in these comments reflects MAREC's proposal.

procedure includes the potential for the filing of objections and a staff recommendation, and the possibility that the requested modification would be suspended. MAREC is extremely concerned about the additional burden and expense this new requirement will place on the development of wind farms in Ohio.

This new requirement is not supported by statute. RC Chapter 4906 only requires and sets forth procedures for the filing of applications for certificates and amendments to such certificates. The statute does not contain a process for the filing of a modification to a certificate. Therefore, MAREC recommends that the Board follow the statute and reject proposed new Rule 09(A)(5)(c).

The proposed rule creates a new obstacle that wind developers must overcome in order to move forward with projects that have already been fully vetted and approved by the Board. Requiring all nonsignificant changes and modifications to be filed with the Board will result in unnecessary expense and could disrupt construction and future development of wind farm facilities in Ohio. Not only does this provision create a barrier to Ohio's economic growth and development, but it discourages developers' from integrating new updated technologies into their facilities. These new technologies could benefit all stakeholders and maximize the facilities' production and lower electricity costs for consumers.

Moreover, new Rule 09(A)(5)(c) creates a new administrative process that is contrary to the Governor's Common Sense Initiative. The new rule disregards the initiative's requirement that the Board balance the critical objectives of the regulation and the cost of compliance, and eliminate rules that are needlessly burdensome or that unnecessarily impede business growth. The new procedure in Rule 09(A)(5)(c) would significantly impede business growth in the wind industry by delaying projects and threatening to suspend projects for further review. The

potential cost consequences of new Rule 09(A)(5)(c) could be fatal to the wind projects that often must respond to requests for proposals very quickly. The process would create uncertainty and potentially place the developers' financial support at risk.

In response to Item 14(a) of the BIA, staff states that "the only businesses impacted by the rules would be entities seeking to build electric generation facilities and wind farms." MAREC respectfully disagrees. The only applicants actually affected by this rule are wind farms. Applicants for generation facilities that are not wind farms will not be burdened by Rule 09(A)(5)(c). In fact, no other major utility facility (i.e., electric transmission and substation facilities or gas pipeline facilities) will be expected to file "modifications" with the Board and be subjected to possible suspension of and delay of their projects, even though they too experience the same situation with de minimis modifications to engineering after the certificate is issued. Moreover, businesses that support wind farms will be negatively impacted by this rule if the wind facilities cannot be built due to the unwarranted delay and expense caused by the proposed process. Customers for wind power will also be affected by delays and increased costs.

MAREC also disagrees with the statement in Item 14(b) of the BIA that costs of compliance with Rule 09(A)(5)(c) are not expected to vary from the costs of complying with the current rule. On the contrary, the cost of compliance with this rule could be significantly higher for wind developers than under the current regulatory process, which only requires wind farm applicants to file actual amendments to certificates. Such costs would be detrimental to the wind industry and could result in Ohio losing out on the opportunity to bring additional jobs to the state through the construction and operation of new wind facilities. Ohio could also lose out on the opportunity to attract new companies that located in Ohio to take advantage of access to new

wind facilities.<sup>16</sup> MAREC believes that, if the requirement for modifications is not rejected, then Item 14 in the BIA should be revised to reflect that wind developers, as well as other businesses that support the wind industry in Ohio, will be negatively impacted by this rule.

Furthermore, MAREC points out that for many years certificate conditions approved by the Board have acknowledged that some unsubstantial engineering modifications will be expected prior to construction (this includes wind farms, as well as other generation, substation, and transmission projects). The conditions in those certificates require that, prior to the preconstruction conference, the applicant submit to staff, for review and approval, detailed engineering drawings of the final facility design, so that staff can determine that the final design is in compliance with the certificate.<sup>17</sup> These conditions recognize that reasonable, but minor, adjustments may be necessary prior to submission of the final engineering drawings; hence the reference to a “final” design. Thus, the very language of certificate conditions approved by the Board permit these minor modifications in order to reflect engineering necessities.

The expectation that all modifications, even those that do not equate to an amendment, must be formally filed is untenable and invites unnecessary uncertainty, delay, and expense. Therefore, new Rule 09(A)(5)(c) should be rejected.

