

BEFORE  
THE OHIO POWER SITING BOARD

In the Matter of the Application        )  
of Yellow Wood Solar Energy LLC,    )  
for a Certificate of Environmental      )  
Compatibility and Public Need for    )  
The Construction of a Solar-Powered)  
Electric Generation Facility in        )  
Clinton County, Ohio                    )

Case No. 20-1680-EL-BGN

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**POST-HEARING BRIEF OF INTERVENORS BRAD COCHRAN,  
BRAD COCHRAN FARMS LLC, JWP FAMILY FARMS  
LLC, DIANE RHONEMUS, AND CHARLES THOMPSON**

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Intervenors Brad Cochran, Brad Cochran Farms LLC, JWP Family Farms LLC, Diane Rhonemus, and Charles Thompson (collectively, the “Residents”) hereby file their Post-Hearing Brief.<sup>1</sup> For the reasons described below, the Residents request that the Ohio Power Siting Board (“Board” or “OPSB”) deny the application by Yellow Wood Solar Energy LLC (“Yellow Wood”) for a certificate to construct and operate its proposed solar power facility (the “Project”).

**ARGUMENT**

**I. Standards for Certification Of Major Utility Facilities**

No person may construct a major utility facility without first obtaining a certificate for the facility. R.C. 4906.04. Yellow Wood’s Project is a “major utility facility” as defined by R.C. 4906.01(B)(1)(a), because it is designed to generate in excess of 50 megawatts (MW) of electricity. In order for OPSB to issue a certificate for a major utility facility, OPSB must hold a

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<sup>1</sup> This brief uses the following abbreviations for citations to the evidentiary record: (1) “Application” refers to Applicant’s Exhibit 1, the Application submitted by Yellow Wood on February 24, 2021; (2) “Narrative” refers to the narrative of the Application; (3) “Application Exh.” refers to the exhibits attached to the Application; (4) “Applic. Exh.” refers to the Applicant’s exhibits introduced at the hearing; (5) “Tr.” refers to the transcript of the hearing, which is preceded by the name of the witness and followed by the transcript’s volume, page numbers, and line numbers; and (6) “OAC” refers to the Ohio Administrative Code.

hearing on the application. R.C. 4906.07. The Board must render a decision on the record either granting or denying the certificate based on the application as filed, or granting it on such terms, conditions, or modifications as the Board considers appropriate. R.C. 4906.10(A). The Board may not grant a certificate unless it finds and determines the following:

- (a) “The nature of the probable environmental impact.” R.C. 4906.10(A)(2);
- (b) “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 considerations.” R.C. 4906.10(A)(3).
- (c) “That the facility will comply with Chapters 3704., 3734., and 6111. of the Revised Code and all rules and standards adopted under those chapters....” R.C. 4906.10(A)(5).
- (d) “That the facility will serve the public interest, convenience, and necessity.” R.C. 4906.10(A)(6).

R.C. 4906.10(A)(3) prohibits OPSB from issuing a certificate unless “the facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations.” Emphasis added. The dictionary meaning of “minimum” is “the least quantity assignable, admissible, or possible.” The Merriam-Webster Dictionary, “Minimum,” <https://www.merriam-webster.com/dictionary/minimum> (last accessed Nov. 17, 2022). 2022). That is, R.C. 4906.10(A)(3) prohibits OPSB from issuing a certificate unless the facility poses the least quantity assignable, admissible, or possible adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations. As explained below, Yellow Wood has not demonstrated that its Project achieves this standard with respect to the many harms that the Project will cause. Yellow Wood also has not provided the information required by the Board’s rules that is necessary for

the Board to determine the nature of the Project's probable adverse impact under R.C. 4906.10(A)(2), (5), and (6).

**II. An Administrative Agency Such As The Ohio Power Siting Board Is Required To Comply With Its Own Rules.**

Administrative regulations issued pursuant to statutory authority have the force and effect of law, so an administrative agency such as OPSB is required to follow its own rules. *State ex rel. Cuyahoga Cty. Hosp. v. Ohio Bureau of Workers' Comp.*, 27 Ohio St.3d 25, 27–28, 500 N.E.2d 1370, 1372–73 (1986); *Parfitt v. Columbus Corr. Facility*, 62 Ohio St.2d 434, 436, 437, 406 N.E.2d 528, 530 (1980); *Clark v. Ohio Dep't of Mental Retardation and Developmental Disabilities*, 55 Ohio App.3d 40, 42 (6th Dist. 1988). A citizen is entitled to enforce such an agency's rule against the agency if the citizen is a member of the class which the rule was intended to benefit. *Parfitt*, 62 Ohio St.2d at 436.

R.C. 4906.03(C) requires OPSB to “[a]dopt rules establishing criteria for evaluating the effects on environmental values of proposed and alternative sites.” R.C. 4906.06(A)(6) provides:

(A) An applicant for a certificate shall file with the office of the chairperson of the power siting board an application, in such form as the board prescribes, containing the following information: ... (6) Such other information ... as the board by rule or order may require.

This statutory mandate requires an applicant to submit the information required by OPSB's rules. OPSB has no discretion to allow an applicant to get away with not complying with the rules. OPSB has promulgated OAC Chapter 4906-4 to implement R.C. 4906.03(C) and R.C. 4906.06. Consistent with R.C. 4906.06(A)(6), OAC 4906-2-04(B) requires an application to include the information required by OAC Chapter 4906-4. Notably, OAC 4906-4-01(B) provides that “[t]he board may, upon an application or motion filed by a party, waive any requirement of this chapter

other than a requirement mandated by statute.” This rule allows OPSB to waive a requirement in that chapter only if a party has filed an application or motion justifying such a waiver.

OAC 4906-3-06(A) requires OPSB’s chairman to determine whether an application is complete and complies with the content requirements of the Board’s rules, including OAC Chapter 4906-4, before the application can be processed. Yellow Wood has not obtained waivers of the rule requirements at issue in this case pursuant to OAC 4906-4-01(B). OPSB cannot ignore its own rule-required procedure for granting waivers, nor did it grant any such waivers of the requirements at issue.

Neither R.C. 4906.10(A) nor OAC Chapter 4906-4 allows OPSB to pick and choose which rule requirements it will consider in deciding whether the criteria in R.C. 4906.10(A) are met. Just because an application contains thousands of pages of information on some potential Project impacts does not mean that the applicant or OPSB is allowed to ignore or gloss over other harms. For example, OPSB cannot find that a facility complies with R.C. 4906.10(A)(2) or (3) if an applicant has neglected to demonstrate pursuant to OAC 4906-4-08(A)(3) that the project will not cause a noise nuisance, even if the applicant has shown that no other types of harm are of concern. In this case, the gaps in rule-required information are myriad and substantial.

OAC Chapter 4906-4 is an integral component of the process set up by R.C. 4906.06 and R.C. 4906.07 to provide members of the public with the information they need to provide the Board with informed input on a project that could impact them. The applicant is required to publish public notices notifying the public about the application and where to find a copy of the application for review. R.C. 4906.06(C); OAC 4906-3-06(C)(4) & (5), 4906-3-07, & 4906-3-09. R.C. 4906.07(A) instructs OPSB to schedule the hearing only after receiving a complete

application “complying with section 4906.06 of the Revised Code.” Thereafter, the Board must conduct a hearing to obtain evidence from the parties and the public, including intervenors. R.C. 4906.07(A). The fairness and accuracy of this process depend on the applicant’s provision of rule-compliant information.

