BEFORE
THE OHIO POWER SITING BOARD

In the Matter of the Application of of Angelina Solar I, LLC, for a Certificate of Environmental Compatibility and Public Need	))))	Case No. 18-1579-EL-BGN

POST HEARING BRIEF OF THE CITIZENS OF PREBLE COUNTY, LLC, ROBERT BLACK, MARJA BRANDLY, CAMPBELL BRANDLY FARMS, LLC, MICHAEL IRWIN, KEVIN AND TINA JACKSON, VONDERHAAR FAMILY ARC, LLC, AND VONDERHAAR FARMS INC.

I. Angelina Solar's Lack Of Due Diligence And Failure To Communicate With The Persons Adversely Impacted By Its Solar Facility Have Resulted In An Incomplete Project Design.

Angelina Solar I, LLC ("Anglina") has submitted an application ("Application") for a certificate to construct and operate a solar-powered electric generation facility ("Facility") within an area of 934 acres (the "Project Area") in Israel and Dixon Townships in Preble County, Ohio. Company Exhibit 1, Application ("Applic."), pp. 1, 6.

The proposed Facility is not a typical, benign collection of solar panels that might be installed on the roofs of homes or in school yards. Angelina proposes to convert up to 827 acres, most of which is valuable farmland used for food production, into this industrial facility. *Id*. at pp. 1, 6, 91. Arrays of solar panels will be grouped into large clusters called "solar fields" that occupy 806 acres. Co. Exh. 6, Herling Testimony, p. 4, A.8, Lines 7-8; Applic., Exh. G, p. 1-4. The landowners in the Project Area have agreed to lease this land for Angelina's industrial facility for 40 years. Applic., p. 91.

This Facility threatens the quality of life and livelihood of nearby residents, including the Concerned Citizens of Preble County and its members who have intervened in this case

(collectively, the "Citizens" or "Concerned Citizens"). The Facility threatens to expose them to unsightly views, intrusive lighting, noise, crop and livestock destruction by wildlife, loss of wildlife, noxious and invasive weeds, flooding and wet fields, drainage tile damage, sedimentation of streams, crime, road obstructions, and other hazards.

The Citizens are 67 persons and companies that live, work, and own property in communities that will be harmed by the Angelina and Angelina solar projects if constructed. CCOPC Exh. 2, Direct Testimony of Rachael Vonderhaar ("Vonderhaar Testimony"), p. 2, A.6 and A.7. Fourteen of the citizens own and/or occupy land adjacent to the proposed Angelina Project Area. *Id*. at p. 3, A.11, p. 3, A.12, and Exh. A (map of their locations); Vonderhaar, Tr. III 335:7-23.

The most troubling aspect of this case is the scarcity of information in the Application for evaluating these threats and for identifying measures to avoid or minimize these threats. To a large extent, the Facility's impacts are unknown, because the Application does not accurately or adequately evaluate them. While the conditions proposed in the Amended Stipulation filed by some of the parties seek to fill in some of this missing information by requiring Angelina to submit 14 studies to the Staff after the certificate is issued, that approach is an insufficient substitute for informed decision-making on whether to grant the certificate and what conditions to include in it. This approach also is unlawful, as explained later in this brief.

This project has been plagued by Angelina's lack of transparency since its beginning stages. While Angelina discussed its plans early and often with local officials to enlist their support for the project and solicited landowners of farmland it wanted to lease, it made no effort to inform the citizens who would bear the brunt of the harm from the project until such time as OPSB's rules required this communication.

Angelina had its first meeting with local officials in early 2017, when it met with the Economic Development Board. Herling, Tr. I 38:2-7.[1] Angelina met privately with the Board's Staff in mid-2018 to discuss the project. Herling, Tr. I 23:16 to 24:2. Angelina sent letters to some landowners from 2016 to 2018 asking them to lease their land for the project. Herling, Tr. I 40:18 to 41:4. But, unless Angelina wanted to lease the landowners' land, it did not bother to provide them with information about the project until required by the Board's rules to do so in October 2018. Herling, Tr. I 40:5-17, 41:2-4, 42:9-22. Thus, Angelina did not send letters or make other contact informing neighbors about the project before required by the Board's rules, except for letters sent to people with whom they wanted to negotiate leases.

Angelina's reluctance to communicate with the project's neighbors has resulted in an Application that is wholly deficient in the details necessary to identify and deal with the threats to the neighbors. A couple of examples illustrate this point. Because Angelina has not worked out arrangements with neighbors for screening their homes and land from the objectionable sight of mammoth arrays of solar panels and annoying exterior lighting, the Application contains no meaningful, enforceable commitments to protect the neighbors against these intrusions. And if Angelina had solicited advice from its farming neighbors, it would have known to include procedures in its Application to prevent the propagation of noxious and invasive weeds that could spread from the Facility to adjoining farm fields and natural areas. The result of Angelina's lack of due diligence is an Application filled with generic unenforceable promises instead of specific, legally enforceable commitments for mitigation. The large number of concerns raised by the Citizens is the inevitable outgrowth of Angelina's incomplete

[1] Citations to the transcript of the hearing are abbreviated as "Tr." following the last name of the witness whose testimony is being cited.

investigation of the project's adverse impacts, its failure to design and commit to mitigation for these impacts, and its lack of communication with the citizens affected by its project.

Rather than becoming more forthcoming with information, Angelina and the Staff have now collaborated on a scheme to insulate the public from involvement and input into the decision-making process altogether. Because the Application lacks the necessary detail on project threats and mitigation, these parties have proposed stipulated conditions that would allow them to fill the gaps with 12 post-certificate studies that will be proposed and approved in secret.

While the incomplete Application has deprived the neighbors of a complete evaluation of the project's harm, the adjudicatory hearing has exposed enough facts to determine that the project does not satisfy the criteria set forth in R.C. § 4906.10.

II. The Amended Stipulation Is An Unlawful Attempt To Circumvent The Board's Statutory And Regulatory Mandates To Base Its Proceedings On Complete Applications So That Citizens Can Provide Meaningful Input On Siting Decisions That Affect Them.

As explained in Section III below, the Application is missing many of the studies and information needed to evaluate the Facility's threats and the mitigation of those threats. Seeking to compensate for the Application's deficiencies, Angelina, the Staff and other parties filed a Joint Stipulation and Recommendation on June 14, 2019 ("original Stipulation") designed to allow them to fill the gaps with post-certificate studies that would be proposed and approved in secret. The Board then held an adjudicatory hearing on July 31, August 1 and 12, and September 10, 2019 ("original hearing"), and the parties thereafter filed their post-hearing briefs.

On July 29, 2020, about eight months after the original hearing, Angelina filed a motion to reopen the record, along with a "Restated and Amended Joint Stipulation and Recommendation" ("Amended Stipulation"). The Amended Stipulation tries to compensate for the lack of information in the Application by requiring 12 other studies to be performed after

certification: (1) detailed engineering drawings of final project design under Condition 3; (2) any changes to project layout after the submission of final engineering drawings under Condition 4; (3) a modification or mitigation plan for avoiding cultural resources or minimizing impacts on them under Condition 9; (4) a landscape and lighting plan under Condition 11; (5) a public information program under Condition 12; (6) a Storm Water Pollution Prevention Plan under Condition 16; (7) a vegetation management plan under Condition 18; (8) a construction access plan under Condition 22; (9) a final traffic plan under Condition 25; (10) a transportation management plan under Condition 26; (11) a comprehensive decommissioning plan under Condition 29; and (12) pre- and post-construction stormwater calculations under Condition 30. Jt. Exh. 2, pp. 6-12. So the Amended Stipulation requires Angelina to perform and submit 12 studies to the Staff after the certificate is issued, instead of properly testing them in the adjudicatory process.

On October 29, 2020, OPSB held a supplemental hearing ("supplemental hearing") to receive testimony on the Amended Stipulation. During this hearing, Angelina's acoustics expert David Hessler submitted testimony about a noise study he had conducted after the original hearing to model the sound from the Facility's central inverters, which was intended to fill the information gap left by the absence of an inverter noise study in the Application. A contour map of projected noise levels from central inverters was attached to Mr. Hessler's supplemental testimony, but neither that map nor any report about the supplemental noise study was added to the Application. Co. Exh. 23, Exh. DMH-S1.

By the time of the supplemental hearing, Angelina had completed a number of studies that had been slated for completion pursuant to the original stipulation. These studies were not included in the Application or subjected to the entire adjudicatory process, such as the public

comment session of the hearing and discovery. The supplemental testimony of Douglas Herling (Co. Exh. 22) included attachments consisting of a preliminary site plan (Attachment DH2), a letter from the Ohio State Historic Preservation Office about Angelina's proposed cultural resources survey (Attachment DH3), a complaint resolution program (Attachment DH4), and a road use and maintenance agreement (Attachment DH5), none of which were included in the Application. The supplemental testimony of Matthew Robinson included a preliminary landscape plan for mitigating the Facility's visual impacts on the neighborhood. Co. Exh. 24, Attachment 1. Mr. Robinson's testimony stated that the preliminary landscape plan is subject to revision prior to finalization after Facility certification. *Id.*, p. 5, lines 4-6. The second supplemental testimony of Mark Bonifas included a preliminary vegetation management plan, which is subject to revision. Co. Exh. 27, Attachment 1; Co. Exh. 16, Herling Testimony, p. 10, lines 2-4. The supplemental testimonies were not incorporated into the Application. None of the studies attached to these supplemental testimonies have been incorporated into the Application, nor does the Amended Stipulation require Angelina to incorporate any of their language into the final studies submitted pursuant to the Amended Stipulation.

OPSB's acceptance of studies introduced at the supplemental hearing without first incorporating them into the Application, and the Board's acceptance of the Amended Stipulation with its arrangements for a multitude of post-certificate studies would violate OPSB's enabling statute and its own rules. R.C. 4906.06(A)(2) requires the Application to contain "[a] summary of any studies that have been made by or for the applicant of the environmental impact of the facility." To implement R.C. 4906.06, OAC 4906-2-04(B) requires an application to include the information required by OAC Chapter 4906-4. OAC Chapter 4906-4 sets forth the studies that must be included in Angelina's Application. OAC 4906-3-06(A) requires the chairman of the

OPSB 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.

Once an application is complete, the Staff conducts an investigation of the application and submits its Staff Report with recommendations on whether the application complies with the criteria of R.C. 4906.10(A) and the Board's rules. OAC 4906-3-06(C). The Staff Report is made available for intervenor and public review. R.C. 4906.07(C); OAC 4906-3-07(A)(2).

In the meantime, 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); OAC 4906-3-07; 4906-3-09. R.C. 4906.07(A) allows OPSB to schedule the public hearing for the general public and the parties only after receiving a complete application "complying with section 4906.06 of the Revised Code." The public is then provided the opportunity to comment on the application at the public comment session of the hearing, including the studies required to be included in it. R.C. 4906.07(A). Thereafter, the adjudicatory portion of the hearing hears evidence from the parties, including intervenors.

In this case, the Application does not contain many of the studies required by OAC Chapter 4906-4, OAC 4906-2-04(B), OAC 4906-3-06(A), and R.C. 4906.06, so the Board is violating all of those authorities. The Board violated R.C. 4906.06(A)(2) and OAC 4906-3-06(A) by erroneously determining that the Application is complete and complies with the content requirements of the Board's rules, including OAC Chapter 4906-4. The Board violated R.C. 4906.07(A) by scheduling the hearing without receiving a complete, compliant application. An administrative agency such as OPSB is required to follow its own rules, as well as applicable statutes. *State ex rel. Cuyahoga Cty. Hosp. v. Ohio Bureau of Workers' Comp.*, 27 Ohio St.3d

25, 27–28 (1986); *Parfitt v. Columbus Corr. Facility*, 62 Ohio St.2d 434, 436 & 437 (1980). These authorities that are being violated are designed to benefit the Concerned Citizens by affording them opportunities to provide the Board with input on an Angelina Facility that could seriously impact them, and the Citizens are prejudiced by OPSB's failure to comply with these authorities. *Cf.*, *id*., at 436-37.

The Concerned Citizens' rights to vet Angelina's studies through the application process, including a review of the study, receiving a Staff investigation and Staff Report, conducting discovery, submitting comments at the public comment session of the hearing, and participating in the adjudicatory session of the hearing, will be bypassed by the Amended Stipulation's acquiescence to receiving studies only for Staff review and approval after this case has ended. The post-certificate studies will not be submitted to the public for review and comment, nor will they be subject to adjudication. The studies submitted at the supplemental hearing, *i.e*., the central inverter noise modeling results, the preliminary landscape plan, the preliminary vegetation plan, the letter about the Phase I cultural resources program, the preliminary site plan, the road use and maintenance agreement, and the complaint resolution program, were not subjected to a Staff investigation and Staff report, a public hearing and the normal adjudicatory process including discovery, but instead were revealed to the Concerned Citizens only 16 days before the supplemental hearing started. Instead of accepting the Amended Stipulation and the studies introduced at the supplemental hearing, the Board should vacate its findings under 4906-3-06(A) that the Application is complete and compliant with the rules, and require Angelina to supplement its Application to correct the deficiencies.

III. **Angelina Solar's Application Is Incomplete And Lacks The Information Required By Statute And The Board's Rules.**

Angelina's Application is incomplete, as it fails to provide much of the information about the project's impacts and proposed mitigation measures required by the Board's rules. The Board needs this information to determine whether the Facility will harm the public. Without this information, the Board lacks the authority to approve the Application and issue a certificate.

The Board's rules require certificate applications to contain specific information in order to show whether the Project will harm the public. Angelina seeks to excuse some of its Application's failures to provide the required information necessary to identify the Project's potential harm by arguing that the Board can determine no harm exists without the information required by the rule. An example of this argument is Angelina's argument that the Board does not need the water quality data required by rule to determine whether soil erosion from construction will pollute the streams, because the Project supposedly will involve only a small amount of grading. However, without the water quality data, the Board cannot tell how much sediment will be washed into the streams or whether this sediment will damage the streams. The Board must base its conclusion on data that it independently evaluates, not on a blanket assertion from a self-interested applicant that stream pollution will not be a problem. The Application contains so little empirical evidence on this issue and many other issues that the Board cannot make an informed judgment as to whether or not the Project represents the minimum adverse impact. The Application's compliance with the rules is necessary to provide this evidence, and Angelina has fallen well short of that goal in many ways.

A. The Application Fails To Provide The Information About The Project's Visual Impacts And Mitigation Measures Required By OAC 4906-4-08(D)(4).

1. The Board's Rule Requires The Application To Describe The Visual Impact Of The Facility And To Describe The Measures That Will Taken To Minimize The Facility's Adverse Visual Impacts.

OAC 4906-4-08(D)(4) provides:

> (4) Visual impact of facility. The applicant shall evaluate the visual impact of the proposed facility within at least a ten-mile radius from the project area….The applicant shall:
>
> (a) Describe the visibility of the project, including a viewshed analysis and area of visual effect, shown on a corresponding map of the study area. The viewshed analysis shall not incorporate deciduous vegetation, agricultural crops, or other seasonal land cover as viewing obstacles.
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> ****
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> (e) Provide photographic simulations or artist's pictorial sketches of the proposed facility from public vantage points that cover the range of landscapes, viewer groups, and types of scenic resources found within the study area. The applicant should explain its selection of vantage points, including any coordination with local residents, public officials, and historic preservation groups in selecting these vantage points.
>
> (f) Describe measures that will be taken to minimize any adverse visual impacts created by the facility, including, but not limited to, project area location, lighting, turbine layout, visual screening, and facility coloration. In no event shall these measures conflict with relevant safety requirements.

Emphasis added. The Application violates this rule in two respects. First, its simulations do not accurately portray the Facility. Second, it makes no commitments for mitigation measures that will be taken to minimize adverse visual impacts, even though the rule requires that the Application describe the "measures that will be taken." These deficiencies are more specifically addressed below.

2. The Application Does Not Adequately And Accurately Describe The Facility's Visual Impacts.

The Facility, if approved, would impose a serious blight on the scenic views in Preble County. Figure 7, Sheets 1 and 2 of the viewshed analysis show that the solar equipment will be

potentially visible for most of the area surrounding the Project Area. *See* the green colored area around the Project Area in these figures. Applic., Exh. I; Robinson, Tr. II 187:16-21. And this figure is based on the assumption that no one can see the equipment if vegetation is higher than six feet tall, even though the panels may be as high as 15 feet. Robinson, Tr. II 182:25 to 183:7, 189:1-6.[2]

Answer 8 of Mr. Robinson's testimony states: "[f]ield review suggested that the Project will be clearly visible from nearby roadways and residences directly adjacent to the Project, particularly where the proposed panels are situated in open fields directly adjacent to public roadways that are void of screening vegetation." Co. Exh. 12, Robinson Testimony, p. 4, A.8. Even the Application admits that the visual effect will be "adverse" when largely unscreened and viewed in the immediate foreground. Applic., p. 88. The fences around the solar equipment will take the form of a 7-foot tall chain link fence or a 6-foot tall chain link fence with three strands of barbed wire at the top, bringing the total height to 7 feet. Applic., Exh. I, p. 6.

The project will potentially be visible from 82.26 % of the area within a half mile of the Project, even if obstacles of vegetation, structures and topography are taken into consideration. Exh. I, p. 23, Table 1; Robinson, Tr. II 185:7-11. This is of particular concern to the Citizens. Angelina's viewshed report advises that, within a half mile, "a viewer is able to perceive details of an object with clarity." Applic., Exh. I, p. 18. "Surface textures, small features, and the full intensity and value of color can be seen on foreground objects." *Id*. The Facility equipment will potentially be visible from 41.8 % of the area between a half mile and one mile. Exh. I, p. 23, Table 1. The Facility equipment will potentially be visible from 30.78 % of the area between one and two miles. Exh. I, p. 23, Table 1; Robinson, Tr. II 185:12-15.

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[2] Page 8 of the Application Narrative states that the solar panels will be between 8 and 14 feet.