Even though MAREC strongly opposes Rule 09(A)(5)(c), we recognize the Board’s need to receive information concerning modifications and to be apprised of the progress of

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<sup>16</sup> *Paulding Wind Farm II, LLC*, Case No. 10-369-EL-BGN; <https://aws.amazon.com/about-aws/sustainability/>

<sup>17</sup> *Carroll County Energy, LLC*, Case No. 13-1752-EL-BGN, Order (Apr. 28, 2014) at 21; *NTE Ohio, LLC*, Case No. 14-534-EL-BGN, Order (Nov. 24, 2014) at 17; *American Transmission Systems, Inc.*, Case No. 11-2754-EL-BSB, Order (Dec. 17, 2012) at 15; *Hardin Wind Energy, LLC*, Case No. 09-470-EL-BGN, Order (Mar. 22, 2010) at 34-35; *Paulding Wind Farm, LLC*, Case No. 09-980-EL-BGN, Order (Aug. 23, 2010) at 37; *Blue Creek Wind Farm, LLC*, Case No. 09-1066-EL-BGN, Order (Aug. 23, 2010) at 37; *Champaign Wind, LLC*, Case No. 12-160-EL-BGN, Order (May 28, 2013) at 78; *Clean Energy Future-Lordstown, LLC*, Case No. 14-2322-EL-BGN, Order (Sept. 17, 2015) at 27; *AEP Transmission Co.*, Case No. 11-4505-EL-BTX, Order (Mar. 11, 2013) at 14.

construction and installation of the projects on an ongoing basis. Therefore, MAREC would be willing to work with the Board staff to define what constitutes a modification, so that it would be clear what needs to be filed and what does not need to be filed because it is a modification.

2. **Rule 09(C)(6) – Aesthetics and recreational land use – photographic simulations**

As stated previously, MAREC supports all efforts to ensure that sufficient information is provided in the application for review and consideration of the important resources surrounding the project area. However, new Rule 09(C)(6) is problematic for wind farm applicants because it restricts the type of modeling wind farm applicants can use to illustrate the facilities and requires that applicants use only photographic simulations.

Initially, MAREC points out that the limitation in this rule represents a significant departure from the rule that was in effect prior to December 2015, which permitted applicants to depict the proposed facility from either “photographic interpretation or artist’s pictorial sketches.”<sup>18</sup> MAREC also notes that, in this rulemaking docket, staff is proposing that current Rule 08(D)(4)(e) be retained as written; this section allows the applicant to provide “photographic simulations or artist’s pictorial sketches” of the proposed facility. Thus, in the case of a wind farm applicant it appears that new Rule 09(C)(6) contradicts Rule 08(D)(4)(e) and imposes on wind farm applicants a more stringent requirement; forcing wind farm applicants to use the more costly photographic simulations even if there is a more economically feasible alternative that captures the same information. Only wind farm applicants are affected by this rule; other applicants before the Board for generation, substation, and transmission projects are not so constrained.

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<sup>18</sup> Previous Rule 4906-17-05(B)(3)(d).

Therefore, MAREC believes that, as proposed, new Rule 09(C)(6) discriminates against wind farm applicants and does not comply with the Governor's Common Sense Initiative directive requiring the Board to ensure that the rules are not needlessly burdensome and do not unnecessarily impede business growth. In addition, if this rule is not revised to permit wind farm applicants to obtain the information through reasonably cost-effective methods, then Item 14 in the BIA must be revised to reflect that wind developers will be negatively impacted by this rule and that the cost of compliance with Rule 09(C)(6) will vary significantly from the costs of complying with the current Rule 08(D)(4)(e).

Therefore, MAREC strongly recommends that new Rule 09(C)(6) be revised to read:

The applicant shall provide photographic simulations or artist's pictorial sketches of the proposed facility....

**3. Rules 09(D) and (D)(1), (2), (6), and (8)-(9) – Wildlife protection**

This rule sets forth requirements for the avoidance and minimization of impacts to wildlife species. Initially, MAREC notes that wind developers currently work very closely with governmental agencies and stakeholders to ensure that any concerns regarding wildlife are addressed and minimized to the greatest extent practical. Therefore, MAREC agrees that the concept set forth in new Rule 09(D) which spells out the requirements and procedure for working with the state agencies is a necessary part of any project.