An intervenor’s right to conduct discovery cannot compensate for an applicant’s failure to comply with OAC Chapter 4906-4. Many of the studies required by these rules do not exist until an applicant generates them, so intervenors are unable to obtain this information through discovery. For example, the field surveys for plants and wildlife in the Project Area required by OAC 4906-4-08(B) ordinarily do not exist unless the applicant conducts them. Citizen intervenors have no access to the participating landowners’ land, so they cannot conduct these surveys themselves. That is why the rules require the applicants, not the Staff or intervenors, to produce the necessary information. Moreover, it is only fair to require applicants to produce the information necessary to prove that the developments from which they will benefit financially will not harm the public.

In this case, the evidentiary record lacks much of the information required by OAC Chapter 4906-4. The Board may not issue a certificate without this information. The missing information is necessary for the Residents to participate meaningfully in the hearing process. This information is also needed for the Board to make sound decisions under the R.C. 4906.10(A) criteria, namely, whether to approve the Project, and if so, how it should be designed to minimize the Project’s impacts on the Residents. The Residents would be prejudiced by OPSB’s failure to comply with these rules, and they have standing to seek OPSB’s compliance with its rules.



**III. Public Opposition To The Project Shows That The Project Does Not Serve The Public Interest, Convenience, And Necessity Under R.C. 4906.10(A)(6).**

The OPSB has recognized that its determination of public interest, convenience, and necessity under R.C. 4906.10(A)(6) must be examined through a “broad lens” that balances a project’s projected benefits against the magnitude of potential negative impacts on the local community. *In re Application of Republic Wind*, Ohio Power Siting Board Case No. 17-2295-EL-BGN, Opinion and Order, ¶ 91, 2021 WL 2667132, at \*1, \*18 (June 24, 2021). In that case, the “especially prominent and one-sided” local opposition to the disapproved wind project was an important factor in OPSB’s determination that the Republic Wind project did not serve the public interest, convenience, and necessity under R.C. 4906.10(A)(6). Recently, the Board reaffirmed this principle in *In re Application of Birch Solar*, Ohio Power Siting Board Case No. 20-1605-EL-BGN, Opinion and Order, at ¶ 68 (June 24, 2021).

In this case, the Clinton County Board of Commissioners formally expressed its unanimous opposition to the Project by passing Resolution ## 22-645 and 22-686. Exhibits A and B of Clinton Cty. Exh. 1.<sup>2</sup> The Commissioners’ press release accompanying the resolution noted that among their concerns with the Project was the Project’s displacement of more than 2,000 acres of farm land. Since the Commissioners govern Clinton County, they have made firsthand observations of the views of their constituents about the Project.

Recognizing this fact, Yellow Wood conducted what its pollster, Raleigh Barnes of Calvert Street Group, LLC (“Calvert”), characterized as an “opinion poll” of Clinton County residents about their views on the Project. Barnes, Tr. II 115:19-24; Applic. Exh. 25, p. 5, lines 18-30. Yellow Wood grossly skewed this “opinion poll” to provide the false conclusion that the

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<sup>2</sup> The documents in Clinton County Exhibits A and B were certified copies of official government records and were admissible as non-hearsay under Evid.R. 803 and as self-authenticating documents under Evid.R. 902.

county's residents favor this Project. Prior to conducting this poll, Calvert's pollsters had done another poll to find out who supported and opposed renewable energy projects. Barnes, Tr. II 119:17 – 121:6. In the follow-up poll, Calvert called 608 households who during the first poll had expressed support for renewable energy and excluded those who had concerns or questions about the Project. Barnes, Tr. II 119:16 to 121:6. From both polls, Calvert excluded Republicans over 40 years old, because this metric tends not to support renewable energy projects. Barnes, Tr. II 117:19 to 119:3, 120:14-15. Only 71 of the 608 households targeted in the second poll responded to Calvert's calls. Barnes, Tr. II 121:11-20. Calvert did not ask those 71 households whether they were familiar with the Project, but just asked whether they supported solar energy farms in Clinton County in general. Barnes, Tr. II 116:8-11; Applic. Exh. 25, p. 5, lines 19-23. Only 43 of these 71 households indicated that they supported solar projects. Applic. Exh. 25, p. 5, lines 29-30. Calvert then urged these 43 households to leave voicemails for the Commissioners to urge their support for the Yellow Wood Project. After all of Calvert's efforts to prequalify the respondents as supportive, only 14 households indicated they were willing to leave such a voice message for the Commissioners. Applic. Exh. 25, p. 6, lines 1-2. Mr. Barnes did not know how many, if any, of the 14 households actually left any voice messages for the Commissioners. Barnes, Tr. II 122:6-17.

This "poll" did nothing to demonstrate any public support for Yellow Wood's Project. Despite Yellow Wood's underhanded attempt to pressure the Commissioners, they still oppose the Project as contrary to their constituents' best interests. The Board should defer to the Commissioners' judgment and deny the certificate pursuant to R.C. 4906.10(A)(6).

**IV. The Board Should Not Accept The Narrow Setbacks Proposed By Yellow Wood Solar, Because They Are Not Adequate To Minimize The Project's Adverse Environmental Impacts Under R.C. 4906.10(A)(3).**

R.C. 4906.13(B) preempts the application of local zoning to utilities subject to OPSB authority. As a substitute for local zoning, R.C. 4906.10 entrusts the OPSB with the authority and responsibility to require regulated utilities to responsibly site and design their facilities.

To implement this mandate, the Board should not accept the unreasonably narrow setbacks between Yellow Wood's industrial facility and its neighbors' land and homes requested by Yellow Wood. The original Application provides for setbacks of 100 feet from property lines, 300 feet from residences, and 100 feet from road rights-of-way. Narrative, pp. 24, 78. Yellow Wood's Response to the Staff's Sixth Data Request slightly expanded the proposed setbacks from property lines and public roads by 50 feet. Applic. Exh. 18, Hreha Direct Testimony, p. 6, lines 24-31; Applic. Exh. 12, Response to the Staff's Sixth Data Request, p. 1.

For perspective, the 300-foot setback from nonparticipating neighbors' houses is equivalent to the length of a football field. The 150-foot setbacks are equivalent to half of that length. Installing high solar fences and imposing solar panels so close to the neighbors' residential properties and public roads will expose nearby residents and motorists to the unavoidable and unsightly views of the solar equipment and reduce their pleasure of living there. Since the Project's expected life is 50 years (Hreha, Tr. I 20:8-10), this Project will cause long lasting damage to the community. Consequently, the Board should deny the certificate for the failure to comply with the requirement in R.C. 4906.10(A)(3) to demonstrate that the Project represents the minimum environmental adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations.

V. **The Ohio Power Siting Board Cannot Issue A Certificate For The Project Without Receiving The Information Required By OAC 4906-4-08(A)(4)(a) And R.C. 4906.10(A)(2) & (3) Concerning The Project's Potential Impacts On Groundwater Supplies Or Without Preventing The Loss Of Water Supplies Pursuant To R.C. 4906.10(A)(3).**

OAC 4906-4-08(A)(4)(a) provides:

(4) Water impacts. The applicant shall provide information regarding water

impacts

(a) Provide an evaluation of the impact to public and private water supplies due to construction and operation of the proposed facility.