Fourteen of the citizens own and/or occupy land adjacent to the proposed Angelina Project Area. CCOPC Exh. 2, Vonderhaar Testimony, p. 3, A.11, p. 3, A.12, and Exh. A (map of their locations); Vonderhaar, Tr. III 335:7-23. Some of the Citizens live directly across a road from planned solar fields. Vonderhaar, Tr. III 362:1 to 363:6. Photographs attached as Exhibits B and C to Rachael Vonderhaar's Direct Testimony illustrate how close the Project Area is to some of the Citizens' properties. CCOPC Exh. 2, pp. 6-7, A.14. In Exhibit B, Shara Ridenour's house is depicted on the left side of the road, and a field in the Project Area is shown on the right side of the road. *Id*. In Exhibit C, the house of Earl and Sharon Stang is shown on the left side of the road, and a field in the Project Area is shown on the right side of the road. *Id*.

Other Concerned Citizens will be bordered on the sides or back of their land. *Id*.; Vonderhaar, Tr. III 362:10-14, 363:1-6; Vonderhaar Direct Testimony, Exh. A. Two Citizens, Steven Wyatt and Stephanie Longworth, own a home on a 3.2 acre parcel that will be bounded by solar panels on three sides. CCOPC Exh. 2, Vonderhaar Direct Testimony, p. 7, A.14 & Exh. A. Campbell Brandly Farms, in which Marja Brandly and Michael Irwin live and Vonderhaar Farms rents and farms, is bordered on three sides by the Project Area. CCOPC Exh. 4, Brandly Direct Testimony, p. 2, A.6 & p. 3, A.12. The Johnsons' house is right in the middle of the Project. Vonderhaar, Tr. III 361:18-20. The Application provides for miniscule setbacks between the Facility and the neighbor's houses. Applic., p. 54. Even if the Project's fences are screened with plants, some of the Concerned Citizens will have unobstructed views of the solar panels from the second floor of their houses, including the house in which Adam Vonderhaar resides. Vonderhaar Direct Testimony, p. 7, A.14.

Angelina attempts to disguise the Project's adverse visual impacts by emphasizing that people will not be able to discern the individual solar structures at distances of two and five

miles away. Robinson, Tr. II 203:4 to 204:18, 206:1-7. Mr. Robinson's direct testimony cites his report's conclusion that the Project will be visible from only 16.79 % of the area within five-miles, but neglects to mention that it will be visible to 82.26 % of the area within a half mile. Robinson Testimony, p. 4, A.8. Angelina's focus on faraway views is merely a red herring, since it is the exposure of closer neighbors to the objectionable views that particularly worry the Citizens, especially for persons living within a half mile of the solar equipment. Even in response to the questions of Angelina's counsel, Mr. Robinson admitted that the solar equipment will be highly visible to neighbors living within a half mile. Robinson, Tr. II 206:6-11.

Thus, Angelina's own statistics reveal that its unpleasant views will be highly visible to the persons living near the Project. Angelina attempts to disguise how bad its solar equipment will look by violating the requirement in OAC 4906-4-08(D)(4)(e) to accurately portray the equipment's appearance. This rule requires Angelina to "[p]rovide photographic simulations or artist's pictorial sketches of the proposed facility from public vantage points." Angelina has chosen to provide photographic simulations for this purpose. However, Angelina's simulations disguise the true adverse extent of the solar panels' visual impact by depicting panels that are eight feet tall. Applic., Exh. I, Section 3.3.2, Figure 11. Robinson, Tr. II 182:2-12. The Application allows Angelina to select panels that are 15 tall, so the Application has to analyze the impact of this worst-case scenario. In fact, the preliminary site plan attached to Mr. Herling's second supplemental testimony depicts the solar panels to be a maximum of 15 feet high. Co. Exh. 22, Attachment DH2, pdf p. 65. Since the panels may be as high as 15 feet (Robinson, Tr. II 182:25 to 183:7), the eight-foot simulations do not accurately portray the public's views of the Facility's equipment and structures that will tower above the short plants. Robinson, Tr. II 207:3-14. As Mr. Robinson admitted, the simulations should have shown the

panels to be almost double the height as inaccurately depicted in the simulations. Robinson, Tr. II 194:24 to 195:2. A 15-foot solar panel is more intrusive and imposing than an eight-foot panel, and the simulations must accurately depict the appearance of the tallest model that the Application is applying for permission to use. These simulations do not comply with the mandate in OAC 4906-4-08(D)(4)(e) for photographic simulations or artist sketches to show the Board and public what the Facility will look like.

Angelina tried to conceal the seriousness of its deception by asking Mr. Robinson if his report's conclusions would change if the simulations were based on 15-foot panels. Robinson, Tr. II 205:15-17. He responded: "They would not, no. We're still introducing contrasting use into the landscape that, from an adjacent position, you would notice and it would be visible." *Id.*, 205:18-21. That is, nearby neighbors will notice the solar equipment whether it is eight feet high or 15 feet tall. This statement misses the whole point of the simulation, which is supposed to show the actual extent of the adverse visual impact so the Board can determine whether the facility represents the minimum adverse impact under R.C. 4906.10(A)(3).

In addition, Amended Stipulation Condition 3 provides for ridiculously short setbacks of 25 feet between solar fences and neighbors' yards/land and 150 feet between solar equipment and neighbors' houses. Based on these setbacks, the Application does not comply with the requirement in OAC 4906-4-08(D)(4)(e) for "photographic simulations or artist's pictorial sketches of the proposed facility from public vantage points that cover the range of landscapes, viewer groups, and types of scenic resources found within the study area." The photographic simulations in the Application's Visual Resource Assessment do not depict the views from these setbacks. Figure 9 of the assessment shows views from 300, 600, and 900 feet away, but not from 25 or 150 feet away. Applic., Exh. I, pdf p. 61. Moreover, because Angelina could decide

to install 15-foot high solar panels as allowed by the Application, its simulations fail to portray the panels' appearance at elevations of eight feet above the seven foot fences at the close distances allowed by the setbacks in Amended Stipulation Condition 3.

The preliminary landscape plan attached to Mr. Robinson's supplemental testimony provides additional pictorial evidence of just how starkly visible the residents' views of the solar project will be from their homes unless effective mitigation is provided. Co. Exh. 24, Robinson Suppl. Testimony, Attachment 1. Section 5.0 of the preliminary landscape plan is an aerial photograph of the entire Project Area showing locations, depicted as green dots, of many residences throughout and surrounding the Project Area with potential views of the solar fields. *Id*., pp. 12-13. The preliminary plan also contains aerial photographs of nine non-participating residential properties abutting solar fields. *Id*., pp. 14-22. The aerial photographs show that eight of these homes and their yards have close, unobstructed views of solar panels. *Id*. 14, 16 – 22. The descriptions for each of these three properties echo this fact, stating: "Residence adjacent to proposed solar array field, no existing hedgerow" and "Open views towards agricultural field with solar panel array". *Id*.

Angelina's visual simulations fail to show the ugly, imposing views of the 15-foot (or eight-foot) solar equipment that nonparticipating residents will have from only 25 feet and 150 feet away in their yards and houses. The visual impact assessment contains no simulations depicting the view of solar panels 25 feet from the yard or 150 feet from the house of the unfortunate residents whose yards will be surrounded on two or three sides by solar panels. OAC 4906-4-08(D)(4)(e) requires simulations from the perspective of every "viewer group" exposed to Facility views. The residents within 25 feet or 150 feet are important "viewer groups" whose vantage points are not represented in the simulations. This information is

important for evaluating the Facility's adverse impact on them. The failure to include these simulations violates OAC 4906-4-08(D)(4)(e) and deprives the Board of information it needs to ascertain determining "[t]he nature of the probable environmental impact" of the project as required by R.C. 4906.10(A)(2).

3. **The Application Does Not Include Measures That Would Minimize The Facility's Adverse Visual Impacts.**

The Application does not describe the measures that will be implemented to minimize the Facility's adverse visual impacts as required by OAC 4906-4-08(D)(4)(f). All the Application does is generally list three types of visual mitigation that are theoretically available:

> Situations such as these will be accounted for in the development of a landscape plan for the Project, which will be included as part of the final design. A number of cost-effective options are available to address specific issues in limited circumstances. First, in some cases, full screening with short trees, native hedges or low-growing vegetation outside a portion of the fence may be employed. Second, portions of the perimeter fence can be designed with different materials or colors to enhance its visual appeal. Finally, native pollinator habitat outside a portion of the fence can provide a partial screen that "softens" the visual differences between the Project and the rural character of the area.

Applic., pp. 88-89. Emphasis added. Similarly, Application Exhibit I states that Angelina "is considering" pollinator-friendly plants to soften the Project's appearance, that it "anticipates" using plants that are good for the environment, that it "is considering" the installation of shrubs and trees adjacent to neighboring residences, and that the landscaping plan "would consider" aesthetic properties. Applic., Exh. I, pp. 41-42.

Noticeably absent from this Application language are any commitments to actually mitigate the adverse visual impacts. Instead, the Application states only that one "may" or "can" implement these measures. Applic., pp. 88-89. Exhibit I refrains from any actual commitments, promising only to consider certain plants for screening. Applic., Exh. I, pp. 41-42. The

Application defers any actual commitment to a future time when Applicant submits a post-certificate landscaping plan to the Staff. This plan has not been completed. Herling, Tr. I 117:20-24. This lack of specificity in the Application violates the mandate in OAC 4906-4-08(D)(4)(f) that the Application describe the measures that "will be taken" to minimize adverse visual impacts.

The stipulating parties attempt to remedy this shortcoming in the Application by stating in Amended Stipulation Condition 11 that Angelina shall submit a post-certificate landscape plan that contains "planting of vegetative screening designed by the landscape architect to enhance the view from the residence and be in harmony with the existing vegetation and viewshed in the area."[3] Angelina also introduced a preliminary landscape plan as an exhibit during the supplemental hearing, but it is not included in the Application either. A post-certificate condition does not cure Angelina's failure to include this plan in the Application as required by OAC 4906-4-08(D)(4)(f). Moreover, this preliminary plan also is not incorporated into or referenced by the Amended Stipulation, so it is entirely unenforceable as a means to minimize visual impacts. Moreover, Angelina's testimony illustrates why a post-certificate landscaping plan such as the preliminary plan introduced into evidence during the supplemental hearing provides little assurance that the Facility's visual blight will be satisfactorily managed and why the Application must commit to specific visual mitigation.

Amended Condition 11 does not provide non-participating neighbors with a voice in determining what visual mitigation will be implemented for their residential properties or

[3] The condition does not give Angelina the option of treating its perimeter fence as visual mitigation near neighbors' homes. The Application provides for a seven-foot chain-link fence without barbed wire, and/or a six-foot chain-link fence with three strands of barbed wire on top. Applic., Exh. I, p. 6. A chain-link fence, with or without barbed wire, is not visual mitigation. The fence itself is an unsightly structure that must be mitigated. And, as noted elsewhere in this brief, those simulations use eight-foot panels to provide the misleading appearance that the 15-foot panels do not loom above the fences.

surrounding areas. The condition as revised provides that Angelina can vary from the vegetation planting requirements of the condition if "alternative mitigation is agreed upon with the owner of any such adjacent, non-participating parcel containing a residence with a direct line of sight to the fence of the facility," but, remarkably, does not require Angelina to even consult with any such owners to learn about their screening preferences or to accommodate them. Nothing in the Amended Stipulation provides the neighbors with any rights of approval for the visual mitigation near their homes and land, so the neighbors are completely at the mercy of Angelina to design and the Staff to approve the landscaping as they wish. These neighbors would have such a voice if Angelina had included a landscape plan in the Application so that the neighbors could comment on it at the public comment session of the hearing or contest/approve of it during the adjudicatory process. Amended Condition 11 does not even try to compensate for this failure. Instead, it allows Angelina to design the mitigation however it pleases, whether the victimized landowner likes it or not. The landscaping plan should have been included in the Application as required by OAC 4906-4-08(D)(4)(f) so that the neighbors could adjudicate the details and adequacy of the vegetative designs chosen for their homes and land.

The preliminary landscape plan submitted by Angelina at the supplemental hearing shows that it was feasible for Angelina to include a final landscape plan in the Application. The preliminary landscape plan contains maps and plant lists showing where the screening plants could be located along the borders of three nonparticipants' properties. Co. Exh. 24, Attachment 1, pp. 14-22. The detail on these pages is sufficient for nonparticipating neighboring landowners to tell whether the proposed screening is adequate. Had Angelina included such information in the Application for every affected nonparticipating neighbor, those neighbors could have consented to or contested the sufficiency of those screens during the public comment session of

the hearing and the adjudicatory session of the hearing. The plan is still subject to post-certificate revisions at the whims of Angelina and the Staff and, in fact, could be changed in its entirety since neither the Application nor the Amended Stipulation require any degree of adherence to the draft attached to Mr. Robinson's testimony.

Neither the Application nor the Amended Stipulation require Angelina to completely screen the neighbors' homes from the intrusive views of solar panels and fences. Such a condition is critical to the Citizens. As Rachael Vonderhaar testified, they are concerned that "[s]eeing hundreds of acres of solar panels near our properties and on nearby public roads will spoil the visual and aesthetic enjoyment of living and working there." Vonderhaar Testimony, p. 4, A. 13. Nevertheless, Angelina's viewshed consultant, Matthew Robinson, testified that his goal is never to install 100 % screening. Robinson, Tr. II 199:8-12. Although a complete screen along all of the roads in the Project Area may look unnatural, a complete screen between solar panels and houses/yards is entirely reasonable and should be installed for affected homeowners who prefer not to see the panels at all from their homes. The Amended Stipulation does not give the neighbors the option to insist on complete screening, or anything else. Amended Condition 11 requires, in vague terms, "planting of vegetative screening designed by the landscape architect to enhance the view from the residence and be in harmony with the existing vegetation and viewshed in the area." But it does not provide any detail on how wide the row of vegetation must be or how far apart the plants will be planted. This allows Angelina to leave huge gaps between the plants at the time of planting, or for those gaps to develop later if vegetation dies and is not replaced. By allowing Angelina to do whatever it wants without the neighbors' consent, Amended Condition 11 fails to accommodate the reasonable expectation of the Concerned Citizens and any other nonparticipating neighbors who may want the solar equipment

to be completely screened from their homes by vegetation. Even though Angelina is intruding on the neighbors' presently pleasant views, Angelina does not appear amenable to making such a commitment to salvage whatever can be salvaged of those views.

Thus, Angelina plans to submit a post-construction landscape plan that leaves gaps between the plants so nearby residents can still see the ugly facility. Now, in the supplemental hearing, Angelina has introduced a new concept that makes this problem even worse, by proposing a provision in Amended Stipulation Condition 11 that requires Angelina to keep only 90% of the plants alive for five years, and then does not specify how much of the screening must stay alive in years six through 40 of the Facility's life expectancy. So Angelina intends to start out by planting trees and bushes with gaps between them, the gaps will be allowed to multiply in size and number by allowing up to 10% of these plants to die in the first five years, and thereafter there is no standard whatsoever as to how many plants have to survive. This arrangement does not provide for a meaningful vegetative screen between the solar facility and nonparticipants' homes. There is no good reason why Angelina, with its own employees, cannot keep 100% of the screen intact by caring for and, where necessary, replacing the trees and bushes. The ineffective arrangement for vegetative screening is a good example of why the final landscaping plan should have been included in the Application and subjected to public hearing and a complete adjudicatory process to vet and improve the plan.

There are three solutions for this situation: (1) properly care for the plants so they do not die; (2) replace the plants that die; and (3) plant at least two rows of plants so that a dead plant will not open a view to the Facility. Given the visual blight that the Facility will cause, this small extra effort to give neighbors some relief from the views is warranted. Moreover, if the Facility is as profitable as portrayed by the Application, Angelina can afford to plant and

maintain enough vegetation to make its screening effective for the life of the facility. Amended Stipulation Condition 11 does not fix this deficiency. The condition provides only that the "Applicant shall maintain vegetative screening for the life of the facility and the Applicant shall replace any failed plantings so that, after five years, at least 90 percent of the vegetation has survived." This provision leaves hanging some important questions.

First, after five years, how much of the vegetative screening must be maintained for the life of the facility? The condition states that Angelina is required to maintain at least 90% of the vegetation for only five years. If only 50%, or even less, of the screening survives in years six through 40 of the Facility's life expectancy, is that enough to satisfy the condition's requirement to "maintain vegetative screening for the life of the facility"? If Angelina builds the Facility, it very well might argue that this condition does not specify how much vegetation must survive during years six through 40. Even during the first five years, must Angelina maintain 90% of the screening in front of every nonparticipating neighbor's homestead, or is Angelina allowed to let all vegetation in front of a neighbor's home die as long as 90% of the screening still survives in the facility overall? With regard to the 90% requirement, Staff member Andrew Conway stated that he does not know how it would be implemented. Conway, Tr. V 648:19 – 649:7. These questions could have been answered by including a vegetation maintenance plan in the Application, but none was provided. These loopholes in the amended condition could eviscerate the screenings' effectiveness.

Second, except for requiring screening in front of fences in direct line of sight of non-participants' residences, the Application and Amended Stipulation say nothing about how tall the vegetation will be or about whether the plants must be as high as the solar panel or fences. As currently worded, Angelina might later contend that the Application and Amended Stipulation

require planting of no more than "pollinator" plants in front of most of the Facility. The planting of "pollinator habitat" does nothing to block the view of solar equipment, since it consists of short plants that do not hide the solar panels or fences at all. Figure 13, Simulation 1, Sheet 2 of 4 in Application Exhibit I depicts what pollinator habitat looks like. Robinson, Tr. II 194:12-23, 196:3-8. This vegetation is only four to six feet tall at maturity, and this simulation shows that it does not disguise the solar panels or fences. Robinson, Tr. II 196:9-19; Applic., Exh. I, Fig. 13, Simulation 1, Sheet 2 of 4, pdf p. 73.

Submitting a post-certificate landscaping plan pursuant to a certificate condition is not a lawful substitute for a compliant Application that would give affected neighbors a fair opportunity to adjudicate the adequacy of the Applicant's screening plans. Instead of providing an enforceable goal, such as complete screening for neighboring residences, Condition 11 does little more than state that Angelina and the Staff will later determine in secret, without Board or public input, what screening will be required. Matthew Robinson, who is "a large part" of the team that is designing the vegetation plan, stated that the impacted neighbors will not even be consulted about the plan's contents. Robinson, Tr. II 200:5-11. In fact, he started developing the plan without consulting with any neighbors. *Id.*, 201:10-12. The landscaping plan should have been included in the Application as required by OAC 4906-4-08(D)(4)(f). The Board should not approve the Application unless and until the deficiencies described above are addressed in the Application.

