

**BEFORE
THE OHIO POWER SITING BOARD**

In the Matter of the Application of Kingwood Solar I LLC for a Certificate of Environmental Compatibility and Public Need))))	Case No. 21-0117-EL-BGN
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DIRECT TESTIMONY OF DYLAN STICKNEY

Q1. Please state your name, title and business address.

A1. My name is Dylan Stickney. I am Development Manager for Vesper Energy, 906 W. McDermott Dr., Suite 116-366 Allen, TX 75013. The Applicant, Kingwood Solar I LLC, is a wholly owned affiliate of Vesper Energy Finance LLC. I am the Project Manager for the Kingwood Solar Project (the “Project”).

Q2. What are your duties as Development Manager?

A2. I am responsible for managing development activity of solar projects in the eastern United States. This typically includes real estate contracting, utility interconnection procedures, field studies & surveys, community engagement and site permitting.

Q3. What is your educational and professional background?

A3. I obtained a B.S. in Business Administration from the University of New Hampshire in 2011. I have worked in the energy industry since 2013, with more than five years’ experience in renewable and sustainable energy development and technologies. From 2017 to 2021, I worked as a Sr. Manager of Business Development for a utility-scale solar development company based in Boston, MA. My responsibility included more than 4 gigawatts (GW) of new solar development project capacity across the United States, including more than 500 megawatts (MW) of projects in the PJM market and contributions

1 to four utility-scale projects in Ohio that are still in development today. I joined Vesper
2 Energy in January of 2021 and have been involved with the Kingwood Solar Project since
3 then.

4 **Q4. Can you please describe Vesper Energy?**

5 **A4.** Founded in 2015, Lendlease Energy Development was re-branded as Vesper
6 Energy in 2020. Vesper Energy is a developer, owner, and operator of utility-scale
7 renewable energy assets. Since its founding, Vesper Energy has commercialized more than
8 680 MW of solar projects in the United States, including the 80-MW Nestlewood Project
9 in Ohio, and other successfully operating projects in California, Texas, Connecticut, and
10 Hawaii. Vesper Energy's current development pipeline represents 3 GW of renewable
11 energy and energy storage projects across the country.

12 **Q5. Can you please give a general overview of the Kingwood Solar Project?**

13 **A5.** The Project will be located within an area of approximately 1,200 acres of property
14 in Greene County. The Project Area primarily consists of agricultural land, characterized
15 by gently rolling topography, with elevations ranging between 920 and 1,080 feet above
16 mean sea level. Multiple existing electric transmission lines cross the Project Area, which
17 is primarily in agricultural use with scattered areas of wooded vegetation and a few water
18 features. The area is generally rural. All Project components, including the Project
19 Substation and 138-kV gen-tie, will be located within the Project Area.

20 The Project's PJM Interconnection, LLC (PJM) interconnection application
21 specifies a total power generation capacity of up to 175 MW alternating current (AC). The
22 Project will consist of solar panels affixed to single-axis metal racking designed for
23 tracking the sun to optimize sunlight exposure and energy generation. The solar panel

1 technology for the Project will be one of two basic types: crystalline or thin-film.
2 Crystalline modules are silicon-based. Thin-film modules use one of several alternative
3 chemistries (such as copper indium gallium selenide). While the specific module has not
4 yet been selected, the Project will use modules manufactured by a module manufacturer
5 from the Bloomberg Finance Energy News Tier 1 list. To be included on the Tier 1 list, a
6 module manufacturer must have provided in-house manufactured panels to six different
7 projects that have been non-recourse financed by six different banks over the past two
8 years. These manufacturers are widely considered to be the highest quality manufacturers.
9 At a maximum capacity of 175 MW alternating current (AC), the Project is expected to use
10 approximately 410,000 modules.

11 Underground electrical interconnections at a voltage of 34.5-kV will be used to
12 transmit generated electricity from the inverters to the Project Substation, where it will be
13 stepped up to 138-kV. From there, a short 138-kV gen-tie will connect the Project
14 Substation to the Utility Switchyard to transmit the Project's electrical output to the
15 existing ATSI Greene-Clark 138-kV transmission line. The ATSI Greene-Clark 138-kV
16 transmission line routes through the Project Area. A 345-kV transmission line also routes
17 through the Project Area but will not be utilized by the Project.

18 The Project is expected to operate with an annual capacity factor of up to 23 percent,
19 generating approximately 360,000 megawatt-hours (MWh) of electricity each year, enough
20 to power approximately 33,000 average Ohio households, which is roughly half the number
21 of households in Greene County.