This rule requires Yellow Wood to conduct a groundwater impact study prior to certification in order to identify threats to the community's water supplies. However, no such study was performed, and no hydrogeologists testified for Yellow Wood at the hearing. Hreha, Tr. I 27:16-18; Singh, Tr. I 62:2-8.

Yellow Wood denies that its Project will affect nearby private wells, but admits that Project construction could "result in certain localized impacts to groundwater." Narrative, p. 38. Yet Yellow Wood provided no analysis of those impacts or any mitigation for them, thus violating OAC 4906-4-08(A)(4)(a). However, the record contains evidence indicating that Yellow Wood's plans could threaten nearby water supplies. As described below, the use of grout or other impermeable substances to fill karst voids under solar racking could interrupt groundwater flow to shallow wells used by nearby landowners.

The first indication of this potential threat lies in the shallowness of the area's groundwater, whose underground flow could be interrupted by the Project's subsurface construction. Yellow Wood found that the static water levels of the wells inside the Project Area range from 12 to 30 feet below surface. Applic. Exh. 6, p. 9, Answer 30. However, Yellow Wood failed to identify the depths of the wells used by nonparticipating neighbors. This is

critical information for determining whether Project construction will interrupt the flow of groundwater between the Project Area and the neighbors' wells.

While a typical post for solar racks typically is driven down to six feet below grade, the racking posts (piles) for this Project may be installed 5.5 to 9.9.5 feet below grade or 10 to 15 feet below grade due to the area's loose soils and freeze thaw, depending on which of the conflicting statements in the Application are to be believed. Narrative, pp. 6, 55; Singh, Tr. I 56:8 – 58:12. The Application represents that impacts to water supplies are not anticipated at these depths. Narrative, p. 55. However, the Application also admits that the depth of the groundwater found in Yellow Wood's soil borings was as shallow as five feet. Narrative, pp. 57, 58; Singh, Tr. I 54:12-24; Applic. Exh. 28A, Singh Suppl. Direct Testimony, Attachment RS-1, p. 6. At times, the groundwater levels in the Project Area can be even more shallow, approaching the surface. *Id.*, p. 12; Narrative, p. 58; Application Exh. L, p. 9. "[G]roundwater is expected to be encountered in excavations" during construction, and dewatering will be necessary during construction. Narrative, p. 58.

In evaluating the risk that Project construction could block groundwater flow to neighboring wells, it is important to know the proximity between the wells and the subsurface Project equipment. Nevertheless, Yellow Wood did not figure out where or how close the nonparticipating wells are located relative to the Project. Yellow Wood identified only the distances between the Project and the wells inside the Project Area, and not the wells of nearby nonparticipating landowners. Hreha, Tr. I 28:13 – 30:5. Yellow Wood's Third Supplement to the Application provides a table of distances between solar farm equipment and the wells inside the Project Area, but inexplicably neglects to identify the distances from off-site wells. Applic. Exh. 4, Attachment 1, Table 3. This table shows that the nearest well is only 230 feet from solar

equipment. *Id.* Given the proximity of solar equipment to that well, Mr. Hreha's statement that solar equipment would be farther from off-site wells than on-site wells provides no assurance that the on-site disruption of groundwater flow will not interrupt the groundwater flow to off-site wells. Hreha, Tr. I 37:21 – 38:15. Yellow Wood provided no data to demonstrate the accuracy of Mr. Hreha's statement that off-site wells are farther from solar equipment. There is no evidence that Yellow Wood even tried to find out where the off-site wells are located. In fact, Terracon's Geotechnical Engineering Report in the Application does not address the issue, nor does the supplemental report attached to Mr. Singh's direct testimony. Application Exh. L; Applic. Exh. 28A, Singh Suppl. Direct Testimony, Attachment RS-1. Moreover, the Application provides for setbacks of only 100 feet from property lines and 300 feet from residences, so the off-site wells could be as close as 100 to 300 feet from solar equipment. Narrative, pp. 24, 78.

Mapping prepared by the Ohio Department of Natural Resources depicts the Project Area as a karst area with carbonate rocks at or near the land surface. Applic. Exh. 28A, Singh Suppl. Direct Testimony, Attachment RS-1, Karst Survey and Assessment Report, p. 1.<sup>3</sup> Karst contains surface depressions, voids, sinkholes, caves, sinking and losing underground streams, and subsurface drainage that may develop from the dissolution and erosion of carbonate rocks. *Id.* Yellow Wood's field study found these features in the Project Area. *Id.* Terracon warned that construction activities increase sinkhole development concerns due to the removal of ground cover during grading, modifications to existing drainage paths, and other factors during construction. *Id.*, Design level Geotechnical Engineering Report, p. 13.<sup>4</sup>

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<sup>3</sup> The Karst Survey and Assessment Report starts on pdf page 160 of Part Two of Singh Suppl. Testimony, Applic. Exh. 28A.

<sup>4</sup> This report starts on pdf page 6 of Part One of Singh Suppl. Testimony, Applic. Exh. 28A.

Terracon set out a numeric ranking system of 0 for “very low risk,” 1-2 for “low risk,” 3-4 for “moderate risk,” 5-6 for “high risk,” and 7-9 for “very high risk” to quantify the relative danger from installing solar facilities on karst features. *Id.*, Karst Survey and Assessment Report, p. 11. These risk factors are based on what karst characteristics are present, such as an open hole into the subsurface, drainage into the hole, and the presence of vegetation. *Id.*, pp. 9-11. Mr. Singh testified that “very low risk” karst areas could safely host solar facilities, but that no construction should be allowed within 150 feet of “low risk” karst features (and presumably also the higher risk karst features). Singh, Tr. I 69:25 – 71:2.

Yellow Wood’s response to the Staff’s Second Data Request stated that the company “will likely employ a remediation measure known as a ‘reverse filter’” to fill any karst openings in the ground when installing the foundations of solar structures. Applic. Exh. 7, p. 1. The response defines a “reverse filter” as aggregate that would allow water to pass through rather than changing hydrogeological conditions. Applic. Exh. 7, pp. 1-2. However, Mr. Singh contradicted this representation at the hearing, testifying that the aggregate in the filter would not allow the passage of water. Singh, Tr. I 62:9 – 64:1; 67:16 – 68:8. Consequently, the use of a reverse filter does not preserve the capacity of a karst opening to transmit groundwater to nearby wells, so only the prohibition of construction on karst will accomplish that purpose.

Nevertheless, the Application allows Yellow Wood to use a reverse filter to plug karst openings. In addition, the Application does not prohibit the use of grout to plug karst openings. Stottsberry, Tr. I 94:15-20. Grout can impede the hydrological flow of groundwater and could impair groundwater flow to water supply wells. *Id.*, 94:21 – 95:11.