However, it is also important to ensure that the requirements appropriately focus on the purpose behind the regulation, which is to preserve and protect wildlife species, with particular requirements for those that are listed as threatened or endangered species. Furthermore, MAREC recommends that the rules be revised to reflect the Board's jurisdiction over only state power siting matters. As with the state regulatory agencies, wind developers also work closely

with federal regulatory agencies on federal wildlife issues. However, due to the different requirements and threatened and endangered species included in the federal and state regulations, MAREC submits that any reference to the federal regulatory requirements should be removed from the Board's rules. This revision will then appropriately focus on the issues within the Board's jurisdiction and will acknowledge that issues under the jurisdiction of the federal regulatory agencies must be addressed at the federal level. With this in mind, MAREC recommends the following revisions to the new wildlife protection requirements in Rule 09(D).

**a. Rule 09(D) – State listed species**

The list of species in Ohio includes not only threatened and endangered species, but species of special concern and special interest, etc.<sup>19</sup> State law protects approximately 200 bird species. It is important that the regulations provide for focused review and protection of state threatened or endangered species. If the list of species identified for protection is expanded in the rules, it would be nearly impossible for wind developers to comply and the expense of compliance would be untenable.

Therefore, MAREC recommends the following language be included in the first paragraph of this rule to clarify the intent of the requirements so that the intent of the rules is clearly communicated:

...The applicant shall satisfy the following requirements to avoid and minimize impacts to ~~federal or~~ state listed species. State listed species, for purposes of this rule, include wildlife species listed as threatened or endangered in the state of Ohio.

**b. Rule 09(D)(1) - Alternative proposals**

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<sup>19</sup> <http://wildlife.ohiodnr.gov/portals/wildlife/pdfs/publications/information/pub356.pdf>



MAREC agrees that all reasonable science-based recommendations from the agencies should be addressed by the developer in a judicious manner. However, understanding that experts in any given wildlife field could differ on the proper resolution of any issue and how a particular recommendation should be addressed, MAREC requests that new Rule 09(D)(1) be revised, as follows, to afford the Board flexibility to propose and adopt its own recommendation, and to allow applicants to submit alternative proposals through the appropriate forum:

~~...If the United States fish and wildlife service, the Ohio department of natural resources division of wildlife, or board staff identify any recommendations for the avoidance of impacts to specific species, the applicant shall describe how it shall consider and reasonably address all recommendations in a manner satisfactory to the applicable wildlife management agency.~~

**c. Rule 09(D)(2) – Reporting period for state listed species**

MAREC believes it is essential that this rule appropriately identify the proper time period and procedure to be followed when a species is sighted. Not all species are readily identifiable and wildlife experts are not available onsite during construction. Furthermore, it is highly unlikely that a living animal will remain stationary long enough for a wildlife expert to arrive on site and identify the species. Therefore, MAREC recommends that this provision be revised to focus on the event that a carcass of a state listed species is encountered and identified.

While wind developers process this identification as expeditiously as possible, it is important that this rule recognize the need for positive identification and establish a reasonable time frame for notification to the Board staff. Therefore, MAREC recommends that the language be revised, as follows, to clarify when the reporting period begins:

If the carcass of a state listed species is encountered and positively identified during construction, the applicant shall contact the board staff within one business day to indicate how further impacts were avoided.~~twenty-four hours if federal or state listed species are encountered during construction activities.~~

Construction activities that could adversely impact the identified listed species~~plants or animals may~~shall be halted at the request of the board staff until an ~~reasonable~~appropriate course of action has been agreed upon by the applicant, board staff, and other applicable administrative agencies....

**d. Rule 09(D)(6) – Clearing and monitoring habitat**

As proposed, this new rule requires the applicant to conduct a mist-netting survey before tree clearing, in the event habitat for bird or bat species must be cleared outside of the seasonal cutting dates. However, it should be noted that mist-netting may not always be appropriate. In fact, depending on the size of the wooded areas, other types of monitoring may be more appropriate. Thus, MAREC recommends that, to ensure that the most appropriate and effective monitoring is conducted, this new requirement be revised as follows:

...If any habitat for federal or state listed bird or bat species~~of bird or bat habitat trees are found~~ that cannot be avoided is required to be cleared outside the seasonal cutting dates ~~specified by the Ohio department of natural resources~~, the applicant shall conduct biological monitoring in the area to be cleared~~a mist-netting survey~~ prior to such cutting.