1 **Q6. What is the general purpose of the Kingwood Solar Project?**

2 **A6.** The Project will help meet electricity demand in the region, particularly in light of
3 the recent and planned retirements of existing coal-fired generating assets located in Ohio
4 and throughout the PJM system as well as the significant growth of demand for renewable
5 energy in Ohio. In July 2021, Vistra Energy announced the 2022 closing of the 1,300
6 megawatt Zimmer coal-fired power plant. In November 2021, Energy Harbor announced
7 the closing of the last three generating units at the Sammis coal-fired power plant, originally
8 a 2,220 megawatt power plant. An example of the growth in the demand for renewable
9 energy is the Intel announcement that it will make a more than \$20 billion dollar investment
10 to construct two chip factories in Ohio that will span nearly 1,000 acres in Licking County,
11 Ohio. Importantly, the Intel press release on the project notes that the new factories have
12 a goal to be powered by 100% renewable electricity. A copy of that press release is attached
13 to my testimony as Attachment A and is available for review at
14 [https://www.intel.com/content/www/us/en/newsroom/news/intel-announces-next-us-site-](https://www.intel.com/content/www/us/en/newsroom/news/intel-announces-next-us-site-landmark-investment-ohio.html)
15 [landmark-investment-ohio.html](https://www.intel.com/content/www/us/en/newsroom/news/intel-announces-next-us-site-landmark-investment-ohio.html). Just as important as meeting the growth of the need of
16 renewable energy for companies investing in and doing business in Ohio, the Project will
17 provide “on peak” power during the high demand period of mid-day and late afternoon
18 when the Project should be running at full capacity. The Project will also support
19 employment opportunities throughout the region and state, particularly during
20 construction, as well as provide significant annual tax revenues to Greene County, Miami,
21 Xenia, and Cedarville Townships, and the Cedar Cliff and Xenia Local School Districts.

Q7. How does Vesper identify solar project sites for development?

A7. Vesper Energy considers a number of different factors when identifying potential project sites. These factors include whether the site is large enough to accommodate the project target capacity; whether the land use is compatible, such that it does not require substantial earthwork to prepare and has sufficient space for setbacks from non-participating landowners; whether there are adequate solar resources; access to suitable power transmission infrastructure; site accessibility from public roads; supportive participating landowners; and whether the project is expected to result in significant adverse impacts to ecological resources.

Q8. Did Vesper conduct any initial studies on the Project location?

A8. Vesper (Lendlease at the time) conducted numerous desktop studies on the Kingwood Project site including transmission capacity engineering analysis, wetland and flood hazard mapping, geologic, topography and grading estimations, and presence of endangered or threatened species habitat. These studies were conducted using data sources from the Greene County Geographic Information Management System (GIMS), Ohio Department of Natural Resources (ODNR) Natural Heritage Database, Division of Wildlife, Division of Water Resources, and Division of Geologic Survey, Ohio Emergency Management Agency (OEMA), Ohio Environmental Protection Agency (OEPA), US Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), US Fish and Wildlife Service (USFWS), US Army Corps of Engineers (USACE) National Wetland Inventory, and FEMA National Flood Hazard Layer. Additionally, commissioned engineers and environmental experts from consultants regularly used on Vesper projects

1 were consulted in reviewing these initial studies and conducting discrete transmission
2 capacity analysis.

3 Since these initial studies showed that there was suitable land characteristics free
4 of prohibitive environmental and ecological risk, available injection capacity on the
5 existing transmission infrastructure, and sufficient land area from willing landowners to
6 move forward, the Kingwood Project was further advanced into development.

7 **Q9. Did Vesper conduct any additional studies for the Project?**

8 **A9.** We have completed numerous studies to document existing conditions of the
9 Project Area and forecast the potential impacts of the Project. In addition to the PJM
10 studies, we have either completed or commissioned the following studies:

- 11 i. Economic Impact Study;
- 12 ii. Property Value Impact Study;
- 13 iii. Project Noise Evaluation;
- 14 iv. Geotechnical Report;
- 15 v. Aquatic Resource Report;
- 16 vi. Species Consultation;
- 17 vii. Visual Impact Analysis;
- 18 viii. History/Architecture Reconnaissance Survey; and
- 19 ix. Phase I Archaeological Investigation.

20 Final reports for each of these studies were included as appendices to the Project's April
21 16, 2021 Application or submitted with responses to Staff Data Requests.