Mr. Hreha testified that Yellow Wood would not site solar equipment on karst and that a Terracon report in the Application committed Yellow Wood to avoiding karst, but a review of

Terracon's reports reveal no such commitment. Hreha, Tr. I 31:23 – 32:20; 38, lines 16-25; 40:25 -42:8. Mr. Hreha first testified that a Terracon report made such a commitment, but then admitted under cross-examination that neither a Terracon report nor anything else in the Applicaitn made any such commitment. Hreha, Tr. I 31:23 – 32:20; 38, lines 16-25; 40:25 -42:8. As explained above, Terracon's Karst Survey and Assessment Report expresses this goal as a recommendation, and not as a commitment. Mr. Hreha testified that a witness, presumably Rohit Singh, promised to follow Terracon's recommendation to keep solar equipment off of karst, and that Yellow Wood would follow that recommendation. Hreha, Tr. I 41:18 – 42:3. Indeed, Mr. Singh did recommend in his testimony that no construction be conducted on karst areas, except for "very low risk" areas. Singh, Tr. I 61:3-13; 66:25 – 67:5, 69:25 -71:2. If OPSB issues a certificate, the Board should hold Yellow Wood to its promise by adding to the certificate a prohibition against siting solar equipment on karst formations unless they are of "very low risk" as classified in Terracon's Karst Survey and Assessment Report. Otherwise, the Project will not comply with R.C. 4906.10(A)(3) or (6). However, the Board should not issue a certificate for the Project, since the record does not contain the information required by OAC 4906-4-08(A)(4)(a).

**VI. Because The Evidentiary Record Demonstrates Construction Noise Will Impair The Neighbors' Quality Of Life, The Board Has No Basis To Find That The Project Complies With R.C. 4906.10(A)(3) Or R.C. 4906.10(A)(6).**

The Application reveals that construction noise will be common and loud, including the following:

operation of heavy earthmoving equipment such as bulldozers, trenchers, and graders;

irregular engine revs;

back-up alarms;



gravel dumping;  
clanking metal tracks of equipment;  
crane operation;  
pile driving;  
rock breaking or hammering;  
horizontal directional drilling;  
6200 deliveries by tractor trailers; and  
deliveries and unloading of 400 truckloads of concrete.

Narrative, pp. 14, 48, 49,

Yellow Wood attempts to conceal the misery the nearby residents will experience from construction noise by just lying about it. Yellow Wood announces that truck traffic noises will “occur infrequently and over a short duration at each location,” and that they will be “negligible in magnitude” compared to existing traffic noise. Narrative, p. 52. These statements ignore the Application’s estimates of almost 7000 truck deliveries during construction (400 concrete deliveries, 364 box truck deliveries, and 6200 equipment deliveries by tractor trailers).

Narrative, p. 14. While Yellow Wood may argue that these deliveries will supply a large Project Area, most of them will bring the materials to just five acres of laydown areas over and over again on the same roads. Application Exh. S, p. 6-2, Table 6-1 (showing that the laydown areas will occupy up to five acres). In fact, the Application reveals that all component delivery is expected to occur via Lynchburg Road through the main portion of the Project Area. Narrative, p. 52. This means that much of this noise will be concentrated in these areas.

Continuing with its deception, the Application represents that “the maximum potential sound impact at any single residence might be analogous from a few days to a few weeks of

repair or repaving work occurring on a nearby road or to the sound of machinery operating on a nearby farm.” Narrative, p. 48. Incredibly, the narrative even states that “construction activity at the site ... will produce sounds that are already familiar to the community, including sounds from farming activity, and home and other mid-size building construction,” so the noise’s impact “is not expected to be significant.” Narrative, p. 50. The narrative represents that the sharp noises of pile driving and rock breaking “should not pose undue quality of life concerns for residents” simply because they will not last forever. Narrative, p. 51.

Yellow Wood’s acoustic consultant, Michael Hankard, doubled down on these deceptive statements, stating that almost all of the Project’s construction activities are no different than contractors work on a house, sewer pipe installation, or farm equipment operation. Hankard, Tr. II 109:5-24. However, the community around the Project Area has few of these activities. In fact, Mr. Hankard noticed little construction on the day he drove all around and through the Project Area, with only road re-graveling and a tractor tilling soil occurring. Hankard, Tr. II 110:22 – 112:4.

Moreover, Mr. Hankard admitted that pile driving is not similar to any existing sounds in the community, since pile driving “is not perhaps something that everybody has experienced.” Hankard, Tr. II 109:25 – 110:2. Pile driving is among the most long lasting and prominent activities during solar facility construction. Mr. Hankard could not say how long the noisy construction activities will last during the 18-month construction period. Hankard, Tr. II 110:4-21. However, Yellow Wood estimates that the Project may contain as many as 740,000 solar modules, so the pilings will be numerous and will take a long time to install. Narrative, p. 3. Thus, pile driving is obnoxious and bothersome, and this noise will be heard for a long time.

Mr. Hankard's direct testimony revealed that the combined noise level from all construction equipment during pile driving will be as high as 93 decibels at the Project boundary. Applic. Exh. 27, p. 5, lines 2-4; Applic. Exh. 6, Appx. B, p. B2. Worst case noise levels at the Project boundary will be between 80 dBA and 93 dBA for the entire construction period. *Id.* Construction noise levels will be as high as 81-82 dBA at nonparticipating residences. *Id.*, p. B4, B5, B6, B7 (see R-080, R-136, R-137, R-154, R-182, R-185, R-190). Thus, the Application's statement that "construction activity at the site ... will produce sounds that are already familiar to the community" is false. Narrative, p. 50. Consequently, the Project does not comply with R.C. 4906.10(A)(3) or R.C. 4906.10(A)(6).

**VII. The Application Lacks The Decibel Data For Operational Noise From The Inverters Required By OAC 4906-4-08(A)(3), R.C. 4906.10(A)(2), And R.C. 4906.10(A)(3).**

Yellow Wood wants to construct its solar project in a quiet rural community, as it discovered when its acoustics consultant, Michael Hankard, measured the background sound level in the Project Area. The average L90 levels for the Project Area are 29 dBA during daytime and 21 dBA at night. Applic. Exh. 6, Attachment 5, p. 10, Table 4-3. The average Leq levels are 42 during the daytime and 33 dBA at night. *Id.* The background sound level can mask the sound from a new noise source if the background sound is as high as the new sound.

In order to evaluate the harm that a new noise will impose on a community, OAC 4906-4-08(A)(3) describes the information that the Application must provide about the anticipated noise impacts from a project:

(3) Noise. The applicant shall provide information on noise from the construction and operation of the facility.

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(b) Describe the operational noise levels expected at the nearest property boundary. The description shall address:

(i) Operational noise from generation equipment. In addition, for a wind farm, cumulative operational noise levels at the property boundary for each property adjacent to or within the project area, under both day and nighttime operations. The applicant shall use generally accepted computer modeling software (developed for wind turbine noise measurement) or similar wind turbine noise methodology, including consideration of broadband, tonal, and low-frequency noise levels.

(ii) Processing equipment.

(iii) Associated road traffic

(c) Indicate the location of any noise-sensitive areas within one mile of the facility, and the operational noise level at each habitable residence, school, church, and other noise-sensitive receptors, under both day and nighttime operations. Sensitive receptor, for the purposes of this rule, refers to any occupied building.

Emphasis added. Yellow Wood's Application is missing important noise information required by this rule for the inverters that Yellow Wood plans to install in the solar fields. Yellow Wood will construct about 79, 80, or 81 inverters, according to these varying figures provided by the Application. Narrative, p. 9; Applic. Exh. 6, Attachment 5, p. 19. An inverter converts the system to AC power. Narrative, p. 13. Transformers will be located next to each inverter to step up the power's voltage before sending it to the substation. Narrative, p. 13.