**e. Rule 09(D)(7) – Mitigation plan during operation**

This proposed rule appropriately calls for a plan if mortality to birds and bats reaches a certain level. However, in an effort to help clarify this requirement, MAREC suggests that what constitutes “significant mortality” be clearly defined. This clarification will assist wind developers and the agencies determine when action is necessary. Therefore, MAREC recommends that the following revision be made to this new rule:

...During operation of the facility, if ~~significant mortality occurs to any state listed~~ birds or bats is determined to be at a level likely to impact regional populations, and is not already adequately mitigated through other permitting measures, the applicant will develop a mitigation plan or adaptive management strategy.

**f. Rule 09(D)(8) – Curtailment of turbine blades**

Initially, MAREC notes that there is a great deal of migratory season variability among bird species. Moreover, curtailment has not proven effective for birds during as this new rule seems to imply. Therefore, MAREC recommends that birds not be included in the curtailment strategy, but be handled in a manner that has proven effective for birds.

With the elimination of curtailment for birds, this rule can appropriately focus on bats and their fall migratory season. Accordingly, MAREC recommends the following revision to this new rule:

...the applicant shall describe its curtailment strategy for fall bat migration plans ~~for maintaining turbine blades in a stationary or nearly stationary stance during low wind speed conditions at night during bird and bat migratory seasons.~~

**g. Rule 09(D)(9) – Mitigation plan during construction**

As stated previously, MAREC works closely with the regulatory agencies to ensure that all reasonable and appropriate measures are taken in the event there is an impact to wildlife species. Should a significant event occur during construction, MAREC agrees that a mitigation plan or adaptive management strategy should be developed and vetted with the agencies. To that end, MAREC recommends the following clarification be included in this new rule:

If construction activities result in significant adverse impact to threatened or endangered wildlife species, ~~then mitigation measures may be prescribed to the applicant~~ will develop a mitigation plan or adaptive management strategy.

**4. Rule 09(E)(3) – Ice throw**

This rule provides a measurement of one kilogram of ice or less per year per turbine beyond the property line setback in order to show that the impact of ice throw satisfies safety considerations. MAREC is appreciates staff's effort to define an appropriate ice throw measurements for safety purposes. However, the new proposed rule is arbitrary and not based on any identifiable standard or measurement. Moreover, it is questionable whether such a

measurement requirement could even be implemented by the wind developers. Even assuming that such a measurement was possible, to accurately track this information on a turbine-by-turbine, property-by-property basis would be not only be impossible but cost prohibitive. Thus, this new requirement violates the Governor's Common Sense Initiative directive and Item 14 in the BIA would need to be revised to reflect the enormous costs to the wind developers to implement this provision. Therefore, MAREC strongly recommends that this provision be rejected and not adopted by the Board.

This being said, MAREC supports working collaboratively to find answers to the issue staff is trying to address in this proposed rule. Therefore, MAREC would be willing to work with staff to develop a reasonable and appropriate method to address this issue.

**5. Rules 09(F)(1)-(2) – Sound requirements**

MAREC appreciates and supports staff's efforts to provide requirements pertaining to the suitable sound levels for wind farms. To assist the Board in its consideration of this issue, MAREC is recommending additional language that will further focus and clarify the requirements for the benefit of ensuring that the requirements are appropriately applied.

It is essential that whatever restrictions are placed on the wind industry regarding sound take into consideration the reality of what such restrictions mean. If those restrictions are overly onerous, it will mean the end of wind development in Ohio. Therefore, it is crucial for the continuation and growth of the wind industry in Ohio that the sound level be measured at an appropriate and reasonable level.

MAREC emphasizes that measuring the sound level at the property lines, as proposed in the new rule, could eviscerate the wind project development in Ohio. MAREC urges the Board to keep the sound measurement as currently contemplated under the existing precedent in Ohio,

which are already well more restrictive than industry norms. MAREC asserts that the measurement requirements for sound should focus on the applicable residences that could potentially be affected by the sound level, i.e., structures that are inhabited. Since the Board's approval of the first wind application in 2010, the Board has adopted sound requirements that focused on either sensitive receptors, the exterior of any currently existing nonparticipating receptors, or nonparticipating residences.<sup>20</sup> Therefore, the Board should continue to maintain its long-standing precedent and should measure sound from these locations, not the property boundary as proposed in this new rule.

Measuring sound from property lines, instead of habitable structures/sensitive receptors, is not only illogical but an incredible encroachment on the property rights of landowners who wish to host wind turbines. Measuring these effects from property lines is also significantly (nearly 2 times) more restrictive than the already prohibitive statutory property line setback requirements.<sup>21</sup>

MAREC notes that the ambient plus 5 dBA measurement is a much more restrictive requirement than the already (industry leading) restrictive Ohio precedent decibel measurement from the outside of a residential structure, let alone from a property line. The proposed change to ambient plus 5 dBA is going to make things much more difficult, but putting the sound restriction on property lines will destroy wind development in Ohio.