1 **Q10. Did the Applicant engage in any community outreach about the Project?**

2 **A10.** Yes, we have spent a great deal of time and effort in engaging the community about
3 this Project. Throughout the planning of this Project, representatives have met with
4 numerous local officials and community members to gain feedback on the Project attributes
5 and siting criteria and answer general questions about the solar development process.
6 Among other interactions, these included meetings with the Miami Township Board of
7 Trustees, Cedarville Township Board of Trustees, Tecumseh Land Trust, Greene County
8 Board of Commissioners, Cedar Cliff Local School District Board, Xenia Area Local
9 School District, Greene County Soil & Water Conservation District, Greene County Career
10 Center, Yellow Springs Chamber of Commerce, Yellow Springs Village Councilwoman
11 M. MacQueen, 73rd Ohio House District Representative B. Lampton, Greene County
12 Regional Planning & Coordinating Commission, Greene County Engineer, Xenia
13 Township Board of Trustees, Glen Helen Nature Preserve, and Clifton Village Mayor A.
14 Bieri & Councilman Anthony Satariano Jr.

15 In addition, I have met with the Little Miami Conservancy about the Project as
16 recently as February 2022 and the feedback I received from the Conservancy was that it
17 did not have a concern about the Project given its distance from the Little Miami River,
18 which the Conservancy calculated (and I have confirmed) to be approximately 1,300 feet,
19 and significantly greater for the majority of the Project Area. Per its website, the Little
20 Miami Conservancy is a 501(c)(3) organization dedicated to the restoration and protection
21 of the Little Miami National Wild & Scenic River. I also reached out to the Little Miami
22 Watershed Network (which I believe had certain members of the organization testify at the

1 public hearing) but the Network replied to me that it was not interested in meeting with me
2 about the Project.

3 The Applicant also sent out good neighbor agreement offers to the sixty-five non-
4 participating landowners adjacent to the Project. The offers included a \$1,000 payment
5 upon agreement execution, as well as a one-time payment ranging from \$7,500 to \$25,000
6 based on each landowner's property and proximity to the Project area, which would be paid
7 upon commencement of construction. The total amount of the offered payments was
8 \$822,500. At this time the Applicant has entered into 5 of those agreements with
9 landowners.

10 I also hope to continue outreach to the boards of trustees of Xenia, Miami and
11 Cedarville townships. One area of outreach is trying to develop a community benefit fund
12 for the townships that in the aggregate would total \$225,000 for each year of the Project's
13 commercial operation and an expected \$7,875,000 over the life of the Project. We would
14 need to enter into the proper agreements with any interested township, and I would expect
15 that any community benefit fund payment would be conditioned on a Certificate being
16 issued and the township not opposing the construction and operation of the Project. To
17 anticipate one question on the community benefit fund, the total fund would be \$225,000
18 so if only one township is interested in putting in place an agreement with the Project, then
19 that township would receive the entirety of the \$225,000 each year. If all three townships
20 enter into agreements, then each would receive \$75,000 a year. A township would be able
21 to use the community benefit funds for the benefit of the townships and it could include
22 purchasing equipment for first responders or any other expenditure that benefits the
23 townships such as hiring additional employees. The community benefit fund would also

1 supplement the additional tax revenue the townships would receive if the Project is
2 constructed and operated. While the community benefit fund would not be part of a
3 Certificate condition and is not a commitment by the Applicant at this time, I think it is
4 important to note that it will be part of our ongoing outreach to the townships to show the
5 potential benefits of the Project to the local communities.

6 **Q11. What public meetings have you held about the project?**

7 **A11.** In addition to the many individual meetings with stakeholders listed above, we also
8 held a number of public meetings to provide information about the project to the
9 community and to gather feedback about the project. Public meetings were held by the
10 Applicant on October 26, 2020 (Zoom video conference), November 19, 2020 (Dial-in
11 Phone Conference), March 30, 2021 (Zoom video conference followed by Dial-in Phone
12 Conference), June 29, 2021 (in-person), and November 15, 2021 (in-person, the Local
13 Public Hearing). As noted, some of these meetings were virtual due to the ongoing Covid-
14 19 pandemic.

15 I would also like to note that in addition to the public meetings that we organized,
16 I attended the April 6, 2021 town hall meeting organized by the Board of Greene County
17 Commissioners, and also participated in a Board of Greene County Commissioners Work
18 Session on May 20, 2021.