Inverters emit a humming sound and a sound comparable to the noise generated by fans. Hankard, Tr. II 105:23 -106:23. Accordingly, evaluating their noise is an important component of a noise study for a solar facility.

For the Project's nighttime noise, Hankard modeled only the noise from the substation. Hankard, Tr. II 106:24 – 107:2; Applic. Exh. 6, Attachment 5 (Updated Sound Analysis), p. 1. Hankard assumed that only the substation would operate at night, stating that "inverters and their cooling systems do not operate at night." Applic. Exh. 6, Attachment 5, pp. 1, 19; Applic. Exh. 27, p. 5, lines 13-15. This assumption is inaccurate. Mr. Hreha testified that the inverters will

have the ability, and may be called upon, to operate at night to provide reactive power. Hreha, Tr. I 33:12-24. Thus, the Application does not “[d]escribe the operational noise levels expected at the nearest property boundary,” as required by OAC 4906-4-08(A)(3)(b). Nor does the Application comply with OAC 4906-4-08(A)(3)(c), which requires the Application to “[i]ndicate the location of any noise-sensitive areas within one mile of the facility, and the operational noise level at each habitable residence, school, church, and other noise-sensitive receptors, under both day and nighttime operations.” Emphasis added. The Board cannot comply with OAC 4906-4-08(A)(3)(b) or R.C. 4906.10(A)(2) and (3) without first receiving this data.

**VIII. The Operational Noise Limit Proposed by Condition 29 Of The Stipulation Exceeds The Standard In OAC 4906-4-09(F)(2).**

Although OPSB’s rules do not provide a specific operational noise standard for solar facilities, the Board has been using the standard for wind projects in OAC 4906-4-09(F)(2) as its benchmark for solar projects. The operational noise limit in Condition 29 of the Stipulation is intended to meet that standard. Jt. Exh. 1, pp.9-10, Cond. 29. OAC 4906-4-09(F)(2) provides:

The facility shall be operated so that the facility noise contribution does not result in noise levels at any non-participating sensitive receptor within one mile of the project boundary that exceed the project area ambient nighttime average sound level (Leq) by five A-weighted decibels (dBA). During daytime operation only (seven a.m. to ten p.m.), the facility may operate at the greater of: the project area ambient nighttime Leq plus five dBA; or the validly measured ambient Leq plus five dBA at the location of the sensitive receptor. After measured ambient Leq plus five dBA at the location of the sensitive receptor [sic]. After commencement of commercial operation, the applicant shall conduct further review of the impact and possible mitigation of all project-related noise complaints through its complaint resolution process. Non-participating, as used in this context, refers to a property for which the owner has not signed a waiver or otherwise agreed to be subject to a higher noise level.

Emphasis added. The first sentence of this rule defines the Board’s nighttime noise standard, stating that “[t]he facility shall be operated so that the facility noise contribution does not result in noise levels at any non-participating sensitive receptor within one mile of the project boundary

that exceed the project area ambient nighttime average sound level (Leq) by five A-weighted decibels (dBA).<sup>5</sup> That is, this standard does not allow increases of five dBA above the nighttime ambient level but instead prohibits nighttime noise from exceeding that level by five or more decibels. The Board established a precedent for this principle in *In the Matter of the Application of Firelands Wind, LLC*, OPSB Case No. 18-1607-EL-BGN, ¶ 87 (June 24, 3021).

The language for the nighttime limit in the first sentence of OAC 4906-4-09(F)(2) is in stark contrast to that for the more lenient daytime limit in the second sentence, which states that “[d]uring daytime operation only (seven a.m. to ten p.m.), the facility may operate at the greater of: the project area ambient nighttime Leq plus five dBA; or the validly measured ambient Leq plus five dBA at the location of the sensitive receptor.” Emphasis added. The rationale for that difference is obvious: the stricter nighttime limit is meant to protect the public at night when they are relaxing or sleeping.

If OPSB does issue a certificate for the Project, the certificate must contain a condition that requires Firelands to comply with OAC 4906-4-09(F)(2) as written. Proposed Condition 29 of the Stipulation does not comply with this rule, as it would allow Yellow Wood’s inverters to increase nighttime noise levels by five dBA rather than prohibiting noise increases of five dBA or more. Jt. Exh. 1, pp.9-10, Cond. 29. The third sentence of Condition 29 even allows nighttime limits to be determined in reference to the daytime ambient sound level. The authors of Condition 29 apparently did not contemplate that the Project’s inverters will emit noise at night. If OPSB issues a certificate, the Board should correct this legal mistake by expanding the condition’s language to cover nighttime noise and to clarify that nighttime noises must be lower than five dBA above the nearest ambient measurement.

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<sup>5</sup> These sensitive receptors are homes or other human occupied buildings.

**IX. Because The Evidentiary Record Does Not Demonstrate That Yellow Wood Solar Informed Local Aviation Facilities About The Project Or Its Potential Impacts As Required By OAC 4906-4-07(E), R.C. 4906.10(A)(2), And R.C. 4906.10(A)(5), The Board Lacks The Information Necessary To Determine Compliance With R.C. 4906.10(A)(3), (5) And (6).**

OAC 4906-4-07(E) provides:

(E) The applicant shall provide information on compliance with aviation regulations.

(1) List all public use airports, helicopter pads, and landing strips within five miles of the project area and all known private use airports, helicopter pads, and landing strips or property within or adjacent to the project area, and show these facilities on a map(s) of at least 1:24,000 scale. Provide confirmation that the owners of these airports have been notified of the proposed facility and any impacts it will have on airport operations.

Emphasis added. Two airports and a heliport are located within five miles of the Project Area.

Applic. Exh. 6, Response to Sixth Data Request, p. 2, Answer 4. Because the Application fails to indicate that Yellow Wood provided any notice about the Project to the airports and heliport as required by the last sentence of OAC 4906-4-07(E)(1), the Staff sent its Sixth Data Request to remind Yellow Wood of its responsibility to do so. Yellow Wood responded as follows:

The Applicant is in the process of engaging with these private facilities regarding the Project and will also notify these private facilities at least 60 days prior to construction commencement.

Yellow Wood's vague representation that it was "in the process of engaging" with the airports and heliport does not reveal whether or not it had in fact notified them about the Project prior to the hearing in this case. If Yellow Wood had notified them, it surely would have stated that fact. Nor does anything in the Application or responses to data requests show whether Yellow Wood has addressed with the airport and heliport "any impacts it will have on airport operations" as required by the rule. The purpose of this rule requirement is to demonstrate that nearby aviation facilities have been timely notified about the Project and its potential impacts so that the aviation

facilities and the Board can consider and deal with those impacts during the hearing process.

Yellow Wood was required to do this before filing the Application, but there is no indication that this has been done at all. OPSB cannot issue a certificate with this gap in information.

X. **Because The Evidentiary Record Does Not Estimate The Volume Or Disposal Destinations Of Solid Waste And Debris Generated During Construction As Required By OAC 4906-4-07(D), R.C. 4906.10(A)(2), And R.C. 4906.10(A)(5), The Board Lacks The Information Necessary To Determine Compliance With R.C. 4906.10(A)(3) And (5).**

OAC 4906-4-07(D) provides:

The applicant shall provide information on compliance with solid waste regulations.