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<sup>20</sup> *Paulding Wind Farm, LLC*, Case No. 09-980-EL-BGN, Order (Aug. 23, 2010) at 30; *Greenwich Windpark, LLC*, Case No. 13-990-EL-BGN, Order (Aug. 25, 2014) at 28; *Hardin Wind, LLC*, Case No. 13-1177-EL-BGN, et al., Order (Mar. 17, 2014) at 26; *Hardin Wind Energy, LLC*, Case No. 09-479-EL-BGN, Order (Mar. 22, 2010) at 28; *Northwest Ohio Wind Energy, LLC*, Case No. 13-197-EL-BGN, Order (Dec. 16, 2013) at 28; *Black Fork Wind Energy, LLC*, Case No. 10-2865-EL-BGN, Order (Jan. 23, 2012) at 44; *Blue Creek Wind Farm, LLC*, Case No. 09-1066-EL-BGN, Order (Aug. 23, 2010) at 31; *Paulding Wind Farm II, LLC*, Case No. 10-369-EL-BGN, Order (Nov. 18, 2010) at 32; *Champaign Wind, LLC*, Case No. 12-160-EL-BGN, Order (May, 28, 2013) at 88.

<sup>21</sup> RC 4906.20(B)(2)(a).

Moreover, requiring sound to be measured to the property line is contrary to the Governor's Common Sense Initiative because it will have negative consequences, not only on the wind industry, but on the communities and businesses that support the wind industry. In addition, if this new rule is not revised, then Items 14 (a) and (b) in the BIA will need to be edited to accurately reflect the catastrophic adverse impact and the resulting costs this new rule will have on the wind industry and other business that rely on and support wind development in Ohio.

In addition, with regard to Rule 09(F)((2), MAREC recommends that the second sentence reference daytime  $L_{eq}$ , rather than nighttime. Since the statement itself references daytime, MAREC believes that it is appropriate for the the daytime average ambient  $L_{eq}$  to be used.

Therefore, MAREC strongly recommends that the following revisions be made to new Rule 09(F)(1)-(2):

- (1) General heavy construction activities shall be limited to the hours of seven a.m. to seven p.m., or until dusk when sunset occurs after seven p.m., unless otherwise agreed to by the county or appropriate local government officials. Impact pile driving, hoe ram, and blasting operations, if required, shall be limited to the hours between ten a.m. to five p.m. Monday through Friday. Construction activities that do not involve substantial sound~~noise~~ increases above ambient levels at non-participating residences~~adjacent property boundaries~~ are permitted outside of daylight hours when necessary....
- (2) The facility shall be operated so that the facility sound~~noise~~ contribution does not result in sound~~noise~~ levels at the adjacent~~non-participating residence~~property that exceed the average project area ambient nighttime average-sound level ( $L_{eq}$ ) by five A-weighted decibels (dBA). Non-participating residence~~property~~, for the purpose of this rule, refers to residences located on properties not under lease or agreement with the applicant regarding any components of the facility or project. During daytime operation only (seven a.m. to ten p.m.), the facility may operate at the greater of: the project area ambient daytime ~~nighttime~~  $L_{eq}$  plus five dBA; or the validly measured ambient  $L_{eq}$  plus five dBA at the location of the adjacent~~non-participating residence~~property. After commencement of

commercial operation, the applicant shall conduct further review of the impact and possible mitigation of all project-related ~~sound~~<sup>noise</sup> complaints through its complaint resolution process.

- (3) In coordination with the board staff, the applicant shall determine the average daytime and nighttime project area ambient sound level,  $L_{eq}$ , through representative sound monitoring throughout the project area. There shall be one representative sound monitoring location per 3,000 to 10,000 acres of the project area. At least one round of monitoring shall be conducted for a minimum period of ten days between late fall and early spring when leaves and vegetation is minimized.