19 **Q12. Have concerns been raised about the Project?**

20 **A12.** Project opponents have raised a number of different concerns about the project,
21 including that:

- 22 i. The Project will negatively affect adjacent property values;
- 23 ii. The Project will contaminate groundwater wells in and around the Project Area;

- 1 iii. The Project will cause substantial wildlife impacts;
- 2 iv. The Project will cause danger from tornadoes and extreme weather events;
- 3 v. The Project's construction will be disruptive to the area residents;
- 4 vi. The Project will damage drain tiles in the area and cause drainage problems in and
- 5 around the Project Area;
- 6 vii. The Project's lighting will be a nuisance to adjacent property owners;
- 7 viii. The host communities would be financially responsible for returning the site to a
- 8 pre-construction state if the Applicant went bankrupt before the Project was
- 9 decommissioned;
- 10 ix. The solar panels will leach hazardous chemicals;
- 11 x. The Project is too close to non-participating residences;
- 12 xi. The Project will disrupt tourism in the area due to visual impacts from the area's
- 13 tourist attractions and the main thoroughfares;
- 14 xii. The Project will permanently impact the farmland upon which the project is
- 15 proposed;
- 16 xiii. The noise produced by the Project will negatively impact nearby homeowners;
- 17 xiv. The Project will use harmful herbicides; and
- 18 xv. The Project will spoil the visual and aesthetic enjoyment for nearby landowners.

19 **Q13. Has the Applicant taken steps to address the concerns about the Project?**

20 **A13.** We have seriously considered all the concerns about the Project, which have been
21 brought to our attention. Some specific actions that we have taken to address concerns
22 include:

1 Property values: The Applicant commissioned an outside study to quantify the impact of
2 a solar facility on adjacent property values, with specific focus on projects in Ohio. The
3 study, which used actual property sales data from before and after solar facilities were
4 constructed, concluded that the solar farms did not adversely affect property values. From
5 my understanding, this is consistent with other studies that have analyzed the impact of
6 solar development on property values. Andrew Lines, from CohnReznick, will provide
7 additional information about the study commissioned by the Applicant and its results in his
8 testimony.

9 Groundwater Contamination: Kingwood Solar will implement Best Management Practices
10 in accordance with Ohio EPA's Construction General Permit. Moreover, per the
11 Applicant's June 1, 2021 response to a Staff data request, the Applicant will offer to test
12 all active drinking wells within 100 feet of active construction prior to construction and six
13 months after construction is completed. Such pre- and post-construction testing would
14 identify whether construction activities have caused groundwater contamination.
15 Additionally, the Applicant will coordinate with any panel manufacturer to ensure that the
16 solar panel used for the Project does not exhibit the characteristic of toxicity as analyzed
17 with the USEPA's toxicity characteristics leachate procedure (TCLP) test, as
18 recommended in the Staff Report. Dr. Brent Finley will provide more information about
19 why solar panels are not a threat to groundwater contamination.

20 Wildlife impacts: As explained in the Application, the Project is not expected to have a
21 significant impact on wildlife. As an initial matter, the Project has been designed to avoid
22 all permanent impacts to aquatic habitats in the Project Area. The Project will also avoid
23 impacts to most streams, by using horizontal directional drilling to install collector lines

1 under all perennial streams. For seven intermittent and ephemeral stream crossings, the
2 Project will consider using open-trenching methods only if there is no water present at the
3 time of construction.

4 Then, after project construction, small wildlife are expected to recolonize the
5 Project Area, particularly since the Project will incorporate a woven-wire fence, which will
6 resolve small wildlife access and crossing concerns. The Applicant has also committed to
7 incorporate pollinator-friendly habitat in accordance with the recommendations of the Ohio
8 Pollinator Habitat Initiative, as recommended by the Ohio Department of Natural
9 Resources Division of Wildlife. Those plantings will consist of a carefully selected mix of
10 native and pollinator seed that will provide a net benefit to habitat diversity. Such a
11 planting mix is also expected to provide additional benefits, like promoting infiltration,
12 eliminating the need for herbicides, filtering stormwater flows, reducing erosion and
13 sedimentation, and preventing noxious weeds. These efforts, taken as a whole, will
14 minimize impacts to most wildlife.

15 Danger from tornadoes and extreme weather events: The Project is being designed to
16 withstand and minimize potential damage from high-wind occurrences. The racking
17 systems being considered for the Project will include technology to stow the panels (i.e.,
18 to the horizontal) in a manner to reduce wind loading during high wind speed events and
19 racking will be designed per applicable codes. As explained in more detail by Alex Roedel
20 in his testimony, this configuration is designed to withstand hurricane-force winds.