B. The Application Fails To Provide The Information About The Visual Impacts Of Project Lighting And Mitigation Measures Required By OAC 4906-4-08(D)(4).

OAC 4906-4-08(D)(4) provides:

> (4) Visual impact of facility. The applicant shall evaluate the visual impact of the proposed facility within at least a ten-mile radius from the project area. ...The applicant shall:
>
> ****
>
> (f) Describe measures that will be taken to minimize any adverse visual impacts created by the facility, including, but not limited to, project area location, lighting, turbine layout, visual screening, and facility coloration. In no event shall these measures conflict with relevant safety requirements.

Emphasis added. The Application violates this rule with respect to lighting.

The Application states that lights will exist at gates. Applic., p. 87. However, it provides no details about the actual locations of these lights, because Angelina has not decided where to build the gates. The visual impact assessment of Angelina's consultant in Application Exhibit I does not fill this information gap, but simply notes that, other than at the substation, lights will located at "a few other select locations." Applic., Exh. I, p. 40. This has left the Citizens unable to determine whether their individual homes will be subjected to these lights. This lack of information violates the requirement in OAC 4906-4-08(D)(4) to "evaluate the visual impact of the proposed facility."

Angelina could have provided maps in the Application that identify the locations for its lights. In fact, the preliminary site plan attached to Doug Herling's second supplemental site plan does that. Co. Exh. 22, Attachment DH2, pdf pp. 47-63 (see the symbol for lighting in the legend on each map). If Angelina had included this information in the Application, where it would be binding on Angelina upon issuance of the certificate, then the Concerned Citizens and other affected members of the public could have figured out whether the lighting would annoy them in their homes. However, the preliminary site plan is not in the Application, nor does the Amended Stipulation make it binding on Angelina. The preliminary site plan is subject to revision at Angelina's whim.

The Application also fails to make enforceable commitments for mitigation measures that will be taken to minimize adverse visual impacts of lighting, even though the rule requires that the Application describe the "measures that will be taken." Emphasis added. Angelina has not prepared a lighting plan. Herling, Tr. I 118:3-5. The Application's narrative text hollowly promises to "reduce" the lights' off-site impacts, but it makes no commitment as to how it will perform this task or the amount of impact reduction that will be accomplished. Applic., p. 89. Instead, it generally describes the types of mitigation that "may be incorporated into the design" such as downward facing lights, side shields, and motion sensors. Applic., p. 89. This refusal to commit to specific mitigation appears to reject the statements in the visual impact assessment of Angelina's consultant that "security and work related lights will be shielded, downward facing fixtures" and that security lights will use motion sensors. Applic., Exh. I, p. 40. This lack of information violates the requirement in OAC 4906-4-08(D)(4) to "[d]escribe measures that will be taken to minimize any adverse visual impacts created by the facility, including … lighting."

Amended Condition 11 does not correct this deficiency in the Application. The condition provides that "[l]ights shall be motion-activated and designed to narrowly focus light inward toward the facility, such as being downward-facing and/or fitted with side shields." However, this language is still missing from the Application, where Angelina was required to place it. In addition, while this language belatedly makes it mandatory for the lights to be focused towards the Facility and motion-activated, these requirements fall short of the detail necessary for nonparticipating neighbors to know whether the lights will bother them. For example, if the lights are bright and close to a neighbor's house, additional mitigation such as complete vegetative screening (not Mr. Robinson's gapped plantings) may be necessary to prevent the lights from illuminating the neighbor's house. The condition does not fill in the information

missing from the Application to "describe measures that will be taken to minimize any adverse visual impacts " from lighting as required by OAC 4906-4-08(D)(4)(f). Nor does the condition provide an enforceable goal or standard to achieve. This reality is betrayed by the fact that Condition 15 still requires the lighting details to be fleshed out in a later plan. The condition just provides that Angelina and the Staff will work out the mitigation measures in a future secret deal.

Staff member Jon Pawley testified that nothing about the Project prevented Angelina from submitting the lighting plan with its Application. Pawley, Tr. II 304:21-25. The Certificate cannot be issued without first including this information in the Application.

C. <u>The Application Lacks The Decibel Data And Mitigation Measures For Operational Noise From The Inverters Required By OAC 4906-4-08(A)(3)</u>.

1. <u>Angelina Wants To Install Its Solar Project In An Extremely Quiet Community In Which New Noises Will Be Easily Heard</u>.

Angelina wants to construct its solar project in a quiet rural community, as it discovered when its acoustics consultant, Hessler Associates, Inc., measured the background sound level in the Project Area. Applic., pp. 1-2; Hessler, Tr. II 242:11-19. The background sound level can mask the sound from a new noise source if the background sound is as high as the new sound. Hessler, Tr. II 242:1-6. In the Project Area, the average L90 background sound level in daytime is "extremely quiet" at "only 31 dBA."

2. <u>OAC 4906-4-08(A)(3) Requires The Application To Describe The Operational Noise Levels Expected At The Nearest Property Boundary And At Each Habitable Residence</u>.

OAC 4906-4-08(A)(3) describes the information that the Application must provide about the anticipated noise impacts from the Facility:

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

****

(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.

(d) Describe equipment and procedures to mitigate the effects of noise emissions from the proposed facility during construction and operation, including limits on the time of day at which construction activities may occur.

Emphasis added.

3. The Application Represents That The Sound From The Project's Inverters Is Almost Inaudible.

Angelina's Application is missing important noise information required by this rule for the inverters that Angelina plans to install in the solar fields. Angelina will construct up to 40 central inverters and an unknown number of string inverters. Herling, Tr. I 75:8-22. Inexplicably, the Application contains no modeling for the noise from inverters to determine how much noise would travel from them to neighboring land and houses. Bellamy, Tr. II 312:20-22.

Inverters convert the energy from solar panels from direct current to alternating current so it can be transmitted in a collection line. Herling, Tr. I 51:16-23; Applic., Exh. E, p. 12. During that process, the inverters generate a humming noise. *Id.*, pp. 12-13.

Accurately quantifying the decibel levels of the noise from Angelina's inverters is important due to the tiny setbacks set by the Application. While Angelina argued in the original hearing that it does not expect inverter noise to travel beyond 150 feet, the Application does not require inverters to be sited at least 150 feet from neighboring land or houses. Herling, Tr. I 491:3-15; Hessler, Tr. IV 499:6-13. The Application requests permission to site an inverter a mere 25 feet from a neighbor's land and only 100 feet from a neighbor's house. Applic., p. 54. These inverters will be operating in an "extremely quiet" rural area in which the existing average daytime L90 noise level is only 31 dBA, with a range of 20 to 35 L90 dBA. Hessler, Tr. II 260:8-19; Applic., Exh. E, p. 5 & p. 6, Table 3.0.1.

Angelina tried to excuse its lack of acoustics data for the inverters by representing in the Application that a solar facility "comes close to operating silently." Applic., p. 57. The Application further states that "the noise that inverters and their associated step-up transformers generate is inaudible at a distance of 50 to 150 feet from the source." Applic., p. 58. Mr. Herling also made this argument at the original hearing. Herling, Tr. I 74:7-15. Mr. Herling testified that the solar arrays are "near-silent." Co. Exh. 7, Herling Testimony, p. 8, lines 6-8. Angelina stated that this position is based on the report from Hessler Associates in Exhibit E of the Application (hereinafter referred to as "Hessler's Report"). Applic., p. 58; Herling, Tr. I 245:10-18. Hessler Report also contends that inverter sound "is rarely audible at the perimeter fence of typical solar fields." Applic., Exh. E, pp. 2, 15.

The Application estimates that there will be a distance of 50 feet between the solar equipment and the project's "site property boundary," as "conservatively interpreted." Applic., p. 57. The Application's representation that Hessler's Report finds the inverter noise to be inaudible at 50 feet away was obviously intended to demonstrate that inverter noise would not

reach the property line. However, the Application, including Hessler's Report, contains no noise data showing the amount of inverter noise that will travel 50 feet, or any distance. This was especially troubling in light of the fact that the setbacks provided in the Application between the solar equipment, including inverters, and neighboring land/yards and homes are only 25 feet and 100 feet, respectively. Applic., p. 54; Bellamy, Tr. II 309:19 to 310:10.

Neither the Application's narrative nor Hessler's Report contains any noise data to show the amount of inverter noise that will travel 50 to 150 feet. The statement in Hessler's Report, representing that "field measurements indicate that inverter sound fades to insignificance relative to normal background levels at a distance of 150 ft.," is based on a report for the Massachusetts Clean Energy Center (hereinafter referred to as the "Massachusetts Report"). Applic., Exh. E, p. 13; Hessler, Tr. II 245:10 to 246:2; CCOPC Exh.1. The same is true of the statement in Exhibit E that "inverter sound is rarely audible at the perimeter fence of typical solar fields." Applic., Exh. E, pp. 2, 13. In fact, these statements were based solely on the Massachusetts Report, since this was Mr. Hessler's only information on inverter volume at the time he did his report.

The Massachusetts Report did not identify the inverters' sound volumes at 150 feet away. Instead, it found only that the inverter sound at three study sites did not exceed the background sound levels at that distance. Hessler, Tr. II 249:13 to 256:12. Thus, the high background sound at the Massachusetts sites covered up the inverters' noise. Hessler, Tr. II 254:4-8, 255:11-15, 256:11-12. Accordingly, contrary to the Application, the Massachusetts Report provides the Board with no data on how loud inverters are at a distance of 150 feet. And at the sites studied in the Massachusetts Report, the background sound levels were considerably higher than the 31 dBA L90 average daytime background sound level in Angelina's Project Area. In contrast to 31 dBA, the average L90 background sound levels for the three sites measured in the Massachusetts

Report were 43.9 dBA, 49.6 dBA, and 42.5 dBA. Hessler, Tr. II 249:13 to 256:12; CCOPC Exh. 1, pp. 9, 17, 25.

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). The Application does not even contain any data to show that inverter noise levels at 150 feet away will be suitable. 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, <u>and the operational noise level at each habitable residence, school, church, and other noise-sensitive receptors</u>, under both day and nighttime operations." Emphasis added. The Application fails to identify the inverter noise levels at the residences and other noise-sensitive receptors within a mile of the Facility.

Angelina has no good excuse for failing to provide this data in the Application. Angelina claimed that "[t]he precise make and model of the inverters for the Angelina project has not yet been selected so their sound emissions cannot be modeled or rigorously evaluated at this time." Applic., Exh. E, p. 13. However, Angelina could have modeled the sound levels from several inverter models that are typical of the inverter that ultimately would be selected, just as wind power applicants for OPSB certificates typically do for wind turbine models. Or Angelina's acoustics consultant could have simply measured the sound from an operating solar facility. Without this information in the Application, OPSB cannot issue a certificate for the Angelina project.

4. <u>Angelina Now Admits That Inverters Emit Noise At A Level of 38 dBA At A Distance Of 500 Feet</u>.

As described above, the Application represents that a solar facility "comes close to operating silently" and that inverter sound "is inaudible at a distance of 50 to 150 feet from the

source." Applic., pp. 57-58. Mr. Herling testified that the solar arrays are "near-silent." Co. Exh. 7, Herling Testimony, p. 8, lines 6-8.

Mr. Hessler took a very different position at the supplemental hearing. By that time, he had obtained a manufacturer's sound test report for a commonly used inverter. Co. Exh. 23, Hessler Suppl. Testimony, p. 2, lines 10-23. He then used the manufacturer's data to model the noise from the central inverters for the Project. *Id*., p.2, line 23 – p.3, line 4. Based on his modeling, Mr. Hessler opined that no non-participating houses would be exposed to more than 35 dBA from the central inverters. Co. Exh 23, p. 3, lines 2-4. He discovered that central inverter noise is 38 dBA at a distance of 500 feet. *Id*., p. 4, lines 5-6. The contour map of noise levels in Mr. Hessler's supplemental testimony shows that noise from the central inverters will be as high as 40 dBA and 45 dBA at the property lines of nonparticipating neighbors. Hessler, Tr. V 636:17-22; Co. Exh. 23, Exh. DMH-S1 (blue lines show that 40 dBA from five inverters, and orange lines show that 45 dBA from three inverters, intersect or cross the project area's boundaries).

Mr. Hessler did not calculate the inverter noise level at a distance of 50 feet, which is the setback that he and the Application assured the Board would be adequate to avoid adverse noise impacts in the original hearing. Needless to say, the inverter noise level at 50 feet is higher than at 500 feet. The information introduced in the supplemental hearing on the actual 38 dBA noise level at 500 feet for central inverters, in contrast to Mr. Herling's testimony that solar farms are "near-silent," has destroyed any credibility for representations made by Angelina. Co. Exh. 7, Herling Testimony, p. 8, lines 6-8.

With an average daytime L90 ambient sound level of 31 dBA, the central inverters will increase the community's average noise level by seven dBA to 38 dBA at 500 feet. Since the

L90 background levels range between 20 dBA and 35 dBA (Applic., Exh. E, p. 5), the central inverters can increase the community's noise levels by as much as 18 dBA at 500 feet. In addition, although Angelina contends that the noise at neighboring nonparticipants' homes will not exceed 35 dBA, it will still raise the sound level to 40 dBA or 45 dBA on neighboring land. That is, at its highest projected sound, a central inverter could raise the noise level on non-participating land by as much as 14 dBA over the average L90 level or as much as 25 dBA above the low end of the community's normal range.

The Amended Stipulation attempts to compensate for the Application's failure to identify the noise levels for central inverters by providing for a 500-foot setback between the central inverters and non-participants' homes. However, the project may use string inverters. Herling, Tr. V 75:8-22, 561:21 – 562:12. String inverters convert the electricity on a single string (row) of solar panels. Herling, Tr. V 562:20-24. The 500-foot setback would not apply to string inverters. Hessler, Tr. V 586:14-23.

Mr. Herling testified that "some string inverters are grouped into what is essentially a central inverter and operate the same way as a central inverter and will be considered in this design as a central inverter." Herling, Tr. V 562:7-12. This provides Angelina with a loophole in the proposed 500-foot setback, since Amended Stipulation Condition 3 specifically applies that setback only to any "central inverter." Angelina might argue, after certification, that its grouped string inverters are immune from this setback. Mr. Herling also represented that string inverters are "typically on the interior of the Project." Herling, Tr. V 572:1-6. However, neither the Application nor the Amended Stipulation preclude Angelina from siting string inverters, whether single or in groups, any farther than 25 feet from non-participants' yards or 150 feet from houses.

OAC 4906-4-08(A)(3) requires the Application to identify "the operational noise levels" at the nearest property boundary and nonparticipants' residences for all project noise sources, and string inverters emit noise. Nevertheless, no noise measurements or modeling has been conducted for string inverters, because Angelina did not tell Mr. Hessler that string inverters might be used or ask him to model the noise from the string inverters. Hessler, Tr. V 596:15-20. For locations at Angelina at which the noise from string inverters will be combined with noise from central inverters, Angelina should have modeled the combined noise levels. Angelina could have provided this modeling, because David Hessler had sound test information that he could have used for that purpose. Hessler, Tr. V 596:8-14.[4] Angelina's Application contains no noise modeling for noise from string inverters, alone or combination with the central inverters, because Angelina neglected to tell Mr. Hessler that string inverters might be used. Hessler, Tr. V 624:20-24.

Mr. Hessler testified that noise from string inverters is significantly lower than noise from central inverters and has no tonal quality. Hessler, Tr. V 601:8-17. He also opined that noise from string inverters would be low at neighboring residences at a distance of 150 to 175 feet away. Hessler, Tr. V 602:23 – 603:3. However, while Amended Stipulation Condition 3 proposes a 150-foot setback between solar equipment and non-participants' houses, it would provide only a 25-foot setback to neighboring yards.[5]

[4] Mr. Hessler had estimated string inverter noise levels of about 30 dBA at non-participating residences at a different wind project, but he could not identify the distances between the residences and string inverters other to say that it was "substantial." Hessler, Tr. V 598:3-9, 599:1-7.

[5] Mr. Hessler also thought at first that the Application contains a 25-foot setback between solar equipment and solar fence, but he was mistaken. Hessler, Tr. V 602:6-18, 603:13 – 604:6; Applic., p. 54. Then he said that there may be an access road or "something" between the solar equipment and the fence that might occupy 25 feet. Hessler, Tr. V 603:20-25. But the Application and Amended Stipulation do not require any such space between the solar equipment and the fence.

Mr. Herling represented that he has seen some string inverters, and they were quiet. Herling, Tr. V 570:14 – 571:4. But he did not measure the noise outputs from any of those string inverters. Herling, Tr. V 577:6-8. However, we have heard this tune before, in the Application, which assured that a solar facility "comes close to operating silently," and in the original hearing, in which Mr. Herling reassured everyone that the solar arrays are "near-silent." Applic., p. 57; Co. Exh. 7, Herling Testimony, p. 8, lines 6-8. And those assertions now have been proven false by Mr. Hessler's modeling of 38 dBA at a distance of 500 feet. So there is no reason to believe the same type of testimony for string inverters, unless their noise has been modeled. Sound modeling should have been included in the Application for string inverters, as well as central inverters.

5. **Revising The Setback Between Solar Equipment And Nonparticipants' Homes By Stipulation Does Not Satisfy The Requirements In OPSB's Rules That The Application Provide The Setbacks And Noise Estimates At Project Boundary Lines And Nearby Homes.**

The Application states that "[t]he Project will be designed to site the inverters within the solar fields to ensure they do not cause material, adverse impacts to any sensitive, off-site receptors." Applic., p. 58 (emphasis added). Although Doug Herling and David Hessler stated at the original hearing that the inverters would be sited in the Facility's interior, their statements are not enforceable during construction because the Application does not state where "within the solar fields" the inverters will be located. The Application's only restrictions on inverter siting are the setbacks, which are 25 feet and 100 feet between the Facility's above-ground equipment and nonparticipants' property lines and habitable residences, respectively. Applic., p. 54. Thus, under the Application, the inverters could be a mere 25 feet from the boundary and 100 feet from

non-participating residences and still comply with the Application's statement that they will be located "within the solar fields."