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(2) The applicant shall provide information regarding solid waste during construction.

(a) Provide an estimate of the nature and amounts of debris and other solid waste generated during construction.

(b) Describe the proposed method of storage and disposal of these wastes.

Emphasis added. The Application does not provide an estimate of the amounts of debris and solid waste that will be generated during construction or operation, or the destinations of disposal.

The Application states that Project construction will “generate some solid waste, primarily plastic, wood, cardboard and metal packing/packaging materials, construction scrap, and general refuse.” Applic. Exh. S, p. 6-7. Mr. Hreha admitted that the Application contains no estimates of the quantity of solid waste that will be produced by Project construction. Hreha, Tr. I 33:1-11. Instead, the Application represents that construction waste will be “minimal.” Narrative, p. 43; Application Exh. S, p. 6-7. This is not an estimate of the quantity of waste, just as Mr. Hreha admitted. OPSB cannot issue a certificate with this gap in information.



**XI. The Ohio Power Siting Board Cannot Issue A Certificate For The Project Without Receiving The Information Required By OAC 4906-4-07(C) And R.C. 4906.10(A)(2), (3), And (5) About The Project's Drainage Impacts And Associated Mitigation To Prevent Flooding.**

OAC 4906-4-07(C) requires the Board to obtain data about a project's potential for surface water runoff from an applicant prior to approving a project, so that potential drainage problems can be diagnosed prior to construction. Rather than making uninformed guesses about whether the Project's design and construction will increase the runoff of stormwater from a site by altering the terrain, the Board has promulgated this rule to answer this question ahead of construction rather than finding out after flooding has damaged the community.

OAC 4906-4-07(C) provides:

(C) The applicant shall provide information on compliance with water quality regulations.

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(2) The applicant shall provide information regarding water quality during construction.

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(b) Provide an estimate of the quality and quantity of aquatic discharges from the site clearing and construction operations, including runoff and siltation from dredging, filling, and construction of shoreside facilities.

(c) Describe any plans to mitigate the above effects in accordance with current federal and Ohio regulations.

(d) Describe any changes in flow patterns and erosion due to site clearing and grading operations.

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(3) The applicant shall provide information on water quality during operation of the facility.

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(d) Provide a quantitative flow diagram or description for water and water-borne wastes through the proposed facility, showing the following potential sources of pollution, including:

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(vii) Run-off from soil and other surfaces.

(Emphasis added.) The underlined language requires Yellow Wood to quantify the amount of water that will flow off the Project Area during construction and operation. For construction, OAC 4906-4-07(C)(2)(b) requires “an estimate of the ... quantity of aquatic discharges from the site clearing and construction operations.” (Emphasis added.) For operation, OAC 4906-4-07(C)(3)(d) requires “a quantitative flow diagram or description for water ... through the proposed facility.” (Emphasis added.) These water flow estimates are necessary to determine whether site clearing and the existence of impervious solar panels will increase stormwater runoff that could flood downstream properties.

OAC 4906-4-07(C)(2)(c) requires the applicant to “[d]escribe any plans to mitigate” runoff.

Yet the record contains no numeric data on the quantity of water runoff during construction or operation of the Project. The section of the Application that was supposed to provide this data just ignores these requirements. Narrative, pp. 37-42. At hearing, Yellow Wood’s project manager admitted that Yellow Wood did not calculate the amount of water that will flow from the Project Area during construction or operation:

Q. Does the Application include any estimates of the quantity of aquatic discharges from the facility?

A. I don’t believe so.

Hreha, Tr. I 25:24 – 26:2. The Board cannot issue a certificate without this data, nor can it issue a certificate without identifying mitigation measures designed to prevent any flooding threats revealed by the water quantity data that should have been provided.

**XII. The Ohio Power Siting Board Cannot Issue A Certificate To Yellow Wood Solar Without Receiving The Information Required By OAC 4906-4-07(C) And R.C. 4906.10(A)(2), (3), And (5) Concerning The Project's Pollution Impacts And Associated Mitigation.**

OAC 4906-4-07(C) requires the Board to obtain data about a project's potential for water pollution from an applicant prior to approving a project, so that potential pollution problems can be diagnosed prior to construction. Rather than making uninformed guesses about whether the Project's disturbance of the soil will increase the runoff of soil-laden water into streams, the Board has promulgated this rule to answer this question ahead of construction rather than finding out after water pollution damages the streams and the community.

OAC 4906-4-07(C)(1)(d) and 4906-4-07(C)(2)(b), (c), (d), and (e) require Yellow Wood to provide water quality data so the Board can evaluate these discharges' impacts:

(C) The applicant shall provide information on compliance with water quality regulations.

(1) The applicant shall provide information regarding preconstruction water quality and permits.

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(d) Describe the existing water quality of the receiving stream based on at least one year of monitoring data, using appropriate Ohio environmental protection agency reporting requirements.

(2) The applicant shall provide information regarding water quality during construction.

\*\*\*\*

(b) Provide an estimate of the quality and quantity of aquatic discharges from the site clearing and construction operations, including runoff and siltation from dredging, filling, and construction of shoreside facilities.

(c) Describe any plans to mitigate the above effects in accordance with current federal and Ohio regulations.

(d) Describe any changes in flow patterns and erosion due to site clearing and grading operations.

(e) Describe the equipment proposed for control of effluents discharged into bodies of water and receiving streams.

(Emphasis added.) The emphasized language requires an applicant to submit information about the quality of surface water flows from the Project Area during construction and operation, such as sediment from erosion carried into the streams.

The Application contains plenty of information indicating that Project construction will disturb soils that will be washed by precipitation into streams. Site grading will likely be conducted to remove slopes greater than 5% to flatten the land. Narrative, pp. 15-16. Grading will change the Project Area's elevations by as much as three feet by filling and excavation. Singh, Tr. I 65:5 – 66:11. Soil with a high organic content (i.e., the most fertile soil) may be moved from the solar equipment areas to the landscaped areas. Applic. Exh. 6, p. 9, Answer 29. Grading may require excavation, soil redistribution, and soil compaction to achieve desired grades and elevations. Narrative, p. 16. Temporary stockpiling and grading will require backhoes, graders, and rollers/compactors. *Id.*

Because Project construction will disturb soils, an Ohio National Pollutant Discharge Elimination System (“NPDES”) permit will be required to regulate construction. Narrative, p. 37; Hreha, Tr. I 21:21 – 22:5. This is a discharge permit designed to regulate discharges of soil particles from construction activities. Hreha, Tr. I 22:7-22. Soils bare of vegetation during construction will be “susceptible to erosion.” Applic. Exh. 28A, Singh Suppl. Direct Testimony, Attachment RS-1, p. 48. The Application states that the SWPPP will include specific methods to “direct how stormwater is handled during construction,” thus admitting that stormwater runoff will occur. Narrative, p. 73. The Application states that a storm water pollution plan (“SWPPP”) will be developed to identify potential pollution sources that may affect the quality of stormwater discharges associated with construction activities. Narrative, p. 40.