21 Last, as with any other commercial or industrial facility, the Project will maintain
22 sufficient general liability insurance to insure against any property damage potentially
23 caused by the Project components in the event of a tornado.

1 Construction impacts: Project construction is expected to last not more than 16 months.
2 During that time, it is anticipated that there might be inconveniences to area residents
3 primarily through increased road traffic and construction-related noise. We would mitigate
4 the severity of those impacts in a number of ways. First, a final transportation management
5 plan will be provided in coordination with the Greene County Engineer, ODOT, and local
6 health and safety professionals as appropriate. The final transportation management plan
7 will include any road use and maintenance agreements, and a detailed methodology for
8 monitoring local, County and township roads used for construction traffic to ensure they
9 remain safe for public use. Project construction traffic would be limited to labor personnel
10 transportation and deliveries of equipment, the majority of which are “normal” delivery
11 trucks and vehicles. The only unique delivery, which may require special permitting and
12 route coordination for delivery, is the electrical transformer. We would hope to coordinate
13 with the County and townships about an agreement for coordinating time and routes for
14 deliveries to minimize impacts to area residents, and have been in contact with the Greene
15 County Engineer as Kingwood project development has progressed.

16 The Project is also committed to mitigating construction noise impacts. Although
17 any construction noise impacts would only be intermittent and temporary, the Applicant
18 committed in the Application to mitigating construction noise as much as reasonably
19 possible by employing construction industry best management practices, such as providing
20 7-day notification to adjacent landowners, limiting loud construction activities to daylight
21 hours, limiting pile driving between the hours of 10:00 am and 5:00 pm, maintaining all
22 tools and equipment in good operating order, using sound mufflers or silencers, where
23 feasible, and communicating with adjacent landowners who will be most impacted by

1 nearby construction activities. The Applicant is also agreeable to Staff's recommended
2 Condition 29, which would further limit construction activities, with the exception of the
3 impact pile driving.

4 Drain tile impacts and surface runoff: The Applicant understands the importance of
5 drainage tiles in the area and is committed to working with local landowners to ensure that
6 the drainage tile infrastructure is not negatively impacted by the Project. To accomplish
7 this, the Applicant will attempt to identify the location of any subsurface drainage tiles
8 prior to the start of construction and will avoid damaging those tiles during construction.
9 This process has already started, as the Applicant has been coordinating with participating
10 landowners and reached out to the Greene County Soil & Water Conservation District.
11 Any main drain tiles damaged by the Project during construction or operation of the Project
12 will be promptly repaired. Lateral drain tiles will also be promptly repaired or rerouted,
13 unless the landowner agrees not to have the damage repaired and the non-repair will not
14 affect any adjacent landowners. Staff recommended Conditions 31 and 32 provide further
15 requirements for drainage, and I have provided suggested revisions to those conditions
16 which supplement the Application commitments.

17 In terms of opponents' concerns about off-site surface drainage, the Project's only
18 source of water discharge is from stormwater on the Project Area. The Applicant will
19 adhere to standard engineering design and best management practices and will comply with
20 all applicable stormwater permits (such as the Ohio EPA construction stormwater general
21 permit). Moreover, only 2% of the Project Area is considered impervious. The majority
22 of the Project will allow infiltration of precipitation. As a result, the Applicant does not
23 anticipate any impacts from stormwater or other drainage to adjacent properties.

1 Project lighting: To reduce impacts from the Project, lighting associated with the Project
2 will be limited to that required for safety and security, in such locations as around the gated
3 entrances to the Project, the substation, and the utility switchyard. Furthermore, all
4 necessary lighting will incorporate mitigating designs, such as downward-facing lights
5 with side shields, motion-activated lighting, or manually operated task lighting.

6 Decommissioning: The Applicant will be responsible for decommissioning the Project at
7 the end of its operational lifespan and a performance bond will be in place to ensure that
8 occurs for the life of the Project. Decommissioning will involve removing all system
9 components and rehabilitating the site to conditions similar to pre-construction. To protect
10 the community in the event of bankruptcy, the Applicant committed in the Application to
11 providing financial assurance in the form of a bond, letter of credit, or other form of
12 financial security acceptable to landowners in their reasonable discretion, to decommission
13 the Project and restore the properties. Per a recommended condition by Staff (Condition
14 33), the financial security must be in the form of a performance bond, not take into account
15 Project salvage value and be posted prior to the start of construction. The amount of
16 financial security will be an estimate developed and signed by an Ohio Professional
17 Engineer. This value will be updated every 5 years throughout the duration of the Project.
18 More specifics about Project decommissioning are discussed in Lee Saunders's testimony.