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, <u>and the operational noise level at each habitable residence, school, church, and other noise-sensitive receptors</u>, under both day and nighttime operations." Emphasis added. The Application fails to identify the inverter noise levels at the nonparticipants' residences within a mile of the Facility.

Realizing the indefensibility of its position, Angelina has now entered into an Amended Stipulation with its allies that would institute a 500-foot setback between central inverters and the homes of nonparticipating neighbors. David Hessler's supplemental direct testimony contains a map showing locations using this new setback for central inverters with sound contours around them. Co. Exh. 23, Exh. DMH-S1. This attempt to retrofit a new setback into the project by stipulation does not comply with the mandate of OAC 4906-4-04(B)(1) to include the setback in the Application in a constraint map that shows the locations of nonparticipants' homes in relation to the facility. Neither the Application nor the Amended Stipulation contain this map or require Angelina to adhere to the map attached to Mr. Hessler's supplemental testimony. This information should have been included in the Application, where it could have been subjected to public comment, discovery, and the complete adjudicatory process and made enforceable as a condition of the certificate.

The map of central inverter noise levels in the map attached to Mr. Hessler's supplemental testimony represents that the noise from the central inverters will be up to 35 dBA

at some nonparticipants' homes. Co. Exh. 23, p. 3, lines 2-4. However, these are the projected noise levels if the central inverters are sited at the locations shown in Exhibit DMH-S1 of Company Exhibit 23. Angelina is not required by the Application or the Amended Stipulation to place its central inverters at those locations. Angelina could move them closer to the Facility boundary, as long as they were at least 500 feet from neighboring non-participants' houses. Mr. Hessler represented that his model showed that the noise from central inverters will be 38 dBA at a distance of 500 feet. Co. Exh. 23, p. 4, lines 3-6. This would expose non-participants' to up to 38 dBA of noise at their houses, which is a noticeable and obtrusive seven dBA above the 31 dBA daytime background sound level and 18 dBA above 20 dBA at the low end of the normal range of L90 background sounds.

Neither the Application nor any witness' testimony reveals the sound level at boundary lines and sensitive receptors from string inverters. Without including this information in the Application as required by rule, OPSB cannot issue a certificate for the Angelina project.

6. The Application Fails To Describe The Mitigation Equipment And Procedures For Mitigating Noise Problems From Operating The Inverters As Required By OAC 4906-4-08(A)(3).

OAC 4906-4-08(A)(3) describes the information that the Application must provide about the anticipated noise impacts from the Facility:

> (3) Noise. The applicant shall provide information on noise from the construction and operation of the facility.
>
> ****
>
> (d) Describe equipment and procedures to mitigate the effects of noise emissions from the proposed facility during construction and operation, including limits on the time of day at which construction activities may occur.

Emphasis added.

In recognition of its failure to identify the sound levels expected from the inverters, Hessler's Report states that options exist for mitigation of inverter noise "should any problem

arise" during operation. Applic., Exh. E, p. 2. These mitigation measures include cabinet damping and ventilation silencers. *Id*. at 13. But mitigating noise after it becomes a problem is a poor substitute for proper siting to prevent the problem ahead of time. By that time, it already will have harmed the neighbors exposed to the objectionable noise.

The Amended Stipulation also fails to identify the noise level at which mitigation will be employed. Hessler, Tr. V 600:1-5. Mr. Hessler said that noise problems typically are raised by complaints (Hessler Tr. V 600:25 - 601:7), but that begs the question about the sound level necessary for such a complaint to be considered successful in obtaining mitigation. The failure to determine when mitigation will be required does not satisfy OAC 4-08(A)(3)(d), which requires the Application to proactively describe the "procedures to mitigate the effects of noise emissions from the proposed facility during construction and operation."

D. **The Application Lacks Effective Measures To Minimize Disagreeable Noise From Construction Required by OAC 4906-4-08(3)(d).**

OAC 4906-4-08(A)(3) requires the Application to contain the following information about noise levels expected to occur during construction of the Facility:

> (3) Noise. The applicant shall provide information on noise from the construction and operation of the facility.
>
> (a) Describe the construction noise levels expected at the nearest property boundary. The description shall address:
>
> (i) Blasting activities.
>
> (ii) Operation of earth moving equipment.
>
> (iii) Driving of piles, rock breaking or hammering, and horizontal directional drilling.
>
> (iv) Erection of structures.
>
> (v) Truck traffic.
>
> (vi) Installation of equipment.

****

> (d) <u>Describe equipment and procedures to mitigate the effects of noise emissions from the proposed facility during construction</u> and operation, including limits on the time of day at which construction activities may occur.

Emphasis added.

The Application predicts that "numerous piles" will be driven into the ground to serve as posts for the solar panels. Applic., p. 57. The posts for the solar panels will be pounded by a pile driver or screwed by a drill rig truck into the ground. Hessler, Tr. II 258:5-24; Herling, Tr. I 62:10 to 63:2. The posts and pile driver are composed of metal, resulting in metal pounding on metal during post installation by pile driver. Herling, Tr. I 62:19 to 63:10.

The Application admits that the pile driver and/or drill rig truck used to drive the posts into the ground will produce a noise that is 84 dBA or 85 dBA at a distance of 50 feet, which the Application represents to be "conservatively interpreted" as the distance to the project's boundary. Applic., p. 57; Hessler, Tr. II 253:6-18. This is equivalent to the noise from a bulldozer. Applic., Exh. E, p. 14, Table 6.0.1; Hessler, Tr. II 257:16-24. "There's no question that construction noise is going to be audible." Hessler, Tr. II 259:23-25. This grating noise will be repeated about 45,300 times during construction, as about 45,300 pilings (posts) will be installed to hold the 213,333 to 320,000 solar panels. Applic., p. 8; Applic., Exh. G, p. 7-4.

The Application states that the pile driving noise will be "temporarily produced." Applic., p. 57. Hessler's Report asserts that this activity will be "fairly short-lived in any particular location." Applic., Exh. E, p. 2. However, this assertion is wrong. Mr. Herling acknowledged that post installation will take three to four months. Herling, Tr. I 63:14-20. He could not say how long post installation would occur near a particular neighbor's home, such as the 8000 posts that will be placed in the 120-acre field bordering one neighbor's house on three sides. Herling, Tr. I 64:11 to 70:18.

Simply requiring Angelina to stop pounding the metal posts at dusk, as suggested by proposed Condition 10 of the Amended Stipulation, will not provide the Facility's neighbors with adequate relief from this noise. Warning the neighbors in advance that the loud noises are about to start, as required by the same condition, also does nothing to relieve the neighbors of the sound. Pursuant to OAC 4906-4-08(A)(3)(d), OPSB should not issue a certificate without first instructing Angelina to devise more effective mitigation measures to address this noise.

E. The Application Lacks The Procedures Necessary To Comply With The Requirements In OAC 4906-4-08(E)(2) For Avoiding And Repairing Damage To Field Drainage Tiles.

OAC 4906-4-08(E)(2) provides:

> (2) Agricultural information. The applicant shall provide, for all agricultural land, and separately for agricultural uses and agricultural districts identified under paragraph (E)(1) of this rule, the following:
>
> ****
>
> (b) An evaluation of the impact of the construction, operation, and maintenance of the proposed facility on the land and the following agricultural facilities and practices within the project area:
>
> ****
>
> (iii) Field drainage systems.
>
> ****
>
> (c) A description of mitigation procedures to be utilized by the applicant during construction, operation, and maintenance to reduce impacts to agricultural land, structures, and practices. The description shall illustrate how avoidance and mitigation procedures will achieve the following:
>
> (i) Avoidance or minimization to the maximum extent practicable of any damage to field tile drainage systems and soils in agricultural areas.
>
> (ii) Timely repair of damaged field tile systems to at least original conditions, at the applicant's expense.

Emphasis added.

The vigilant monitoring, maintenance, and repairs of field drainage tiles are of utmost importance to a crop farmer. Oversaturated soil in the spring can delay planting of crop fields, which decreases crop yields. Vonderhaar Direct Testimony, p. 9, A.23. After planting, flooding

can kill or damage growing crops. *Id*. Planted corn seeds or small corn plants will die if they are flooded for 24 to 48 hours. Vonderhaar Suppl. Testimony, p. 4, A.6. The seeds rot and the young plants suffocate under this condition. Vonderhaar, Tr. III 410:19 to 411:5. Surface water flow can also damage downgradient fields with erosion. Vonderhaar Direct Testimony, p. 9, A.23.

Well-functioning tiles are critical for crop farming, because otherwise the fields will flood and will stay wet longer after precipitation. *Id*., p. 10, A.25. For example, a damaged tile must be replaced immediately to prevent damage to a newly planted corn crop. Vonderhaar Suppl. Testimony, p. 4, A.6. Because much of the land in the Project Area slopes to the southeast, the tiles in this area drain to the southeast so that the water can flow downgradient to Four Mile Creek. Vonderhaar Direct Testimony, p. 10, A.25. Some tiles in the Project Area flow southeast into tiles on land owned by the Concerned Citizens. *Id*. This includes two main trunk tiles that flow into tiles on land owned by Vonderhaar Family ARC, LLC and Campbell Brandly Farms, LLC (which is land farmed by Vonderhaar Farms, Inc). *Id*.

The latter main tile is located in a low area of Campbell Brandly Farm's field north of Marja Brandly's house. Brandly Direct Testimony, p. 4, A.17. This tile is connected to a tile in the 79.494 acre parcel owned by Gary Stahlheber, which is part of the Project Area. *Id*. If the solar panels on that parcel increase the rate of runoff from rainfall into Mr. Stahlheber's tile, it would increase the amount of flow in Brandly Farm's tile and may keep Brandly Farm's land wet for a longer period of time. *Id*. This may decrease the crop yields on part of this field. *Id*.

Some of the Project Area slopes to the west, and its tiles flow to the southwest and west into tiles on land owned by Kevin and Tina Jackson. *Id*. Their land drains to the Little Four Mile Creek that also flows to Acton Lake in Hueston Woods State Park. *Id*., p. 11, A.25. The

tiles' function is to quickly move water from the surface and upper soil of the fields, in order to prevent flooding and soil oversaturation. *Id*. Without properly functioning tiles in the Project Area, the surface water flow from the Project Area onto the Concerned Citizens' downgradient fields would increase and flood and erode the Citizens' fields. *Id*.

Notwithstanding the tiles' importance, the Application does not comply with the mandate in OAC 4906-4-08(E)(2)(c)(ii) to provide for the "[t]imely repair of damaged field tile systems to at least original conditions." The Application states only that Angelina will "use commercially reasonable efforts" to repair tiles. Applic., p. 92. This implies that Angelina will not repair damaged tiles if it deems the repairs to be too costly or difficult, and sets up a conflict with language in Condition 16 that requires all damaged tile systems to be repaired. Although Angelina may disclaim any such intent, there is a potential that Angelina, or whoever owns the Facility after Angelina builds it, may interpret this ambiguous term in the future to excuse the company from making repairs in the future. This does not satisfy the rule's mandate to repair all damaged tiles. A certificate should not be issued as long as the Application contains this vague language.

The timing of repairs also is a problem. The Application states that repairs will be made "promptly." Applic., p. 92. Amended Stipulation Condition 16 muddles the meaning of this commitment by requiring tiles to be "promptly repaired no later than 30 days after such damage is discovered." Jt. Exh. 1, p. 8. This sentence is poorly drafted. Doug Herling opined that "no later than 30 days" does not define "promptly." Herling, Tr. I 134:9-17. But some time down the road, Angelina might argue that any repair is prompt if it is done within 30 days, even if immediate tile repair is necessary to prevent crop damage to a downgradient landowner.

If a certificate is issued, Condition 16 badly needs repair. The Citizens recommend the following sentence to express the condition's actual intent: "Damaged field tile systems shall be replaced as quickly as feasible, but in no event later than 30 days after the damage is discovered." Making this change is necessary to satisfy the edict in OAC 4906-4-08(E)(2)(c)(ii) for the "[t]imely repair of damaged field tile systems." If broken tiles are not replaced early enough to prevent damage, the certificate should require the Applicant to reimburse the damaged landowner for the resulting loss based on an estimate of loss provided by a Certified Crop Advisor.

The Application does not satisfy the requirement in OAC 4906-4-08(E)(2)(c) to provide procedures for avoiding and mitigating damage to field tiles. Some of the tiles in the Project Area have reached or are close to reaching their life expectancy and will need to be replaced completely when they fail. Vonderhaar Suppl. Testimony, p. 4, A.6. Although Angelina contends it could use a mini-excavator or even a hand shovel to dig out malfunctioning tiles between solar panels, a sizeable replacement of deteriorated tiles would require heavy equipment. Vonderhaar, Tr. III 407:13 to 410:10. Procedures for these replacement activities will necessitate the temporary removal of solar panels to provide room for the equipment used to replace the tiles, but no such procedures are provided. Vonderhaar Suppl. Testimony, p. 4, A.6. The Application does not identify any procedures that will be used to determine whether tiles have been broken, damaged, or deteriorated during project operation, even though tiles reach the end of their usable lives over time. Applic., p. 91-92. Neither does the Amended Stipulation.

In addition, the Application must provide a procedure for detecting tile damage caused by construction. A construction crew will not be able to tell that a tile has been broken if the posts for the panels are driven into the ground. Vonderhaar Direct Testimony, p. 11, A.26. Clay or

plastic tiles offer little resistance to heavy pressure. *Id*. In fact, Ms. Vonderhaar has seen people crush plastic tiles with their feet. *Id*. The construction workers will not be able to hear the tiles break over the noise resulting from pounding the metal posts into the ground. *Id*. The Application must be amended to provide a procedure for detecting this tile damage at the time it occurs, rather than waiting for flooding to occur to look for the damage. Without such a provision, the Application does not comply with the mandate in OAC 4906-4-08(E)(2)(c)(i) to avoid damage to tiles "to the maximum extent practicable."

The Application also fails in another way to satisfy the requirement in OAC 4906-4-08(E)(2)(c)(ii) to provide procedures for the "[a]voidance or minimization to the maximum extent practicable of any damage to field tile drainage systems." Emphasis added. In situations where Angelina damages or blocks a tile, Angelina must consult with landowners whose land may be affected by the tile damage or blockage. Vonderhaar Suppl. Testimony, p. 3, A.6, lines 10-13. Consultation with all potentially affected upstream and downstream landowners (both adjacent and non-adjacent to the Project Area) is essential to make sure that the Applicant and County Engineer have all of the information they need to address the problem. *Id*. This consultation also is necessary to make sure the tile repairs or replacement are effective to correct any drainage problem on the affected landowners' land. *Id*., lines 13-15.

OAC 4906-4-08(E)(2)(c) requires the Application to provide procedures to avoid or minimize damage "to the maximum extent practicable," and meaningful consultation with affected neighbors is one such procedure. The certificate cannot be issued without first adding to the Application a consultation process with all affected neighbors for tile repairs/replacements.

In sum, the Application is noncompliant with OAC 4906-4-08(E)(2)(c) for six reasons: (1) the Application states only that Angelina will "use commercially reasonable efforts" to repair

tiles, instead of providing for the "[t]imely repair of damaged field tile systems to at least original conditions;" (2) while the Application states that repairs will be made "promptly," Amended Stipulation Condition 16 conflates "promptly" with 30 days even where immediate repairs are essential to prevent crop damage; (3) the Application does not identify any procedures that will be used to determine whether tiles are broken, damaged, or deteriorated due to old age or other causes during project operation; (4) the Application does not identify any procedures for replacing damaged tiles, especially where a long segment has deteriorated due to old age; (5) the Application provide no procedure for detecting tile damage caused by construction, which cannot be heard over the loud noise of post driving; and (6) the Application does not require Angelina to consult with affected non-participating landowners to repair/replace tiles.

F. The Application Does Not Describe Or Evaluate The Reliability Of The Project's Equipment For Preventing Criminal Access To The Facility As Required By OAC 4906-4-08(A).

OAC 4906-4-08(A) provides:

> (A) The applicant shall provide information on health and safety.
>
> (1) Equipment safety. The applicant shall provide information on the safety and reliability of all equipment.
>
> (a) Describe all proposed major public safety equipment.
>
> (b) Describe the reliability of the equipment.
>
> ****
>
> (d) Describe the measures that will be taken to restrict public access to the facility.

Emphasis added. The Application contains little provision for security to prevent criminals from stealing wire and other recyclable components at the Facility. This makes the Facility an easy target that could attract criminals to the community where they might also harm the Citizens.

While this rule requires the Application to describe all proposed major public safety equipment, its reliability, and measures to prevent public access, the Application only identifies "fences with locked gates" and "warning signage." Applic., p. 55. These generic descriptions do little to satisfy the rule's objective for public safety.

Mr. Herling testified that each solar field will be fenced with locked gates. Herling, Tr. I 90:8-18. The type of locks has not been decided. Herling Tr. 90:12-24. They typically have a keypad or padlock. Herling, Tr. I 90:21-24. A thief can cut off padlocks with a bolt cutter. Herling, Tr. I 90:25 to 91:5; Brandly, Tr. III 428:8-9.

Mr. Herling thought the solar fields would be surrounded by chain link fence. Herling, Tr. I 91:6-9. The Application states that "[f]encing is expected largely to be standard, chain-link material." Applic., p. 13. Thieves can cut through a chain link fence with a blowtorch. Herling, Tr. I 91:14-21. In fact, Mr. Herling has seen chain link fences that have been cut. Herling, Tr. I 91:20-21. "Padlocks and chain link fence are meaningless to them." Brandly, Tr. III 428:8-9.

The solar Facility will be largely isolated. Mr. Herling testified that Angelina's personnel will conduct "periodic" security checks of the Facility. Herling Direct Testimony, p. 13, A.22. The Application does not specify the frequency of these security checks, and Mr. Herling could not say how frequently the security checks would occur. Herling, Tr. I 91:22 to 92:2, 94:3-7. Most disturbingly, Angelina does not know whether it will have any security personnel in the Project Area at night to deter crime. Herling, Tr. I 92:9-19, 94:8-10.