Despite the Application's admissions about soil pollution, Yellow Wood's project manager admitted at the hearing that Yellow Wood did not calculate the soil pollution in the water that will flow from the Project Area during construction or operation:

Q. Does the Application include any estimates of the quality of aquatic discharges from the facility?

A. I don't believe so.

Hreha, Tr. I 25:20-23. The Board cannot issue a certificate without this data, nor can it issue a certificate without identifying mitigation measures designed to prevent any pollution threats revealed by the water quantity data that should have been provided.

**XIII. The Ohio Power Siting Board Cannot Issue A Certificate For The Project Without Receiving The Information Required By OAC 4906-4-08(B) And R.C. 4906.10(A)(2) And (3) Concerning The Project's Potential Impacts On Wildlife And Plants.**

Yellow Wood admits that “[w]ildlife within the Project Area could potentially use the area for foraging, migratory stopover, breeding and/or shelter.” Application Exh. S, p. 4-4. The report from Cardno, Yellow Wood's natural resources consultant, acknowledged that wildlife “species present in the Project vicinity are primarily associated with agricultural fields, pasture grasslands, isolated wooded lots, and wetland areas.” Application Exh. S, p. 6-6. The Project will disturb 2,397 acres of crop fields, one acre of forest, and 51 acres of pasture.<sup>6</sup> Narrative, p. 66, Table 7. This means that the Project will destroy thousands of acres of habitat that is presently being used by wildlife for foraging, migratory stopover, breeding and/or shelter.

To evaluate the seriousness of such a threat, OAC 4906-4-08(B) requires an applicant to conduct surveys of the plant and animal species in the Project Area to assess and mitigate a project's potential ecosystem impacts:

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<sup>6</sup> Table 7 of the Application states that the Project will impact 51 acres of hay/pasture even though Table 6 states that a lesser amount of hay/pasture, 44 acres, exists in the Project Area. Narrative, p. 66. Either way, the Project will destroy a substantial amount of pasture land used by wildlife that favor grasslands.

(B) The applicant shall provide information on ecological resources.

(1) Ecological information. The applicant shall provide information regarding ecological resources in the project area.

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(c) Provide the results of a literature survey of the plant and animal life within at least one-fourth mile of the project area boundary. The literature survey shall include aquatic and terrestrial plant and animal species that are of commercial or recreational value, or species designated as endangered or threatened.

(d) Conduct and provide the results of field surveys of the plant and animal species identified in the literature survey.

(Emphasis added.) Without this information, OPSB can neither determine the nature of the probable environmental impact under R.C. 4906.10(A)(2) nor find that a project represents the minimum adverse environmental impact under R.C. 4906.10(A)(3).

OAC 4906-4-08(B)(3) provides:

Operational ecological impacts. The applicant shall provide information regarding potential impacts to ecological resources during operation and maintenance of the facility.

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(b) Describe the procedures to be utilized to avoid, minimize, and mitigate both the short- and long-term impacts of operation and maintenance....

(c) Describe any plans for post-construction monitoring of wildlife impacts.

Emphasis added.

Because Yellow Wood did not conduct the literature search and fields surveys necessary to identify the plant and animal species in the area, the Application also fails to evaluate the Facility's potential impacts on these species during operation and the mitigation measures necessary to minimize that harm. These failures violate OAC 4906-4-08(B)(3).

Yellow Wood failed to fulfill these requirements. The Application's literature identification of plant and animal species is limited to species that are endangered, threatened, or commercially valuable. Narrative, pp. 67-68; Applic. Exh. S, Appx. C (titled "RTE

Information”); Rupprecht, Tr. I 80:19 -81:21. The rule requires a complete literature review for all species, not just the rare ones.

The Application admits that “[n]o species specific field surveys were conducted for the Project Area.” Narrative, 69; Rupprecht, Tr. I 84:15 -85:5. Instead, Yellow Wood just stated that its consultant’s employees found few rare, endangered, or threatened species in the Project Area while engaged in the wetland and waterbody delineations. Narrative, p. 69; Application Exh. S, p. 5-1, ¶ 5.1.2; Rupprecht, Tr. I 86:3-10. The Application admits that only “[i]ncidental wildlife observations were recorded.” Narrative, p. 65. Yellow Wood’s ecological consultant did no observations at all within a quarter mile of the Project Area, with Mr. Rupprecht claiming his field teams had no access to those areas. Rupprecht, Tr. I 85:6-18. Yellow Wood admitted that its employees saw migratory shorebirds, game species, waterfowl, and songbirds in the Project Area, but it inexplicably failed to identify them in the Application. Narrative, p. 69; Application Exh. S, p. 6-6.

Yellow Wood sought to excuse its violation of this rule by stating that its “consultation with the ODNR and USFWS did not result in the suggestion of additional surveys.” Narrative, p. 69. That is, Yellow Wood seeks to use to justify its violation of OPSB’s rule by stating that two altogether different agencies did not require Yellow Wood to comply with OPSB’s rules.

Yellow Wood plans to continue its pattern for not looking for wildlife by stating that it is not proposing to conduct any post-construction monitoring to find out whether the solar equipment is killing or injuring wildlife species. Narrative, p. 75. Instead, Yellow Wood proposes a weak procedure that would just report injured or deceased wildlife that its employees happen to notice while performing their everyday tasks. Narrative, pp. 76-77.

Thus, while Yellow Wood contends its Project will not seriously harm wildlife or cause the wildlife to harm the community, it has no data to support those claims. The half-hearted effort to search for just some wildlife species, combined with the failure to report the sighted species, leaves the Board with little information about the wildlife in the Project Area. Granting a certificate without the information necessary to determine the Project's effects on wildlife and to identify mitigation measures necessary to address those effects would violate OAC 4906-4-08(B), R.C. 4906.10(A)(2), and R.C. 4906.10(A)(3).

**XIV. Because The Project Will Destroy The Local Public Roads, The Board Should Find That The Project Does Not Comply With R.C. 4906.10(A)(3) Or R.C. 4906.10(A)(6).**

Yellow Wood projects that construction will involve 400 concrete truck deliveries, 364 box truck deliveries, 1300 vehicle deliveries of workers, and 6200 equipment deliveries by tractor trailers. Narrative, p. 14. These vehicles will clog the public roads during construction, making it difficult for motorists to navigate and complicating farmers' efforts to move their machinery between fields. The Project's heavy construction traffic will seriously damage the roads, a problem that Application Exhibit B fails to adequately acknowledge or analyze. The Board should not approve a Project that causes these problems.

**XV. Because The Project Will Damage Drainage Tiles And Surface Waterways, The Board Should Find That The Project Does Not Comply With R.C. 4906.10(A)(3) Or R.C. 4906.10(A)(6).**

The Residents are farmers whose livelihoods depend on the ability to drain their fields in order prevent crop damage and destruction. Although the Application contains generic promises to repair tiles and surface waterways that will be damaged by construction, the Application does not identify the locations of the Residents' tiles or describe specific measures that will be taken to avoid damage to the Project Area tiles that are connected upstream or downstream from the



Residents' tiles. Narrative, p. 96. The Board should not issue a certificate without providing sufficient information about how the Residents' tiles will be protected.