**6. Rule 09(G)(3) – Blade shear**

MAREC is supportive of a new requirement to provide certificates of design compliance for wind turbine generators. However, given the rapid pace of technological progress and innovation, manufacturers are constantly bringing out new turbine models to market. In light of the fact that developers want to install the best and latest technology in order to maximize production and improve the turbines' operations, the certification process for the newest model may not be complete by the time a project reaches its commercial operations date. Therefore, MAREC recommends the following revisions to Rule 09(G)(3) in order to take this timing issue into consideration:

...Within one year after the commercial operation date of the wind turbine generators, the applicant shall submit certificates of design compliance by the equipment manufacturers....

**7. Rule 09(H)(1) – Shadow Flicker**

MAREC emphasizes that the concerns raised previously regarding the sound measurement also hold true for shadow flicker. Whatever restrictions are placed on the wind industry must take into consideration the reality of what those restrictions mean. Otherwise, if those restrictions are overly burdensome there will be no more wind development in Ohio.

As with sound, measuring shadow flicker affects from property lines is also significantly

(nearly 2 times) more restrictive than the already prohibitive statutory property line setback requirements.<sup>22</sup> For example, measuring the 30-hour per year global industry standard for shadow flicker from a residences extends more than 2,640 feet from a turbine; whereas, the current statutory setback requirement in Ohio of 1,125 feet plus blade length would (with current turbine technology) amount to a setback of about 1,400 feet.

Furthermore, for the same reasons stated previously for sound measurements, requiring shadow flicker to be measured to the property line is contrary to the Governor's Common Sense Initiative and Items 14 (a) and (b) in the BIA will need to be revised to accurately reflect the catastrophic adverse impact and the resulting costs this new rule will have on the wind industry and other businesses that rely on and support wind development in Ohio.

Since 2010, the measurements for shadow flicker have been measured from either nonparticipating receptors or nonparticipating habitable receptors<sup>23</sup> It is necessary for the continuation of the wind industry that shadow flicker be measured at an appropriate and reasonable level. Therefore, MAREC urges the Board to retain the shadow flicker measurement that is currently applied, which is already well more restrictive than industry norms.

Accordingly, MAREC requests that Rule 09(H)(1) be revised as follows:

The facility shall be designed to avoid unreasonable adverse shadow flicker effect at any ~~adjacent~~ non-participating residence~~property boundary~~. At a minimum, the

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<sup>22</sup> RC 4906.20(B)(2)(a).

<sup>23</sup> *Paulding Wind Farm, LLC*, Case No. 09-980-EL-BGN, Order (Aug. 23, 2010) at 31; *Greenwich Windpark, LLC*, Case No. 13-990-EL-BGN, Order (Aug. 25, 2014) at 28; *Hardin Wind, LLC*, Case No. 13-1177-EL-BGN, et al., Order (Mar. 17, 2014) at 27; *Hardin Wind Energy, LLC*, Case No. 09-479-EL-BGN, Order (Mar. 22, 2010) at 28; *Northwest Ohio Wind Energy, LLC*, Case No. 13-197-EL-BGN, Order (Dec. 16, 2013) at 28; *Black Fork Wind Energy, LLC*, Case No. 10-2865-EL-BGN, Order (Jan. 23, 2012) at 45; *Blue Creek Wind Farm, LLC*, Case No. 09-1066-EL-BGN, Order (Aug. 23, 2010) at 32; *Paulding Wind Farm II, LLC*, Case No. 10-369-EL-BGN, Order (Nov. 18, 2010) at 33; *Champaign Wind, LLC*, Case No. 12-160-EL-BGN, Order (May, 28, 2013) at 88-89.



facility shall be operated so that shadow flicker levels do not exceed thirty hours per year at any non-participating residence~~property boundary~~.

**8. Rule 09(I) – Decommissioning**

**a. Rule 09(I)(2) – Revisions to decommissioning plans**

MAREC notes that, in accordance with Rule 09(I)(1) the applicant is to “provide” the final decommissioning plan to the Board and the county engineers at least 30 days before the preconstruction conference. However, under Rule 09(I)(2), revised decommissioning plans, which are to be completed every 5 years, are to be “filed” with the Board. While the difference between filing and providing the plan seems to be minor, it is necessary for the applicant to know the proper process to follow in order to comply with the Board’s requirements. Therefore, MAREC recommends that the same process required under Rule 09(I)(1) for the final plan be maintained in Rule 09(I)(2) for subsequent revisions, i.e., the plan be provided, rather than filed.