Based on the Application, these periodic safety checks will be rare. The Application states that "[o]nly a few operational personnel will be needed for the Project, and they will be present at any given location in the Project only occasionally." Applic., p. 75. "On most days, at any particular location at the Project, no operating personnel will be present." Applic., p. 75.

Solar facilities use copper wire in their construction. Herling, Tr. I 94:18 to 95:1. Thieves steal copper wire to sell it. Herling, Tr. I 95:2-4. While Mr. Herling has not heard of thieves stealing copper wire from operating solar facilities, he has never sited a solar facility near the Village of Fairhaven. Herling, Tr. I 95:2-8. The Project's solar collectors and all other metal (electric wiring, structural supports, etc.) will all be located within a four-mile radius of Fairhaven. CCOPC Exh. 5, Mast Direct Testimony, p. 9, A.18.

Crime runs rampant in Fairhaven. The sheriff's reports over the past 5 years report that the township has experienced 30 grand thefts, 52 petty thefts, 30 property damage incidents, and 178 suspicious events. *Id*., p. 6, A.16, Lines 19-20. Drug transactions are constant. *Id*., p. 10, A.20; Mast, Tr. III 460:19-25. The direct testimony of Walter Mast, the co-leader of the Neighborhood Watch Team, recounts a number of these crimes near his home, including a neighbor who was burglarized five times, a neighbor who had been murdered and burglarized, another nearby house that was mysteriously destroyed by fire, two other neighbors who were burglarized, and a burglary and arson in one of Mr. Mast's own buildings. Mast Direct Testimony, pp. 5-9, A.14, A.15, A.16.

Many rural properties in the area have seen numerous thefts, as well. A home west of Fairhaven was recently robbed, a barn south of Fairhaven was broken into multiple times with $7,000 of tools missing, a farmer a mile to the east lost an electric generator, and a kind soul who gave several stranded Fairhaven residents a ride had $500 stolen during the short trip. *Id*., p. 9, A.16. Vehicles, lawn equipment, and metal objects simply and rapidly disappear. *Id*.

These criminals are opportunists, seeking vulnerable targets such as lightly guarded properties. *Id*., p. 7, A.16, Lines 3-5. They use bolt cutters to quickly dispatch with locks and fencing, windows and doors are kicked in or pried open with crow bars, and security cameras

and security lighting have been shot out and/or stolen. *Id*., p. 9, A.17, p. 10, A.19. They use cutting torches to cut some items into undistinguishable forms for recycling. *Id*., p. 9, A.17. If a recyclable possession is stored inside a structure and an opportunity presents itself, ever so briefly, they steal it. *Id*. They use their trucks to take their stolen items to a recycling center less than 20 miles away. *Id*.

Walter Mast is not the only Concerned Citizen in the area to experience burglary firsthand. In 2016, a historic house at Campbell Brandly Farms was burglarized and burned down. CCOPC Exh. 4, Brandly Direct Testimony, p. 3, A.15. This historic farm is located about 1 ½ miles from Fairhaven. *Id*., p. 1, A.4 & p. 3, A.16. The Project Area is adjacent to this farm on three sides, so the Facility is within the zone that Fairhaven's criminals are known to visit. *Id*., p. 3, A.12.

Despite this existing criminal activity, Angelina has given little thought to how it will prevent criminal access to its Facility. Certainly, the Application lacks the detail necessary to assure the public that the Facility will be designed and operated to prevent an increase in neighborhood crime. By attracting criminals to the community, the Facility will increase crime against the neighborhood as criminals see and seize opportunities to commit crimes against other persons and their property. The Application provides no analysis of crime threats to its Facility, nor does it identify design features or operational practices to reduce criminal threats. As with many other potential problems for this Facility, the Application deprives the Board and the public of the information necessary to determine whether and/or to what degree the Facility will harm the public and what measures should be taken to address these threats. A certificate should not be issued without adding a thorough evaluation of this issue in the Application.

G. The Application Fails to Evaluate The Impact To Groundwater From Contaminants That Might Be Released From Solar Panels By Vandals And Disasters As Required By OAC 4906-4-08(A)(4).

OAC 4906-4-08(A)(4) 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.
>
> ****
>
> (c) Provide existing maps of aquifers, water wells, and drinking water source protection areas that may be directly affected by the proposed facility.

The Application does not adequately evaluate the impact to underground water supplies from contaminants that could be released from the solar panels by natural disasters or human destruction. The area wells are relatively shallow, so pollutants contaminating the wells, the adjacent creek, and Hueston Woods lake could occur quickly. CCOPC Exh. 5, Mast Direct Testimony, p. 10, A. 18.

The Application states that the "[s]uppliers of most solar panel[s] have demonstrated that their products pass U.S. EPA's 'Toxic Leaching Characteristic Procedure' qualifying them as routine waste" instead of hazardous waste. Applic., p. 38. A TCLP test is used to evaluate the tendency of toxic metal contaminants to leach from the material into the soil or water. 40 C.F.R. § 261.24. Mr. Herling acknowledged that some solar panels on the market are not TCLP tested, so it is unknown whether they would pass the test. Herling, Tr. I 99:11- to 100:24. Mr. Herling promised that Angelina would use solar panels that pass the TCLP test. Herling Direct Testimony, p. 16, A.28, Lines 11-13. However, the Application makes no such commitment. Herling, Tr. I 100:25 to 101:5; Applic., pp. 38-39. Nor does the Amended Stipulation require Angelina to use TCLP-compliant panels. Like so many of Angelina's promises in the hearing,

this promise is unenforceable and meaningless without being included in the Application or Amended Stipulation.

Consequently, the Citizens request that the Board require Angelina to perform a complete risk assessment (chemicals, weather, fire, theft, etc.) and review of the solar company's risk mitigation plans including training of fire and emergency personnel, etc. to ensure the risk mitigation plans adequately address all of the risks. CCOPC Exh. 6, Mast Suppl. Testimony, A.11. Angelina also should conduct an analysis of what wind speeds the solar panels can withstand including an assessment of how the panels are attached to the pilings. *Id*. These studies should be performed before the Board acts on the Application, so that the certificate, if issued, can include any protective conditions found by the studies to be necessary. *Id*. Drafts of the consultant(s)' studies should be made available for public comment prior to finalization. *Id*.

The Citizens are concerned that the Amended Stipulation does not adequately protect soil and water from contamination that could occur if severe weather arises such as high winds, hail, and the recent tornadoes that hit Preble County and Montgomery County, a fire starts in the solar field, lightning strikes the field, or thieves break or damage the solar panels. CCOPC Exh. 6, Mast Suppl. Testimony, A.8. All of these events can release contaminants onto the ground and consequently into the ground water and into the surface water run-off. *Id*. Since literature from Open Road Renewables states the solar panels contain "some chemicals," water and soil contamination are a major concern. *Id*. To ensure a safe water quality throughout the entire project duration, the Citizens request that the company managing the solar facility fund and jointly select with the Citizens an independent, third party company to analyze the entire chemical composition of the well water on farms adjacent to the solar farm and in Gasper and Washington Townships. *Id*. The testing should be conducted (1) prior to the start of any

construction, (2) annually during every year of facility operation, (3) annually during decommissioning, site clearance, and the return of the land to productive farm use, and (4) at the end of all activity on the site. *Id*. The Amended Stipulation should require the facility to immediate remediate any abnormalities in the chemical composition of the water and to supply replacement water to all impacted individuals so long as the water quality is impacted. *Id*. The Board also should require the Applicant to provide an accurate and complete listing of all water wells and their locations in the vicinity of the Project Area as part of the Application. *Id*.

H. The Application Does Not Contain Adequate Provision For Emergency Services As Required by OAC 4906-4-08(A)(1)(e).

OAC 4906-4-08(A)(1)(e) provides:

> (e) Describe the fire protection, safety, and medical emergency plan(s) to be used during construction and operation of the facility, and how such plan(s) will be developed in consultation with local emergency responders.

The Application contains only a three-sentence statement that Angelina will develop an emergency response plan for law enforcement, fire, medical and ambulance, with a brief list of the types of information that the plan will contain. Applic., p. 55. This is insufficient to safeguard the neighbors from crime, fires, and other emergencies. The Amended Stipulation attempts to fill some of the gaps in the Application, but the Amended Stipulation also fails to adequately protect the public.

Solar facilities use copper wire in their construction, and thieves steal copper wire. Herling, Tr. I 94:18 to 95:4. Nevertheless, the Application fails to provide for protection against criminals who will be attracted to steal the Facility's recyclable materials. The county sheriff's department is already too understaffed to address the existing crime in Fairhaven. CCOPC Exh. 5, Mast Direct Testimony, p. 11, A.20. There are typically only two deputies on duty each shift to cover the entire county including the I-70 corridor, and their responses to potential thefts or

break-ins at the Project could detract from the deputies' needed presence in other areas of the township and county. *Id*.; Vonderhaar Direct Testimony, p. 12, A.27. While the county recently hired two additional deputies, this will not increase law enforcement's presence near the Project Area because one is a corrections officer and the other probably will just cover overtime work. Mast, Tr. III 461:11-24, 464:22 to 465:2. The sheriff's office was previously understaffed. Vonderhaar, Tr. III 354:11-25.

The deputies' responses to potential thefts or break-ins at the Project could detract from the deputies' needed presence in other areas of the township and county. Mast Direct Testimony, p. 11, A.20. Angelina has the burden of proof to demonstrate that its Facility will not increase the area's crime or exceed law enforcement's capacity to control the crime, and the company included no information on this issue in its Application.

Amended Stipulation Condition 28 requires Angelina to pay for any specialized equipment necessary to fight fires or respond to emergencies at the Facility. The application does not provide for any funding of emergency services to compensate for the Project's potential demands.

The Application contains no analysis of the personnel needs that will result from the presence of the Facility, and without this information, the Application provides no assurance of the Facility's safety. Emergency services in Israel Township are already stretched thin. Vonderhaar Direct Testimony, p. 12, A.27. Israel Township does not have the financial resources to fund its own fire department, so it contracts with the Village of College Corner and the Village of Camden for fire fighting services. *Id*. Therefore, the Application also should commit to funding any additional fire and/or emergency response personnel necessary to adequately service the Facility.

The proposed condition also fails to provide sufficient training for fire and emergency response personnel on how to deal with the particular hazards for the Facility. Angelina should be required to prepare an emergency management plan prior to the Board's action on the certificate, so that Angelina and emergency response personnel understand their responsibilities in an emergency and so that any necessary protective measures can be incorporated into the certificate. Vonderhaar Suppl. Testimony, pp. 4-5, A.7. In addition, although the condition provides for training sessions prior to Facility construction, it requires only periodic safety meetings thereafter. Jt. Exh. 1, p. 11, Condition 28. This arrangement fails to provide for adequate training. The volunteer firefighters and emergency responders serving the township have a high turnover rate. Vonderhaar Suppl. Testimony, p. 4, A.7. Mr. Herling, based on his own experience in a volunteer EMS, acknowledged that "[w]hether it's volunteer or otherwise, there's always turnover" in fire departments and EMS. Herling, Tr. I 123:23-24. So the new personnel would not receive the safety training, but would only hear the information by word-of-mouth through safety meetings. Therefore, emergency training for local fire and EMS service providers should be held annually during the Project's construction and operation. Vonderhaar Suppl. Testimony, p. 4, A.7.

I. <u>The Application Fails To Determine Whether Solar Fences And Other Equipment Will Obstruct Motorist Visibility at Intersections</u>.

The Facility's obstruction of motorists' views of cross-traffic at road intersections could be a problem at any intersection at which solar panels or fences are so close to the intersections that they obstruct motorists' views. CCOPC Exh. 2, Vonderhaar Direct Testimony, p. 9, A.21. It could be a particular problem at two intersections at which visibility already is challenging. *Id*. These locations are the intersection of State Route 725 and Fairhaven College Corner Road, and at the intersection of State Route 177 and Toney Lybrook Road. *Id*. The latter intersection is

especially dangerous, because State Route 177 has a 55 mile per hour speed limit. *Id.*; Vonderhaar, Tr. III 372:10-22.

The application provides for a 25-foot setback between the project perimeter and the public roads. Applic., p. 54. Condition 3 of the original Stipulation expanded the setback by applying it to the rights-of-way instead of the edges of the roads. Even though Angelina has the burden to prove that its Project will represent the minimum adverse impact, Angelina failed to introduce any evidence about additional distance this term expands the setback. Angelina could have provided this information during the supplemental hearing, but failed to do so.

Without knowing the distance between the solar fences and the public roads, the Board has no way of determining whether the solar project will obstruct motorists' views of the crossroads at intersections. Angelina has the burden of proof to demonstrate that its solar facility will not cause this problem, but has not sustained this burden. The Application must be supplemented to supply this information.

J. The Application Does Not Provide For The Control Of Noxious and Invasive Weeds, Contrary To OAC 4906-4-08(E).

OAC 4906-4-08(E) provides:

> (E) The applicant shall provide information regarding agricultural districts and potential impacts to agricultural land.
>
> ****
>
> (1) Agricultural information. The applicant shall provide, for all agricultural land, and separately for agricultural uses and agricultural districts identified under paragraph (E)(1) of this rule, the following:
>
> ****
>
> (c) A description of mitigation procedures to be utilized by the applicant during construction, operation, and maintenance to reduce impacts to agricultural land, structures, and practices.

Although OAC 4906-4-08(E)(2)(c) requires the Application to contain mitigation procedures to prevent damage to agricultural land, the Application contains no procedures for preventing noxious or invasive weed species from spreading from the Facility to the neighbors' farmland.

Crop farmers continually have to fight against weeds that damage their crops by competing with the crops for water, nutrients, and space. CCOPC Exh. 2, Vonderhaar Direct Testimony, p. 7, A.15. Invasive plant species, if allowed to grow on the Project Area, will spread to their land, damage their crops, and increase their work to eliminate these weeds. *Id*. The Concerned Citizens' farmers near the Project Area already experience these problems with noxious plant species: thistle, johnson grass, honeysuckle and especially pig weed. *Id*. The Project should be required to use only native seeds and plants that are certified to be free of noxious and invasive plant species and should be required to promptly eliminate any noxious and or invasive plants that appear in the Project Area so that they do not spread to nearby farm land. *Id*. Angelina also should not be allowed to plant any species whose roots can clog drainage tiles. *Id*., p. 7, A.16.

The Application states that Angelina plans to plant vegetation inside and outside of the solar fields. Applic., pp. 12, 75. However, the Application provides no procedures for ensuring that its plant seeds do not include weeds that can invade surrounding farm fields and natural areas. Nor does it provide for eradicating honeysuckle and other invasive or noxious plant species that may sprout in the Facility. Instead, it only states that operating personnel "may" use herbicides to control noxious weeds, without any enforceable commitment to do so. Applic., p. 75. Thus, the Application is deficient under OAC 4906-4-08(E)(2)(c).

Proposed Stipulation Condition 11 attempts to compensate for the Application's deficiency, but the proposed condition itself is deficient. The proposed condition would require

Angelina to consult with the Ohio Seed Improvement Association to identify vendors who sell seeds certified to be free of seeds of noxious or invasive weeds. But Angelina has to plant seeds from these certified vendors only if "practicable", *i.e.*, if this seed is available for the type of ground cover Angelina wants to plant. This weak condition gives Angelina a loophole whenever it wishes to use an alternative source of seed, even if it contains noxious and/or invasive weeds.

The Amended Stipulation contains no procedures for controlling invasive and noxious weeds at the Facility. Proposed Condition 11 only requires Angelina to submit a post-certificate vegetation plan outlining "the steps to be taken to prevent establishment and/or further propagation of noxious weed identified in OAC 901:5-37 during implementation of pollinator-friendly plantings." Jt. Exh. 1, p. 9. This approach has two failings. First, the weed controls required in the vegetation plan appear to be limited to the area in which pollinators are planted. Second, submitting a post-certificate vegetation plan to the Staff without scrutiny and public comment during the Application process does not satisfy Angelina's responsibility to include these procedures in the Application as mandated in OAC 4906-4-08(E)(1)(c). The preliminary vegetation plan attached to Mr. Robinson's supplemental testimony does not cure this defect, since it is not included in the Application or made enforceable by the Amended Stipulation.

K. The Application Does Not Provide The Data Required By OAC 4906-4-08(B)(1) To Evaluate The Project's Potential Adverse Impacts on Wildlife.

OAC 4906-4-08(B) provides:

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

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

****

(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. Angelina performed only a partial literature search for animal life in the vicinity of the Project Area that was required by OAC 4906-4-08(B)(1)(c), and did not conduct and provide the results of any field surveys for the animal species identified in the literature survey as mandated by OAC 4906-4-08(B)(1)(d).

Providing a full list of species is not a burdensome requirement. These lists are readily available online from government agencies and nature organizations. All Angelina needed to do was to copy the lists and append them to its Application, as hundreds of other applicants have routinely done in other OPSB applications.

Nevertheless, Angelina provided a literature survey for only plant and animal species that are endangered, threatened, of concern, or of special interest. Applic., Exh. G, Appx. C. Cardno's summary of its "desktop" review of species reveals that Cardno did a literature search only for "[m]ajor species, including Federal and State-listed threatened and endangered species." Applic., Exh. G, p. 1-1. It did not provide a literature survey for all plant and animal life within at least one-fourth mile of the Project Area as required by the first sentence of OAC 4906-4-08(B)(1)(c). The second sentence of this provision, requiring species of commercial and recreational value and endangered or threatened species to be included in the literature survey, does not limit the scope of the first sentence. Angelina was not allowed to limit its literature search to just those species in the second sentence, as it did, as that would render the first sentence superfluous. The failure to catalogue and evaluate all other species in the area would

leave a huge gap in the Application's "information regarding ecological resources in the project area" contrary to OAC 4906-4-08(B)(1).

Angelina also failed to conduct the required field survey for animal species in accordance with OAC 4906-4-08(B)(1)(d), which required Angelina to "[c]onduct and provide the results of field surveys of the plant and animal species identified in the literature survey." The Angelina representations on Pages 69 and 71 of the Application that it conducted these field surveys in accordance with OAC 4906-4-08(B)(1)(d) are false. Applic., pp. 69-71. Cardno's summary of its field studies reveals that Cardno did a field survey only for "sensitive species assessment." Applic., Exh. G, p. 1-1. And those field studies were conducted during the month of November, after most birds have migrated south for the winter. *Id.* Section 6.1.2 of Application Exhibit G states that no rare, threatened or endangered ("RTE") species were found, which is not surprising given that the survey was conducted when most of the birds were gone. Applic., Exh. G, p. 6-3. This section notes that only common species were seen while the observers were looking for RTE species, but other than mentioning deer and squirrels, no checklist of the observed species was provided. So even if the observers happened to see some common species while looking for RTE species, Angelina did not "provide the results of field surveys" as required by the rule.