**XVI. Because The Project Will Displace Food Production On Thousands Of Acres Of Farm Land, The Board Should Find That The Project Does Not Serve The Public Interest, Convenience, And Necessity Under R.C. 4906.10(A)(6).**

The Project will be located on 3,850.6 acres of leased land, most of which is cultivated land. Narrative, pp. 2, 5; Applic. Exh. 4, Third Suppl. to Application, Attachment 1, Table 1. The Application provides inconsistent totals of how much agricultural land will be converted to industrial use, with Exhibit F stating that 3,250 agricultural acres will be lost, while Table 7 on Page 66 of the Application's Narrative lists the loss of 2,448 acres of cropland and pasture. Either way, the loss of farmland will be substantial and damaging to the food supply.

The Project Area contains about 1,400 acres of agricultural district land, with about 770 acres being replaced by industrial solar facilities. Narrative, p. 95. An agricultural district is farmland that has been set aside exclusively for agricultural purposes, in exchange for tax benefits and other protections to encourage farmland preservation. R.C. Chapter 929. Yellow Wood's plan to destroy this land's agricultural use for 50 years is contrary to the legislative policy embodied in this law.

Clinton County is already experiencing an alarming loss of farm land. In just 15 years, the number of farms in Clinton County has decreased by 64 farms from 811 farms in 2002 to 747 farms in 2017, a loss of 9%. Application Exh. F, p. 17; Loomis, Tr. II 127:2 – 128:24. In just 15 years, the amount of agricultural acreage has decreased by 26,036 acres from 238,805 acres in 2002 to 212,769 acres in 2017, a loss of 10.9%. Application Exh. F, pp. 17-19; Loomis, Tr. II 127:2 – 128:24. Yellow Wood's planned conversion of 3,250 additional acres from agriculture

to solar facilities will reduce the existing farm land by 1.5%, all by itself. Application Exh. F, p. 19.<sup>7</sup>

Yellow Wood's Application attempts to disguise the adverse impacts of this farmland conversion by contending that the total of farmland in the entire country "has remained steady." Application Exh. F, p. 20. In the same paragraph, however, Yellow Wood admits that the country's farmland has decreased from 257.4 million acres in 2012 to 249.8 million acres in 2017. *Id.* This amounts to a loss of 7,600,000 acres of farmland, a reduction of 3% of the nation's agricultural land in just five years. Yellow Wood points out that the world's agricultural acreage has increased by 1.3% from 1961 to 2015, but it is hardly reassuring to climate control enthusiasts to learn that the conversion of rain forests and other natural resources into farm fields is occurring in other parts of the world.

Yellow Wood seeks to defuse the negative impacts of industrial solar development on agriculture in Ohio by stating that the OPSB-approved solar projects listed in Table 1 of Application Exhibit F will displace a small percentage of Ohio's farm land. Application Exh. F, pp. 6, 22. However, Table 1 is a grossly outdated list of seven approved solar projects, which pales in comparison to the combined total of projects approved in the interim and pending for approval.

Even if the owners of the Project Area wish to return to farming after facility decommissioning, the site may no longer be suitable for that purpose. Site grading for the Project may require excavation, soil redistribution, and soil compaction to achieve desired grades and elevations. Narrative, p. 16. The Application indicates that fertile topsoil will be "displaced

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<sup>7</sup> Exhibit F states that 3,250 agricultural acres will be lost, while Table 7 on Page 66 of the Application's Narrative lists the loss of 2,448 acres of cropland and pasture. Even with the latter acreage, Yellow Wood's Project would destroy another 1% of the county's farmland.

due to grading and excavation.” Narrative, p. 97. This topsoil will be moved to fill lower grades in the Project or even moved to other farms. Narrative, p. 97. The soil with the highest organic content, that is, the most fertile soil, may be moved from solar equipment areas to the landscaped areas. Applic. Exh. 6, p. 9, Answer 29. Although Yellow Wood states that it will restore the land to its current state through decommissioning, its expectation that the Project Area will return to its current fertility appears naïve given how it plans to mess up the soil. At any rate, while Yellow Wood contends that the Project’s land will be available for agricultural use after the Project’s useful life has expired, this life is expected to be 50 years. Hreha, Tr. I 20:8-10. Five decades is an extremely long time to deprive society of food production on thousands of acres. The Board should not approve such a large waste of good farm land.

**XVII. The Ohio Power Siting Board Cannot Issue A Certificate To Yellow Wood Solar Without Evaluating The Project’s Negative Economic Impacts As Required By OAC 4906-4-06(E)(4) And R.C. 4906.10(A)(6).**

OAC 4906-4-06(E)(4) requires applicants to “provide an estimate of the economic impact of the proposed facility on local commercial and industrial activities.” Yellow Wood’s economic impact study is a “rose-colored glasses” exercise that considers the Project’s economic benefits, but not its adverse economic impacts. Yellow Wood did not evaluate the economic losses to local businesses and individuals that will result from its project.

The Application touts the Project’s economic benefits, but it does not evaluate negative impacts. Narrative, pp. 29-30. While the Project will provide construction jobs, that employment is temporary and fleeting. In contrast, during operation the entire Project will employ only 1.8 new jobs in Clinton County and another 1.8 jobs in the rest of Ohio. Loomis, Tr. II 128:4 – 129:5; Application Exh. F, p. 35. However, the solar project will remove 2,448 acres or 3,250 acres from food production, depending on which part of the Application is to be

believed. Yet Yellow Wood has not studied the number of jobs and income that the Project may extinguish by displacing farm income, farm employees, seed and fertilizer sales, and custom applicator fees. Loomis, Tr. II 131:3 – 133:15. In fact, Yellow Wood did nothing to determine whether the Project will harm anyone economically. Loomis, Tr. II 133:16-18. Application Exhibit F represents that indirect and induced jobs also will be created, but these numbers are suspect due to Yellow Wood’s failure to determine the number of indirect and induced jobs that will be lost due to loss of agricultural production.

Yellow Wood’s only comeback on redirect to witness Loomis’ admissions that Yellow Wood failed in its duty to evaluate the Project’s economic damage was to say that Yellow Wood also neglected to quantify the value of Project’s potential environmental benefits, if any, or any impacts on electricity prices. Loomis, Tr. II 134:14 – 135:1. This strawman does nothing to excuse Yellow Wood from providing the Board with the facts necessary to determine the true economic impact of the Project.

A one-sided economic analysis does not comply with the mandate in OAC 4906-4-06(E)(4) to “provide an estimate of the economic impact of the proposed facility on local commercial and industrial activities.” Nor can the Board find that the Project “will serve the public interest, convenience, and necessity” as required by R.C. 4906.10(A)(6) without examining the Project’s negative economic impacts. The Board should not issue the certificate due to Yellow Wood’s failure to conduct a complete economic analysis as required by R.C. 4906.10(A)(6) and OAC 4906-4-06(E)(4).

### **XVIII. Conclusion**

As explained above, there a multitude of good reasons to deny the certificate sought by Yellow Wood Solar. Yellow Wood has failed to provide the information on the Project’s

adverse impacts and mitigation measurements necessary to minimize them that is required by the Board's rules. The Board cannot violate its own rules by approving the Project without this information. Nor do the criteria in R.C. 4906.10(A)(2), (3), and (6) authorize the issuance of this certificate. The Board should deny Yellow Wood's Application.

Respectfully submitted,

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#### **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, I hereby certify that, on November 18, 2022, a copy of the foregoing document also is being served by electronic mail on the following: :

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