Accordingly, MAREC requests clarification of the process to be followed in Rule 09(I)(2) and recommends that the rule be revised to read:

The applicant shall ~~file~~ provide a revised decommissioning plan to the board and the applicable county engineer(s) every five years from the commencement of construction.

**b. Rule 09(I)(7) – Decommissioning and salvage value**

MAREC supports this new rule which calls for a licensed engineer to estimate the total cost of decommissioning prior to the preconstruction conference and every 5 years thereafter. As provided for in the new rules, this estimate will be used by the applicant in determining the amount of the decommissioning bond required for the project.

As proposed, the new rule requires that the cost estimate excludes the salvage value of the equipment. However, because the salvage cost is a significant factor in the decommissioning

costs, it must be considered. Including the salvage value provides a more accurate representation of the scope of work on the project. In fact, in many cases, the salvage value offsets the deconstruction costs.

Further, if the salvage value is not included in the cost estimate at the conclusion of decommissioning, the question will remain regarding who benefits from the value of the scrap materials from the project. While the facility equipment and materials are the property of the owner, disregarding the salvage value in the estimate could lead to litigation of this issue at the decommissioning stage of the process. For instance, the questions relating to the decommissioning of commercial wind energy facility were part of the reasons Illinois, in 2015, required that the salvage value be included in the decommissioning cost estimate.<sup>24</sup> Likewise, the Oklahoma legislature required, in 2010, the evidence of financial security be accompanied by an estimate of the total cost of decommissioning and an estimate of the salvage value of the equipment and directed that the amount of the financial security must be determined based on these estimates.<sup>25</sup>

MAREC emphasizes that not including the salvage value in the cost determination would result in an artificial cost estimate that does not take all of the significant cost factors into consideration. Therefore, MAREC recommends that new Rule 09(I)(7) be revised as follows:

...the applicant shall retain an...engineer...to estimate the total cost of decommissioning in current dollars, ~~without regard to salvage value of the equipment.~~ Said estimate will be converted to a per-turbine basis calculated as the total cost of decommissioning of all facilities divided by the number of turbines in the most recent facility engineering drawings. This estimate shall be conducted every five years. Said estimate shall include:

- (a) An identification and analysis of the activities necessary to implement the most recent approved decommissioning plan

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<sup>24</sup> Illinois House Bill 3523, Public Act 099-0132 (July 24, 2015).

<sup>25</sup> 17 O.S. §160.15(2) (OSCN 2016), Oklahoma Wind Energy Development Act.

- including, but not limited to physical construction and demolition costs assuming good industry practice and based on publication or guidelines approved by staff;
- (b) The cost to perform each of the activities; ~~and~~
- (c) An amount to cover contingency costs, not to exceed ten per cent of the above calculated reclamation cost-; and
- (d) The salvage value of the equipment.

**c. Rule 09(I)(10) – Abandonment and salvage value**

MAREC recognizes that, with the inclusion of the salvage value in the costs for decommissioning and the bond, it would be appropriate to specify, as did Illinois<sup>26</sup>, which entity would obtain the salvage value, in the highly unlikely event that the facility would be abandoned. Therefore, MAREC recommends that new Rule 09(I)(10) be revised, as follows, to clarify that the principal on the bond, i.e., the county in the case of Illinois, would receive the value of the salvaged materials:

...The decommissioning funds, performance bond, or financial assurance shall be released by the holder of the funds, bond, or financial assurance when the facility owner and/or facility operator has demonstrated, and the board concurs, that decommissioning has been satisfactorily completed, or upon written approval of the board, in order to implement the decommissioning plan. In the event that the facility is abandoned, the principal on the bond would receive the value of the salvaged materials.

**III. CONCLUSION**

MAREC appreciates the opportunity to respond to staff's proposed amended Rule 08 and new Rule 09. MAREC is supportive of staff's endeavors and believes that, with the few exceptions noted above, the proposal strives to balance the interests of all stakeholders in the wind-powered generation industry. While MAREC applauds staff's efforts, MAREC respectfully requests that the Board revise staff's proposal in keeping with our comments herein,

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<sup>26</sup> Id.

in order to comply with the Governor's Common Sense Initiative, encourage economic growth in Ohio, and ensure that the rules treat all players in a fair and nondiscriminatory manner.

Respectfully Submitted,

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### **CERTIFICATE OF SERVICE**

I hereby certify that a true copy of the foregoing Comments were served by electronic mail upon the following on this 24th day of October, 2016.

/s/ Terrence O'Donnell  
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