Cardno's employees visited the Project Area only to conduct surface water delineation surveys and habitat evaluations. Rupprecht, Tr. II 211:12-18, 212:3-9. Ryan Ruppecht, the Cardno witness who testified for Angelina, admitted that Cardno performed no bird, bat, or mammal surveys. Rupprecht, Tr. II 214:2-10, 217:20-24.

Accordingly, the Application does not contain the complete literature survey on plant and animal species required by OAC 4906-4-08(B)(1)(c). It fails to include any of the field surveys required by OAC 4906-4-08(B)(1)(d). While Angelina contends its Facility 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 wildlife, combined with the failure to report the sighted species, leaves the Board with little information about the wildlife in the Project Area. A certificate cannot be granted without the information necessary to determine the Facility's effects on wildlife and to identify mitigation measures necessary to address those effects.

L. The Application Fails To Provide Information Required By OAC 4906-4-08(B)(3) To Assess, Avoid, And Mitigate Impacts On Wildlife That Will Result In Crop And Livestock Damage On Nearby Farms.

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.
>
> ****
>
> (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 Angelina 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).

In addition, the Application fails to evaluate the potential impacts on deer and coyote populations excluded from the Project Area by fencing the solar fields. Deer, coyotes, and other wildlife frequent the farm fields in and near the Project Area. CCOPC Exh. 2, Vonderhaar Direct Testimony, p. 8, A.18. Ms. Vonderhaar testified that she often sees deer, coyotes, and other animals in these fields, including the fields in the Project Area. *Id.*, p. 8, A.18 & A.19. Marja Brandly and Michael Irwin have seen herds of up to 30 deer traveling through the area's

farm fields, including the Project Area. CCOPC Exh. 4, Brandly Direct Testimony, p. 4, A.18. Deer walk through Campbell Brandly Farm's crop fields just about every day. *Id*.

The Project will be surrounded by fences that keep deer, coyotes, and other animals out of the Project Area. Vonderhaar Direct Testimony, p. 8, A.18. This will reduce the area available for these animals to roam and forage, which will force them to roam on surrounding lands where they will eat the Citizens' crops and calves, and on public roads, where they will be prone to vehicle collisions. *Id*., p. 8, A.18 & A.19. The deer already consume a great deal of corn in the farmers' fields there. Brandy, Tr. 427:19 to 428:1. The Vonderhaars in the past have lost calves to coyote predation, so this is a real concern for them and other residents. Vonderhaar Direct Testimony, p. 8, A.19.

The reduction of space for deer to occupy will pack them closer together, making the spread of disease easier among them. *Id*., p. 9, A.20. Lepto and Tuberculosis are two diseases common in deer that also infects cattle. *Id*.

Angelina's wildlife witness, Ryan Rupprecht, did not dispute that deer and coyotes may be present in and around the Project Area. Rupprecht, Tr. II 225:16-18, 231:5 to 232:8. He testified that deer will not be able to use the Project Area for foraging once the project is fenced. Rupprecht, Tr. II 223:1-7.

The Application contains no data on the size of the deer and coyote populations that use the Project Area for foraging and hunting. Consequently, the Application lacks the data necessary to determine whether wildlife displacement from the Project Area will damage the Citizens' crops or endanger their calves. Lacking this data, the Application also fails to determine what mitigation may be necessary to address this problem pursuant to OAC 4906-4-08(B)(3)(b). The Application also fails to provide for the post-construction monitoring of

wildlife impacts to determine what damage the displaced animals are wreaking on the neighbors' crops and calves as required by OAC 4906-4-08(B)(3)(c). No certificate can be issued until these corrections are made to the Application to comply with OAC 4906-4-08(B)(3).

M. The Application Provides No Data On The Quantity Of And Mitigation Measures For The Surface Water Draining From The Facility, Thus Violating OAC 4906-4-07(C).

1. OAC 4906-4-07(C) Requires Angelina To Quantify Flows Whether Or Not An Increase In Flow Is Expected.

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

Emphasis added. The underlined language requires the Application to quantify the amount of water that will flow off the Project Area during construction and operation. Notably, the rule

contains no exception for projects whose applicants claim that no flow increase will occur. For example, OAC 4906-4-07(C)(3)(d) requires an applicant to quantify the stormwater runoff from the soil and other surfaces that have the potential to wash soil into a stream, and this requirement applies regardless of whether the flow will increase, decrease, or stay the same. In fact, the flows have to be quantified in order to figure out whether the flows will increase, decrease, or stay the same.

The Application contains no data on the quantity of stormwater runoff during the construction or operation of the Facility. Angelina has not calculated the amount of water that will flow from the Project Area. Waterhouse, Tr. I 149:23 to 150:12; Marquis Rebuttal Testimony, p. 5, A.9; Marquis, Tr. IV 512:16-20. A hydrology study would identify the peak flows coming from the Project Area, but Angelina has not yet done the study. Marquis, Tr. IV 517:5-10, 20-22. Amended Stipulation Condition 30 requires pre- and post-construction stormwater calculations to be performed after a certificate is issued, but this requirement does not improve the Application.

Angelina shrugs off the requirements to quantify stormwater runoff in the Application. The Application claims, without support from any data, that Angelina does not have to comply with this rule because Angelina does not anticipate "changes in flow patterns and erosion" and that Facility construction "will not cause any aquatic discharges." Applic., p. 46. The Application asserts that the Project Area "already is level and very little, if any, grading will be needed." Applic., p. 46. That is, Angelina asserts that its activities will not increase the amount of stormwater flow from the Project Area. These assertions are irrelevant to whether Angelina is required to comply with OAC 4906-4-07(C), which applies if any stormwater flow will occur.

On the other hand, other information in the Application betrays Angelina's position as false by admitting that stormwater flow will occur. This information is contained in a report by Angelina's contractor, Hull & Associates, Inc., that is included in the Application. Applic., Exh. F. The report makes the following instructions:

> Adequate surface water run-off drainage should be established at each solar array, access road, and the switchyard location to minimize any increase in the moisture content of the subgrade material. Positive drainage of each solar array site and access road location should be created by gently sloping the surface toward existing or proposed drainage swales. Surface water runoff should be properly controlled and drained away from the work area.

Id., p. 6. These instructions direct Angelina to drain its construction sites into drainage swales in order to keep the sites dry. Angelina is required to implementing these directions, because they are included in the Application that Angelina is required to implement. This means that stormwater runoff from the Facility will flow into waters of the state.

The Amended Stipulation also establishes that stormwater runoff from the Facility will occur during construction and operation. Amended Stipulation Condition 30 requires Angelina to obtain a "General Permit Authorization for Storm Water Discharges … Associated with Construction Activities"[6] if construction disturbs one acre or more of ground. Angelina will disturb much more than one acre. Angelina's construction will disturb almost 58 acres of soil, including 6.78 acres for temporary roads, 12.02 acres for permanent roads, 13.58 acres for temporary laydown areas, 5 acres for a permanent laydown area, 15 acres for installing collection lines, 3 acres to build the substation, 1 acre to install the solar panel posts, and 0.35 acre to build the inverter pads. Applic., Exh. G, p. 7-3, Tables 7-2 and 7-3. The foundation for the substation

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[6] The condition contains two typographical errors in the permit's title. The word "construction" appears only once in the title, not twice as stated in the condition. "Activities" at the end of the title should be "activity."

alone, at 50,000 square feet in size, will occupy more than one acre of ground that will be disturbed during construction. Applic., p. 9.

This Ohio EPA storm water permit, as its name suggests, governs storm water runoff from construction activities. Amended Stipulation Condition 30 would not require Angelina to obtain such a permit if its construction activities were not going to discharge storm water into waters of the state. Matt Marquis' supplemental testimony admits this fact, since Angelina would not be required to obtain a permit authorizing discharges if it were not going to discharge. Co. Exh. 26, p. 2, lines 1-8, 29-30.

Stormwater runoff also will occur during Facility operation. Mr. Marquis' supplemental testimony states that "Condition 30 will help to ensure that post-construction stormwater flows are appropriately managed," which acknowledges that stormwater flows will occur. *Id*., p. 3, lines 6-11. The Ohio EPA guidance on storm water controls for solar panel arrays marked as CCPC Exhibit 9 states that solar panels "alter the volume, velocity and discharge pattern of storm water runoff." CCPC Exh. 9, p. 1. Mr. Marquis agreed with this statement. Marquis, Tr. V 630:9 – 631:10. Although he said that the vegetation beneath the solar panels manages the storm water, he also agreed that storm water discharges occur from solar fields. Marquis, Tr. IV 633:14-24 (acknowledging runoff from such sources as roads and solar panels), Tr. IV 634:5-18 (stating that vegetation under the solar panels "manage the runoff as sheet flow"). The drainage tiles that inhabit the Project Area will continue to discharge water from the solar Facility after construction. See Co. Exh. 25, Waterhouse Second Suppl. Testimony, p. 2, lines 8-9 (stating that Amended Stipulation Condition 16 will ensure the protection of drain tile and "existing drainage" in the Project Area). The operating Facility also will discharge storm water from rainfall through the tiles.

Most notably, Amended Stipulation Condition 30 requires Angelina to perform pre- and post-construction stormwater calculations if construction will disturb more than one acre of ground. That is, this condition requires Angelina to collect some of the information about the quantity of flows, but only after certification, that OAC 4906-4-07(C) requires be included in the Application. Obviously, if no stormwater will run off the land in the Project Area during construction and operation, then there would be no need for an Amended Stipulation Condition 30 to calculate the flows. Without runoff, no such calculations could be made. This is persuasive evidence that all stipulating parties realized that stormwater runoff will occur.

Since solar facility construction activities and operating solar facilities discharge storm water, Angelina's Application was required to contain water quantity data about both under OAC 4906-4-07(C)(2). To quantify flows, Angelina needed to perform a hydrology study to quantify the flows from the Project Area. Despite the necessity of this study, Angelina has not done it. Waterhouse, Tr. I 149:23 to 150:12; Marquis Rebuttal Testimony, p. 5, A.9; Marquis, Tr. IV 512:16-20. Angelina has failed to quantify surface water flows in the Application, and that failure is not cured by the Amended Stipulation.

2. The Application Does Not Contain The Data Necessary To Determine Whether Construction And Operation Of The Facility Will Increase Stormwater Runoff.

Although an increase in flows is unnecessary to trigger the requirements of OAC 4906-4-07(C), Angelina's Facility will increase stormwater flows. The Application presents no evidence to the contrary. It just asserts over and over, without evidence, that no increase will occur.

While Angelina contends that it will plant vegetation in the solar fields to absorb more precipitation and decrease runoff, this does not address potentially increased flows during construction before vegetation is planted. Angelina's Route Evaluation Study reveals that

construction will require the use of construction equipment such as "excavators, bull dozers, and wheel tractor-scrapers" that need to be transported to the site. Applic., Exh. D, p. 2, § 1.4. The Application would not have discussed the use of these machines if Angelina actually believed no earthmoving will occur. These machines have no purpose other than moving dirt, so their planned use contradicts Angelina's representation that little or no grading will occur.

Any increase in the amount or speed of stormwater flows from the Project would aggravate an already existing drainage problem. Much of the land in the Project Area slopes to the southeast, and this causes surface water to drain from the Project Area onto farm fields owned by Concerned Citizens including Vonderhaar Family ARC, LLC and Campbell Brandly Farms, LLC before reaching Four Mile Creek. Vonderhaar Direct Testimony, pp. 9-10, A.23. Other Project Area land slopes to the west and drains onto farm fields owned/farmed by Kevin and Tina Jackson, and the water then flows into the Little Four Mile Creek *Id*., p. 10, A.23. The existing flows are already a problem, since the surface water flow that travels from the Project Area and through intervening land into Four Mile Creek is so great that storm water retention ponds were built by the Soil and Water Conservation District to intercept sediment-laden water to reduce the sediment filling Acton Lake in Hueston Woods State Park. *Id*., p. 10, A.24. If the Project causes more surface water to flow off-site or increases the rate of flow, this will erode the Concerned Citizens' fields, make them wetter, and damage their crops. *Id*.

Any increase in flow or flow velocity from the Project Area would also exacerbate the drainage problem in the Village of Fairhaven. The portion of Fairhaven along Four Mile Creek and all of Mr. Mast's property are within a 100-year floodplain. Marquis Testimony, p. 4, A.8; Marquis, Tr. IV 518:11 to 519:2. This means that these areas are already prone to flooding. Marquis, Tr. IV 518:24 to 519:5.

Four Mile Creek, about 100 feet west of Mr. Mast's house (a historic inn), overflows its banks every year. CCOPC Exh. 5, Mast Direct Testimony, p. 3, A.11. Flooding occurs both during very heavy rains for short periods as well as during three to seven day periods of fairly steady rain. *Id*. During heavy rains, the area floods within hours. *Id*. During the periods of steady rain, it rises continuously until cresting near the end of the rain. *Id*. The flooding is terrifying with huge full-grown trees, roots and all, rushing downstream in a mighty roar. *Id*. During Mr. Mast's ownership, a deluge caused an almost immediate increase in water level until it was a half inch below the door thresholds. *Id*. Had it risen another inch, the whole first floor would have been inundated. *Id*., pp. 3-4, A.11. The entire crawl space and cellar were completely filled with water. *Id*., p. 4, A.11. On other occasions, the water level rises steadily and methodically. *Id*. This year so far, flood waters from prolonged rains have caused the creek to significantly overflow its banks twice. *Id*. Historically, floodwaters have been 10 inches and 20 inches above the floor on separate occasions. *Id*.

Even the highest elevation land in the northeast section of the village floods regularly. *Id*. Mr. Mast has seen water over the road at the inn, so both sides of the road at the south end of the village flood. *Id*. In the areas farther north, where there is higher land, the creek does not cross the road but it blocks the water from flowing effectively through the culverts under the road. *Id*. The road, which is higher than the surrounding yards, acts as a dam and the rain fills much of eastern section of the village with water. *Id*. Often, after a storm, a portion of the northeast section of the village looks like a lake. *Id*.

Mr. Marquis contended that the Angelina Project Area contributes only 2% of the watershed flowing into Mr. Mast's land and Fairhaven. Co. Exh. 21, Marquis Rebuttal Testimony, p. 5, A.9. He said that this means the Project will not increase the flood risk to these

areas. *Id*. He noted that water from the Project Area enters Four Mile Creek both upstream and downstream of Fairhaven, including Acton Lake. Marquis, Tr. IV 510:1-7. Mr. Mast agreed that water flowing off the Project would enter the Four Mile Creek both upstream and downstream of Fairhaven. CCOPC Exh. 5, Mast Direct Testimony, p. 4, A.11. In fact, he identified concerns about the Project increasing flooding in all of these areas, not just upstream of his house in Fairhaven. *Id*., p. 3, A.11, Lines 14-16. Rachael Vonderhaar testified that these flows are already a problem, since the surface water flow that travels from the Project Area and through intervening land into Four Mile Creek is so great that storm water retention ponds were built by the Soil and Water Conservation District to intercept sediment-laden water to reduce the sediment filling Acton Lake in Hueston Woods State Park. Vonderhaar Direct Testimony, p. 10, A.24. Thus, Mr. Marquis' opinion that most of the Project Area's flow enters the creek downstream of Fairhaven, including Acton Lake, is no comfort at all.

With respect to flooding in Fairhaven and his home, Mr. Mast noted that <u>any</u> increase in the amount and speed of water flow prior to Fairhaven would cause increased flooding in Fairhaven, since there is no safety margin. *Id*. The farmland upstream of Fairhaven must absorb every drop of water possible, or the entire Village of Fairhaven is in peril. *Id*. This reality is illustrated by the incident in which one more inch in the water level would have flooded the entire first floor of Mr. Mast's home. *Id*., pp. 3-4, A.11. Consequently, even if only a small part of the Project Area feeds the water level upstream of Fairhaven, it will harm Mr. Mast and other Fairhaven residents if it increases flood levels by <u>any</u> amount.

Mr. Marquis, an engineer with only nine years of experience, asserted that vegetation and other characteristics of the solar facility will prevent any increase in surface water runoff from the Project Area. Co. Exh. 21; Marquis Rebuttal Testimony, p. 2, lines 5-6 (noting that he

obtained his engineering degree in 2011); Marquis, Tr. IV 522:14 to 523:22. However, Mr. Mast, an engineer with a Masters Degree in Engineering and 31 years of experience including construction management, farming, and surface water issues, disagreed with that position. CCOPC Exh. 5, Mast Direct Testimony, p. 1, A.2; CCOPC Exh. 6, Mast Suppl. Testimony, A.6; Mast, Tr. III 474:1-3. He observed that the solar fields will increase surface water runoff for the following reasons:

- The solar panels will block rain from contacting the earth directly below the panels. This will reduce the amount of soil that is fully saturated. If you have ever stood in a barn and looked out an open door at the rain, the soil floor on the interior of the barn does not become fully saturated and hardly becomes wet. Neither will the soil under the panels and thus the soil will not absorb as much water as the current farmland where all land is exposed directly to the rain.
- The direction of the wind and rain will also be a variable. A rain from the south will not contact as much of the ground under the panels due to the panel slope as a rain from the north. Hence, less soil will be saturated during a rain from the south.
- Direct solar radiation will not contact the ground and grass under the panels and hence not dry the soil and increase the amount of water the soil can absorb in the future. If you want something to dry quickly, place it in direct sunlight, not in the diffuse light under a tree.
- The solar panels will deflect winds upward when the wind is from the west through the south to the east. Winds help dry the soil and the entire solar field will have less air motion near the ground to dry the soil. Stand behind a car during a windstorm and you will observe that most of the air goes over the car.

- Dew condenses on cool surfaces. The glass and metal framework of the solar panels will cool more quickly than the surround ground because of their thermal conductivity and cause more dew to condense and thus increase the amount of moisture in the soil. This will reduce the amount of water the soil can absorb in a rainstorm.
- Given the tremendous number of solar panel support piles that will need to be driven or rotated into the ground, it is highly probable that some drainage tiles will be broken during the installation. It will not be possible to even determine when a tile has been broken during the construction. Broken tiles will prevent the field from draining and thus reduce the amount of water that can be absorbed during a heavy rain.
- The 150-acre solar field with waters entering Four Mile Creek north of Fairhaven (acreage provided by Doug Herling) drains to a culvert under State Route 177 east of the field. The field also slopes to the north and south to a swale that cuts across the field. This sloping surface reduces the potential for water to flow uniformly and evenly under all of the panels and hence reduces the amount of water absorbed by the soil.
- Corn and soybeans require large amounts of water in periods when most grasses tend to become more dormant. Mr. Mast has a farm field with a row of trees along the north edge of the field. The trees do not shade the area farmed since the trees are to the north of the field. The corn and soybeans near the trees have the same amount of fertilizer and sunlight as the rest of the field. Grasses grow fine under the trees, but corn and soybeans wither in the area of the tree root base because they require more water than grass during the critical growing season.
- Tilling the soil in preparation for spring planting and even the slicing of the soil during no till allows more of the soil surface to be exposed to the drying effects of the sun and

wind. Grasses around the panels will tend to retain the moisture. Thus, winds dry the soil more when the earth is being farmed so more water can be absorbed during a rain.

- The ground under the lower edge of the panels will experience large amounts of water during heavy rains. Over time, a small channel will form and become a means for rain to runoff more quickly. This fact can be observed under the eaves of any building with no gutters.
- Dew on grass takes longer to dissipate than dew on concrete, asphalt, or bare soil. Faster dew dissipation means less moisture in the soil. More moisture means a higher relative humidity which reduces the amount of moisture air can capture. Consider how long you must wait on mornings of a heavy dew before you can mow the grass.
- Rows of corn and soybeans provide space between the rows for air to flow near the soil surface while grasses tend to be matted to the soil. This air flow tends to dry the soil and increase its potential to absorb more water during a rain.
- Sloping land makes it impossible to predict where the water flowing off the south edge of the solar panels will go. Even in a sloped paved parking lot, most of the area under cars is often dry after a rain.

Id., A.6. For these reasons, Mr. Mast advised that the Project's threat to flood downstream areas was high enough to justify the inclusion of storm water retention basins or ponds and/or other measures in the Amended Stipulation. *Id*.

The disagreement between Mr. Mast and Mr. Marquis illustrates why it is important for Angelina to comply with the requirements of OAC 4906-4-07(C). The Board should not, and does have to, resolve such a dispute between experts, because Angelina's compliance with this rule would show who is correct. OAC 4906-4-07(C)(2)(b) requires "an estimate of the …

quantity of aquatic discharges from the site clearing and construction operations" in the Application. Emphasis added. OAC 4906-4-07(C)(3)(d)(vii) requires the Application to contain a "quantitative flow diagram or description for water … through the proposed facility … including … [r]un-off from soil and other surfaces" during facility operation. Emphasis added. The Application's compliance with these requirements would inform the Board as to whether stormwater retention basins or other devices or practices are necessary to protect Fairhaven, Mr. Mast's home, and areas further downstream from increased stormwater flows from the Facility. The Application does not quantify the stormwater flowing from the Project Area during construction or operation, depriving the Board of the information necessary to make judgments about this issue.

Without a hydrology study, OPSB has no way of knowing whether the Facility's construction and/or operation will cause drainage and flooding problems in neighboring properties. Drainage swales are common in fields to be used for solar panels in the Project Area. Applic., Exh. G, p. 6-2.

Angelina's Application violates OAC 4906-4-07(C)(2)(by failing to quantify surface water flows during construction and operation of the Facility. Angelina has the burden of proof to demonstrate in the Application whether flows will increase and, if so, by how much. Angelina plans to conduct a hydrology study and prepare storm water pollution prevention plan ("SWPPP") that will quantify storm water flows and prevent flooding (Waterhouse Direct Testimony, p. 3, A.7; Waterhouse, Tr. I 149:10-22), but the SWPPP will not be prepared until after certificate issuance under Amended Stipulation Condition 16. Without this data, the Application does not and cannot identify any mitigation measures that may be necessary to protect neighbors from flooding and drainage problems caused by Angelina's activities as

required by OAC 4906-4-07(C)(2)(c) (requiring the Application to "[d]escribe any plans to mitigate the above effects in accordance with current federal and Ohio regulations"). Emphasis added. The Board cannot issue a certificate based on such a deficient application.

N. The Application Provides No Data On The Quality Of And Mitigation Measures For The Surface Water Draining From The Facility, Contrary To OAC 4906-4-07(C).

OAC 4906-4-07(C) provides:

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

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

(a) Provide a list of all permits required to install and operate the facility, including water pollution control equipment and treatment processes.

****

(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.

(e) Provide available data necessary for completion of any application required for a water discharge permit from any state or federal agency for this project. Comparable information shall be provided for the proposed site and any proposed alternative site(s).

(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 above requires the Application 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 none of this information.

1. **The Application Does Not Identify The Changes In Flow Patterns And Erosion Due To Site Clearing And Grading Operations As Required By OAC 4906-4-07(C)(2)(d).**

As explained in Section III. N. 1 of this brief, Facility construction and operation will discharge storm water into waters of the state. Consequently, Angelina's Application was required to contain water quality data about both construction and operation under OAC 4906-4-07(C)(1).

OAC 4906-4-07(C)(2)(d) states that an application must "[d]escribe any changes in flow patterns and erosion due to site clearing and grading operations") (emphasis added). Rather than providing the required data, Angelina defies this requirement. The Application claims, without support from any data, that Angelina does not have to comply with this rule because Angelina does not anticipate "changes in flow patterns and erosion." Applic., p. 46.

However, Angelina advises that "soil erosion and sedimentation control measures will be installed within and along the proposed construction area, equipment laydown areas, access roads, and other work areas, as applicable, in accordance with approved Preble Soil & Water Conservation District's soil erosion and sediment control (SESC) Plans." Applic., Exh. G, pp. 1-4 to 1-5. The Application further promises to employ best management practices ("BMPs") to minimize sedimentation and erosion. *Id.*, p. 1-5. These statements about the necessity for erosion and sedimentation controls betray Angelina's realization that the Project will cause

erosion and sedimentation into the vicinity streams. The Application fails to describe these changes in erosion in any fashion.

These erosion and sedimentation controls will be necessary in a substantial area, because Project construction will disturb the soil in a significant area. Angelina's construction will disturb almost 58 acres of soil, including 6.78 acres for temporary roads, 12.02 acres for permanent roads, 13.58 acres for temporary laydown areas, 5 acres for a permanent laydown area, 15 acres for installing collection lines, 3 acres to build the substation, 1 acre to install the solar panel posts, and 0.35 acre to build the inverter pads. Applic., Exh. G, p. 7-3, Tables 7-2 and 7-3.

Thus, Angelina has failed to describe the changes in flow patterns and erosion due to site clearing, excavation, and grading operations over this substantial acreage. OPSB cannot approve an Application that violates OAC 4906-4-07(C)(2)(d).

2. The Application Does Not Provide The Information On Water Quality Required By OAC 4906-4-07(C)(1)(d) & (e) And 4906-4-07(C)(2)(b), (c), (d), & (e).

OAC 4906-4-07(C)(1)(d) & (e) and 4906-4-07(C)(2)(b), (c), (d), & (e) require applicants to describe the quality of the expected stormwater flow whether or not a flow increase is anticipated. Angelina has not complied with any of these requirements. Instead, Angelina's Application and testimony incessantly, and irrelevantly, contend that the construction and operation of the Facility will not increase stormwater flows.

As explained in Section II. O. 1. above, the Application reveals that soil disturbance will occur during Project construction on almost 58 acres of soil. The Application acknowledges that soil erosion and sedimentation control measures are necessary for these areas. Applic., Exh. G, p. 1-4. In addition, Angelina acknowledges that its Project construction necessitates an Ohio

EPA construction stormwater permit that "requires development of a proposed storm-water pollution prevention plan ('SWPPP') for erosion control and storm-water management." Applic., p. 45. This plan is designed for erosion control and stormwater management to protect surface waters from sediment pollution. Herling, Tr. I 109:1-4. So stormwater from the Project Area obviously will flow into nearby streams. OAC 4906-4-07(C)(1)(d) & (e) and 4906-4-07(C)(2)(b), (c), (d), & (e) require Angelina to provide water quality data so the Board can evaluate the impact of these discharges.

Amended Stipulation Condition 16 requires Angelina to submit the required SWPPP, but only after a certificate is issued. This plan has not yet been prepared. Herling, Tr. I 109:2-9. For this reason, the Application is missing much of the information required by OAC 4906-4-07(C).

A SWPPP describes the practices that will be followed to control erosion and avoid the release of sediment into streams. Waterhouse, Tr. I 148:12-18. The BMPs can include silt fences or retention basins to intercept sediment before it reaches a stream. Waterhouse, Tr. I 148:19 to 149:9. However, the Application does not identify the BMPs, equipment, or any other measure that will be taken to mitigate the effects from the quality of aquatic discharges from site clearing and construction operations, in violation of the mandate in OAC 4906-4-07(C)(2)(c) and (e).

According to Mr. Waterhouse, data needs to be collected and included in a SWPPP to design the BMPs. Waterhouse, Tr. I 149:10-13. This data includes a hydrology study consisting of a hydrology or hydraulics model to quantify the runoff to size the BMPs. Waterhouse, Tr. I 149:14-22. However, the Application contains none of this data, even though OAC 4906-4-07(C)(1)(e) requires the Application to "[p]rovide available data necessary for completion of any

application required for a water discharge permit from any state or federal agency for this project." While Angelina may point out that only the "available" data needs to be provided under OAC 4906-4-07(C)(1)(e), Angelina has not bothered to find out what data is available for that purpose. Note also that the water quality data required by the other provisions of this rule are not limited to "available" data. *See* OAC 4906-4-07(C)(1)(e) and 4906-4-07(C)(2)(b), (c), (d), & (e).

OPSB's rule requires the Application to contain pre-construction data and post-construction data on water quality so that the water quality effects of the Project's construction on the receiving streams can be assessed. The Application contains neither pre-construction nor post-construction data. The Application does not describe the existing water quality of the receiving streams based on at least one year of monitoring data using appropriate Ohio environmental protection agency reporting requirements as required by OAC 4906-4-07(C)(2)(d). OAC 4906-4-07(C)(1)(e) requires the Application to "[p]rovide an estimate of the quality … of aquatic discharges from the site clearing and construction operations." The Application contains no information about the quality of these discharges.

The Application does not contain the information about how Angelina will prevent harm to the receiving streams from its stormwater discharges. The Application lacks a description of Angelina's plans to mitigate the water quality effects of its discharges as required by OAC 4906-4-07(C)(2)(c). Contrary to OAC 4906-4-07(C)(2)(a), the Application does not contain a map indicating the locations of water monitoring and gauging stations to be utilized during construction. And the Application does not describe the equipment proposed for control of effluents discharged into bodies of water and receiving streams as required by OAC 4906-4-07(C)(2)(e).

Because the Application lacks the information required by rule to evaluate the quality of water from the Facility during construction, OPSB cannot issue the certificate based on this Application. Without this data, the Application does not and cannot identify any mitigation measures that may be necessary to protect neighbors' and the public's surface waters as required by OAC 4906-4-07(C)(1)(d) & (e) and 4906-4-07(C)(2)(b), (c), (d), & (e). The Board cannot issue a certificate based on such a deficient application.

O. The Application Contains No Estimate Of The Volume Of Solid Waste And Debris Generated During Construction, Or The Debris' Disposal Destination, As Required By OAC 4906-4-07(D).

OAC 4906-4-07(D) provides:

> The applicant shall provide information on compliance with solid waste regulations.
>
> ****
>
> (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 its destination of disposal.

The Application acknowledges that project construction will generate package-related materials, such as crates, nails, boxes, containers, and packing materials, damaged or otherwise unusable parts or materials, and occasional litter and miscellaneous debris generated by workers. Applic., p. 49. These wastes are "solid wastes" as defined by R.C. 3734.01(E) and as contemplated in OAC 4906-4-07(D)(2)(a). The Application also states that one or more old buildings may be demolished. Herling, Tr. I 109:18 to 110:8; Applic., p. 78. The preliminary site plan attached to Mr. Herling's second supplemental written testimony shows that two farm

buildings, one house, and several sheds will be removed. Herling Tr. V 560:8 – 561:12. The wastes from these demolitions are "construction and demolition debris" as defined by R.C. 3714.01 and thus are "debris" as contemplated in OAC 4906-4-07(D)(2)(a).

The Application fails to comply with OAC 4906-4-07(D)(2) in two respects. First, as Mr. Herling admitted, the Application does not estimate the amount of solid waste, including demolition waste, that the Project will generate. Herling, Tr. I 109:10-17. Simply stating in the Application that the waste will be generated in "very limited amounts" is not an estimate of quantity as required by the rule. Nor does the Application estimate the amount of debris that will be generated by demolishing the old buildings. Herling, Tr. I 110:9-13. Second, although the Application states that the types of solid wastes listed on Page 49 of the Application will be dumped at a municipal landfill, the Application does not explain what will be done with the demolition waste from the old building(s). Applic., p. 78.

P. The Application Contains Inadequate Detail To Explain How Its Construction Traffic Will Avoid Interference With Local Farming Operations, School Buses, And Other Public Road Traffic.

OAC 4906-4-06(F)(4) provides:

> The applicant shall list all transportation permits required for construction and operation of the project, and describe any necessary coordination with appropriate authorities for temporary or permanent road closures, lane closures, road access restrictions, and traffic control necessary for construction and operation of the proposed facility.

Emphasis added. The Applicant has failed to comply with this rule.

The anticipated interference by Angelina's construction traffic with farming activities is a major concern for the Citizens. Angelina seeks to site its solar fields in the midst of a rural farming community. The area's farmers have to move large combines, sprayers, and planters on county roads. CCOPC Exh. 4, Brandly Direct Testimony, p. 5, A.19. There are no

superhighways in Israel Township, just narrow two-lane roads, that make passing another vehicle risky if not impossible. *Id*. The residents of Israel Township are courteous and always cede the right of way to its farmers. *Id*. The large equipment used to construct the Project could create unsafe conditions when it encounters large farm equipment on the narrow roads. *Id*. The construction of Angelina Solar will imperil the farmers' safety. *Id*.

Angelina will construct the access roads inside the Project Area to be 25 feet wide during construction to allow for two-way traffic for deliveries and personnel movement. Herling, Tr. I 103:1-15. In contrast to these access roads, all of the eight public roads to be used for the Project's deliveries are much narrower. Bonifas, Tr. I 162:1-9. One road is only 13 feet wide, and the rest of them are 15 or 17 feet wide. Applic., Exh. D, p. 3, Table 1.

About 1,700 to 1,800 loads of equipment and construction materials will be brought into the Project Area to build the Facility. Applic., Exh. D, p. 7. At this time, Angelina has done so little planning that it cannot even identify the width of the equipment that will be transported to the construction area. Herling, Tr. I 104:3-14. However, the Application observes that some loads of solar equipment will be oversized and overweight, and Angelina admitted this fact during the hearing. Applic., Exh. D, pp 8; Bonifas, Tr. I 162:10-16. Due to the narrowness of the roads near the Project Area, oversized loads will hang over the midway point of any area road used to deliver these loads. Bonifas, Tr. I 163:20 to 164:14. Oversized solar equipment loads typically need an escort vehicle and a flagger to restrict the road to one-way traffic, thus stopping traffic coming from the opposite direction. Bonifas, Tr. I 167:19 to 168:9. This will interrupt the movement of farm machinery on that road until the solar delivery truck passes. *Id*.

While the transportation problem has been defined, the Application does not explain how the problem will be addressed. The Application and Amended Stipulation do not explain how

Angelina will protect the farmers' access to the public roads during planting and harvesting seasons.

Thus, the Application does not contain the information required by OAC 4906-4-06(F)(4), which mandates the Application to "describe any necessary coordination with appropriate authorities for temporary or permanent road closures, lane closures, road access restrictions, and traffic control necessary for construction and operation of the proposed facility." Instead, proposed Stipulation Condition 25 allows Angelina to study these issues later and report back to the Staff in the form of a Transportation Plan and a Traffic Management Plan.

However, the Traffic Plan and Transportation Plan have not yet been prepared. Herling, Tr. I 121:22-25; Bonifas, Tr. I 166:4-7, 168:10-12. Angelina failed to complete these tasks before filing the Application. As a result, the Application lacks the information mandated by OAC 4906-4-06(F)(4).

Q. The Setbacks Proposed For This Project Have Not Been Included In The Application, Nor Do They Represent The Minimum Adverse Environmental Impact Or Serve The Public Interest.

Ordinarily, local zoning would prevent a person from building an industrial facility in a residential or agricultural area in order to preserve the residents' comfort in living and farming there. R.C. 4906.13(B), with respect to certificated utilities, preempts local zoning meant to protect the populace from the destruction of their communities, but R.C. 4906.10 entrusts the OPSB with the authority and mandate to require regulated utilities to responsibly site their facilities. To implement this mandate, the Board should not accept the ridiculously short setbacks between Angelina's industrial facility and its neighbors' land and homes requested by the Application and Amended Stipulation Condition 3.

The most egregious of the setbacks in Condition 3 is the 25-foot setback between the Facility's seven-foot chain-link and barbed wire fences and nonparticipants' yards and land, which is approximately equivalent to the standard length of a homeowner's garage. Little better is the 150-foot setback between the 15-foot tall solar panels and neighboring homes, which is equivalent to half the length of a football field.

As explained above, Angelina's miserly plans for vegetative screening between its industrial facility and neighbors' homes, unless corrected by the Board, will expose the neighbors to unwanted and unpleasant views from their yards and houses. This will especially harm the 14 Citizens who own and/or occupy land adjacent to the proposed Angelina Project Area, some of whom would be bordered on two or three sides by Angelina's solar panels. CCOPC Exh. 2, Vonderhaar Testimony, p. 3, A.11, p. 3, A.12, pp. 6-7, A.14, and Exh. A (map of their locations); Vonderhaar, Tr. III 335:7-23. Nevertheless, Angelina insists that it will use deciduous plants and that there will be gaps between them even when in summer when they have leaves. Angelina makes no commitment on what it will do after five years of facility operation to prevent the gaps from widening as plants die due to drought or other causes.

Angelina has no good reason to request such short setbacks. Angelina needs up to 827 acres for the Facility, but it has about 934 acres available. Application, p. 1. Angelina can accommodate longer, more reasonable setbacks by using the spare land it has available or reduce its panel acreage. Either way, building an industrial facility along the perimeters of other people's land in an agriculturally zoned area is inexcusable and the Board should not approve such behavior.

From a procedural standpoint, the setbacks proposed in the Amended Stipulation have not been lawfully adjudicated. The new setbacks in the Amended Stipulation have not been

included on a constraint map in the Application as required by OAC 4906-4-04(B)(1). The new setbacks in the Amended Stipulation are not contained anywhere in the Application, were not provided to the public for comment through public notices and a public hearing, and were not subjected to discovery and other pre-hearing adjudicatory procedures. In order to use these setbacks, the Application must be revised to add them and the processes for public notices, public hearing, and adjudication must start over.

R. Summary

The Amended Stipulation, if accepted, would grant a certificate for the Facility based on an Application that violates the Board's rules in a multitude of ways as described herein. With the lack of information in the Application and the record, OPSB also cannot find that the project complies with R.C. 4906.10(A)(2). As constituted, the Application does not provide the Board with a basis for issuing a certificate or for identifying and designing mitigation protections for the public. The Board should deny Angelina's application for a certificate.

IV. The Board Cannot Delegate Its Authority And Responsibility For Certification Decisions To The Staff.

A decision of the Supreme Court of Ohio allowed the Board, in that case, to issue a certificate requiring the applicant to make six submittals for Staff approval after issuance of the certificate.[7] *In re Application of Buckeye Wind, L.L.C.,* 2012-Ohio-878, ¶¶ 28-30, 131 Ohio St.3d 449, 456–57. The lead opinion in that case opined that it may not be practical to hold a hearing on every infinite detail of construction, such as "whether white or gray screws are used in the control room." *Id*. at ¶ 30. This opinion stated that, "[i]n this case, we conclude that the

[7] The certificate in that case required more than six post-certificate submittals, but only six were brought to the Ohio Supreme Court's attention, so the Court's lead opinion applied only to those six submittals.

board reasonably drew the line regarding the issuance of the certificate and the imposition of its conditions." *Id.*

Three justices joined in that portion of the decision, with another three justices dissenting. A fourth justice concurred only in the judgment. The dissent disagreed with the rationale and result of the lead opinion, on several grounds.

First, the dissent observed that the post-certificate conditions denied the appealing citizens of their only opportunity to be heard, and this violated the law:

> The law requires otherwise. The legislature has required the board to settle issues like this up front on a public record, and it specifically guarantees affected citizens the right to participate in the review process and to have their voices heard. *See* R.C. 4906.07 (requiring that the board hold public hearings), 4906.08(A)(3) (neighboring citizens are entitled both to party status and to call and examine witnesses), 4906.09 (requiring the board to keep a record of its proceedings), 4906.10(A) (requiring the board to make all substantive determinations before authorizing construction), and 4906.11 (requiring the board to issue a written opinion stating the reasons for its decisions). Issues are not to be settled *after* construction is approved, much less by unaccountable staff members without public scrutiny or judicial review. Yet that is precisely what the board, and now the lead opinion, has allowed.

Id. at ¶ 53.

Second, the dissent found that the lead opinion did not offer any workable response to the denial of the citizens' right to a public hearing. The dissent found this situation objectionable, for several reasons. It noted that the Staff's post-certificate decisions are made in secret without input from the public and without subsequent review by the Board or the Ohio Supreme Court. *Id*. at ¶¶ 55-56. The affected citizens have no process or opportunity to provide input into the Staff's post-certificate approvals. *Id*. at ¶¶ 57-63. Even if they did have a mechanism to challenge the Staff's decisions, such a remedy would not justify disregarding their right to a hearing. *Id*. at ¶ 61. R.C. 4906.10(A) prohibits the Board from issuing a certificate unless <u>the</u>

Board makes the required findings and determinations to resolve the issues. *Id*. at ¶ 64. The Board cannot delegate these issues to its Staff. *Id*. at ¶¶ 64-65.

Third, the dissent noted that the lead decision rendered ineffectual the laws designed to protect the interests of citizens living near proposed utility projects:

> The outcome of this decision is unfortunate for anyone living near the site of a proposed high-voltage transmission line, electric substation, high-pressure gas pipeline, or generation plant. If the board runs into an issue that for whatever reason it does not want to deal with—or if it simply prefers to resolve an issue without the discomfort of public participation and judicial review—it now has a broad off-ramp. Approve the project now; work out the details with the company later. The public retains a formal right to participate, but it is up to the board whether that right amounts to anything more than a formality.
>
> This is not alarmist but precisely what happened in this case. If, as it did in this case, the power siting board can delegate the very *siting* of facilities—its core duty, the duty from which the power siting board derives its name—it can delegate anything and everything. The lead opinion identifies no enforceable limits on the board's power to delegate but apparently trusts that the board will exercise its new discretion wisely. One can hope that the lead opinion's trust proves well founded, but in my view, the public's business should not be left to the unreviewable discretion of appointed staff members who are not accountable to the public. The board's decisions should have to see and bear the light of day.

Id. at ¶¶ 66-67 (emphasis in original). The Citizens incorporate by reference the statements of the dissent in *Buckeye Wind*.

In Angelina's case, the parties signing the Amended Stipulation are trying to fill the large and numerous information gaps in the Application with a multitude of post-certificate studies to be evaluated only by the Staff without public review and comment and without the Board members' participation. Angelina also submitted studies at the supplemental hearing without including them in the Application. This is not the process envisioned by the General Assembly when it enacted R.C. Chapter 4906.

The Amended Stipulation would allow Angelina to submit 12 major studies to provide for mitigation of the Facility's impacts on the public. Jt. Exh. 1, pp. 6-11. Rather than merely identifying the color of the screws in the control room as allowed in *Buckeye Wind*, these studies provide for design and operational procedures that go to the core of how the Facility will be constructed and operated. This goes well beyond the activities that the lead opinion in *Buckeye Wind* let pass.

The preliminary site plan attached to Mr. Herling's second supplemental testimony reveals that Angelina could have provided substantially more detail in its Application than it did. Co. Exh. 22, Attachment DH2. The Concerned Citizens do not expect that the Application to include every minute detail of construction. However, the Concerned Citizens are entitled to enough detail in the Application to inform them of the Facility's prospective harms to them and the environment and to commit to the measures that will prevent and mitigate those harms. Angelina's Application falls well short of those objectives, and the Amended Stipulation does nothing to correct this problem.

OPSB does not notify the public when post-certificate studies are submitted to the Staff. Butler, Tr. II 292:12 to 294:15. Drafts of these studies are not subject to public review. Butler, Tr. II 295:7-14.

The scarcity of the Application's analysis of the hazards and damage threatened by the Angelina solar project has deprived the Citizens thus far of their right to comment on and test the project's impacts and the proposed certificate conditions. For the same reason, the Staff and the Board have not had the information necessary to make informed decisions about issuing a certificate for this project. The Amended Stipulation does not seek to correct this situation. The Board should not issue a certificate based on this inadequate record, but instead should reopen

the Application with instructions to supply the missing information to allow the Board to make an informed decision.

Any attempt to introduce new details for facility design by stipulation, instead of including them in the Application, deprives intervenors of their right to test these details through discovery and other steps of an orderly adjudicatory proceeding, and deprives other members of the public of their right to comment on these details in the public hearing. The same principle applies to the studies introduced at the supplemental hearing. OAC 4906-3-09 requires an applicant to publish notice that the completed application is ready for the public's review, so the public can comment on it. The original Stipulation and Amended Stipulation were filed after the public comment session of the hearing was held on June 12, 2019. The studies introduced at the supplemental hearing also occurred after June 12, 2019, and the public was not provided the opportunity to submit testimony on these studies. The public's rights were violated by this process, including the rights of CCOPC members who are not individual intervenors and thus are persons who under the Board's practices could have testified at the public comment session of the hearing.

The required studies should be added to the Application before the Board decides whether to issue a certificate, not afterwards. Otherwise, the Board will abdicate its duty to make the required findings and determinations to resolve the issues as required by R.C. 4906.10(A), and unlawfully delegate its responsibility to the Staff. This practice would deprive the Citizens of their statutory right to call and examine witnesses at the hearing under R.C. 4906.08 and otherwise participate in the adjudicatory process as noted in Paragraph 53 of the dissent in *Buckeye Wind*. And it would deprive the Citizens of their right to procedural due process under the Fourteenth Amendment of the Ohio State Constitution and Section 16, Article

I of the Ohio Constitution, which require that administrative proceedings comport with due process. *Mathews v. Eldridge* (1976), 424 U.S. 319; *LTV Steel Co. v. Indus. Comm'n* (2000), 140 Ohio App.3d 680; *Egbert v. Ohio Dep't of Agriculture* (2008), 2008-Ohio-5309. At its core, "due process insists upon fundamental fairness, and the requirement to conduct a hearing implies that a fair hearing must occur." *Lassiter v. Dep't of Social Serv.* (1981), 452 U.S. 18, 24; *Clayman v. State Med. Bd.* (1999), 133 Ohio App.3d 122, 127, *citing State ex rel. Ormet v. Ind. Comm'n* (1990), 54 Ohio St.3d 102, 104. *Also see Seitz v. All Creatures Animal Hosp.* (Nov. 15, 1985), Ashtabula App. No. 1192, 1985 WL 3679.

If the Board decides to follow this procedure, it should at least take steps to remove some of the secrecy from the Staff's decision-making on the post-certificate plans and the Staff's oversight of the Facility's operations. These steps should include the following:

1. Angelina should be required to post notices of and copies on its website of all permit applications, permits, plan submittals, and other correspondence to and from public agencies about the design, construction, and operation of the Project and provide the public with a mechanism by which the public can obtain more information about and comment on issues associated with these actions.
2. Any facility requests for permits and other governmental action should be posted on Angelina's website at least 15 days prior to submission to the government so that the public can provide Angelina and the pertinent government agency with comments on the proposals. These notices should identify a contact person and email address for Angelina and for the government official who is the contact person for Angelina, so that the public can submit comments to them.

3. Notice of the pre-construction meeting and other meetings between Angelina and the Staff about the Project should be posted on Angelina's website at least 14 days prior to the meetings and should be open to the public.

4. Angelina also should be required to send all notices described above to the owners and occupants of land adjoining the Project Area.

5. Angelina's complaint summaries should be posted on the Applicant's website. Currently, Angelina does not intend to provide the public with access to these reports by posting them on its website or by any other means. Herling, Tr. I 119:9-12. While Mr. Herling sought to excuse Angelina's intent to hide its problems from the public by arguing that some complainants would not want to make their complaints public (Herling, Tr. I 126:19 to 127:4), Angelina could easily overcome that objection by giving the complainants the option to have their names redacted from the publicly disclosed report.

These actions will by no means compensate for the Board's failure to require the necessary information in the Application and subject it to hearing. But it at least would inject some transparency into the Staff's decision-making.

V. <u>The Angelina Solar Project Does Not Constitute The Minimum Environmental Impact And Does Not Serve the Public Interest, Convenience, And Necessity</u>.

Angelina does its best to "green-wash" this project, portraying it as benign and environmentally beneficial. The record in this case shows a very different project -- a major industrial plant spread over a rural residential landscape on a vast scale that will harm the community as described in Section III above. Angelina has the burden of proof, but failed, to demonstrate that its Project as designed in the Application will represent the minimum environmental impact as required by R.C. 4906.10(A)(3) and that it will serve the public interest,

convenience, and necessity as required by R.C. 4906.10(A)(6). While R.C. 4906.10(A) may require the Board to base its certification decision "upon the record" that includes evidence introduced at the hearing, the necessary information must be included in the Application so that the parties have a fair opportunity to evaluate it in preparation for testing it at the hearing. Moreover, in this case, Angelina did not supply the required information at the hearing, either.

The Citizens do not have the burden to produce evidence that the Project will harm the public, although they have done so in many instances, including the following.

1. The solar equipment will spoil the neighborhood's scenic views. The unsightly solar equipment will be located in close proximity to neighboring residences and land, and Angelina has not provided meaningful assurances that these views will be adequately mitigated through effective screening designs acceptable to neighbors who will be exposed to these views.
2. The Project lighting may be annoying and intrusive to neighbors, and Angelina has failed to demonstrate how it will prevent this from occurring.
3. The inverters may produce annoying and intrusive noise that reaches neighboring homes and land.
4. Post installation will produce noise that is loud, bothersome, and long lasting.
5. The Project's provisions for preventing and replacing damaged field tiles are inadequate and could result in the flooding of neighboring land and damaged crops.
6. The unguarded recyclable materials in the solar equipment will attract criminals to the area to plunder them, and these criminals may also harm the neighbors while in the area.

7. Solar panels damaged by vandals or disasters may leak contaminants into the groundwater, thus polluting the neighbors' wells.
8. The Project may be a drain on emergency services that it may consume, thus depriving the residents of adequate emergency services.
9. The Project does not provide adequate controls for noxious and invasive weeds.
10. The Project will harm the area wildlife.
11. The Project will force deer, coyotes and other wildlife to congregate in the neighbors' fields and yards, and damage the neighbors' crops and livestock.
12. The Project may increase stormwater runoff and flood the neighbors' fields and homes, including those in Fairhaven.
13. The solar equipment may obstruct motorists' views of cross-roads at intersections.
14. Erosion from Project construction may pollute the streams.
15. The Application lacks sufficient detail about solid waste and debris generation and disposal to demonstrate that the waste and debris will be properly handled.
16. Project construction will clog the neighborhood roads and delay the movement of farm equipment.

Section III above describes these and other harms and potential harms in more detail. Section III is incorporated in this Section V by reference as a description of the reasons why the Facility does not satisfy R.C. 4906.10(A)(3) and (6).

VI. The Proposed Stipulation Cannot Be Used To Delegate The Board's Authority And Responsibility For Certification Decisions To The Staff, Nor It Does Provide For A Facility That Represents The Minimum Adverse Environmental Impact.

Angelina must show that the Amended Stipulation does not violate important regulatory principles and practices and is not contrary to the public interest. Angelina cannot sustain this

burden. The Application and the rest of the evidentiary record do not contain the information required by the Board's rules, thus preventing the Board from determining "[t]he nature of the probable environmental impact" of the project as required by R.C. 4906.10(A)(2). Nor, based on the Application and the evidentiary record, can the Board find "[t]hat the facility represents the minimum adverse environmental impact" as required by R.C. 4906.10(A)(3) and "will serve the public interest, convenience, and necessity" as required by R.C. 4906.10(A)(6). For these reasons, the Amended Stipulation violates important regulatory principles and practices and is contrary to the public interest. Accordingly, OPSB should deny Angelina's request for a certificate.

The Amended Stipulation, if accepted, would grant a certificate for the Facility based on an Application that violates the Board's rules in a multitude of ways as described herein. The Board cannot circumvent its own rules by approving a deficient application. In particular, since the Application is incomplete, the Board should deny Angelina's application for a certificate.

The Amended Stipulation would provide for an unlawful and unconstitutional delegation of power to the Staff for the reasons explained in Section IV above. Most of the Amended Stipulation's supposed accomplishments touted by Angelina and the Staff are future submittals of studies that should have been included in the Application, but which now are proposed to be delivered after certification by Angelina and approved in secret by the Staff. The Amended Stipulation mostly just postpones, until after certification, Angelina's evaluations of the Facility's potential threats to the public and the Angelina's identification of mitigation measures work that should have been included in the Application.

The Amended Stipulation also is carelessly worded to provide loopholes by which Angelina can avoid its responsibilities. Those loopholes are comprehensively identified in Section III above.

The scarcity of the Application's analysis of the hazards and damage threatened by the Angelina solar project has deprived the Concerned Citizens of their right to comment on and test the Project's impacts and the proposed certificate conditions. For the same reason, the Staff and the Board have not had the information necessary to make informed decisions about issuing a certificate for this Project. The Amended Stipulation does not seek to correct this situation. The Board should not issue a certificate based on this inadequate record, but instead should reopen the Application with instructions to supply the missing information to allow the Board to make an informed decision.

Although Angelina and Staff will tell the Board that it should defer to the Amended Stipulation and approve the Project with the Amended Stipulation's conditions, a stipulation signed by allied parties over the objections of other parties is not entitled to deference. If it were, any two or more aligned parties (*e.g.*, two Concerned Citizen intervenors) could sign a stipulation over other parties' objection and obtain the Board's blessing for it. The parties signing the Amended Stipulation do not have to live next door to the Project's hazards, so they do not represent the Concerned Citizens' interests and that fact is reflected in the Amended Stipulation's failure to address these hazards. It is the Board's statutory responsibility to make sure Angelina has provided a complete and honest assessment of the Project's hazards and has designed the Project to reduce those hazards to a minimum. Adopting the Amended Stipulation will not fulfill this responsibility.

VII. Conclusion

For the reasons expressed above, the Board should deny Angelina's application for a certificate.

Respectfully submitted,

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CERTIFICATE OF SERVICE

On December 11, 2020, the docketing division's e-filing system will electronically serve notice of the filing of this document on the following parties: Michael Settineri at mjsettineri@vorys.com, Gretchen Petrucci at glpetrucci@vorys.com, Clifford Lauchlan at cwlauchan@vorys.com, Kathryn West at kwest@prebco.org, Chad Endsley at cendsley@ofbf.org, Thaddeus Boggs at tboggs@fbtlaw.com, and Jodi Barr at Jodi.barr@ohioattorneygeneral.gov. A courtesy copy of this document has also been sent to these persons by electronic mail.

/s/ Jack A. Van Kley______
Jack A. Van Kley

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Summary: Brief (Post-Hearing) electronically filed by Mr. Jack A Van Kley on behalf of Concerned Citizens of Preble County, LLC