19 Hazardous chemicals from solar panels: The Applicant will coordinate with the selected
20 panel manufacturer to ensure that the solar panels used for the Project do not exhibit the
21 characteristics of toxicity as analyzed with the USEPA's toxicity characteristics leachate
22 procedure (TCLP) test. This is consistent with the recommendation in the Staff Report.

1 Dr. Brent Finley will also provide additional detailed testimony about why solar
2 panels do not present a source of hazardous chemicals.

3 Proximity to non-participating residences: In the Application, the Applicant proposed a
4 minimum 25-foot setback for the fence line from all public roads and non-participating
5 property lines with an additional 20 feet minimum distance between the fence line and any
6 solar panels. In addition, Staff's recommended Condition 37 would increase the setback
7 from the edge of a public road to 30 feet from the Project fence line, providing a total
8 setback of 50 feet from the edge of a public road to any solar panels.

9 Tourism impacts: Opponents have raised a few different potential impacts of the project
10 on tourism, including 1) views of the Project from area tourist attractions, such as Clifton
11 Gorge Nature Preserve, John Bryan State Park, the Little Miami River; 2) views of the
12 Project as tourists drive on roadways to these and other nearby recreation areas; and, 3)
13 views of the Project by bicyclists, who use the area roads for recreation.

14 As detailed in the Application, the Applicant completed a detailed Visual Impact
15 Assessment (VIA) for the Project and considered each of these potential impacts. Based
16 on the results of that VIA, the Applicant then prepared a Landscape Plan, which explains
17 in detail how the Applicant proposes to mitigate the identified visual impacts of the Project.
18 Lynn Gresock will provide more detailed testimony about the VIA.

19 As an initial matter, the VIA demonstrates that the Project would not be visible
20 from John Bryan State Park or the Little Miami River Jacoby Road Access point. Although
21 these are all within 0.5 miles of the Project, the topography, low profile of the Project, and
22 dense vegetation will prevent any views of the Project. Visitors to the Clifton Gorge Nature
23 Preserve will not have views of the Project from the natural setting along the Little Miami

1 River nor would it be visible for those visitors who enter from the preserve's main entrance.
2 The only views of the Project would be for drivers from the road as they travel to enter the
3 preserve from the south. For the other recreational areas further from the Project Area, the
4 low profile of the Project and the existing vegetation will obscure potential views of the
5 Project. I would also note that the Project will not be visible from the Governor's personal
6 residence, which is approximately .6 miles from the Project boundary, given the distance
7 and natural vegetative screening that exists in the area.

8 In terms of the potential views along the main thoroughfares in the area, the VIA
9 shows that the total views of the Project will be limited. More locally, the Project will be
10 visible from Clifton Road, Wilberforce-Clifton Road, and State Route 72. Simulations 2
11 through 5 in the VIA show the maximum projected view of the Project from these roads.
12 In reality, a passing tourist's view of the panels from these viewpoints would be mitigated
13 for several reasons. First, a passing tourist would only get a quick view of the Project as
14 they drive by at up to 55 mph, whereas these pictures are static. Second, the simulations
15 are from the middle of winter—any growth in the fields or leaves on the bare trees would
16 dampen the panels' impact. Third, the simulations do not show any of the proposed Project
17 screening.

18 The Project is also not expected to have an adverse impact to bicyclists in the area.
19 While bicyclists would have views of the project along some of the local roads, the Project
20 is not expected to be visible from the Ohio and Erie Trail due to the dense vegetation on
21 either side of the trail.

22 Permanent impacts to farmland: Impacts to the farmland will be temporary. To protect the
23 viability of the Project land for farming after decommissioning, the Project has committed

1 to a number of mitigation strategies, including: avoiding impacts to drainage tiles, where
2 possible, and repairing damaged drainage tiles; preserving topsoil on the Project site; and
3 incorporating pollinator-friendly vegetative cover on the site. At the end of the Project,
4 after decommissioning, the land will be suitable for farming.

5 Operational Noise impacts: The Applicant is designing the Project to minimize noise
6 impacts to adjacent landowners. The Project's operational noise will be generated by the
7 tracking motors, the inverters, and the project substation. When designing the project
8 layout, our engineers attempted to site the locations of these noise-generating components
9 as far as possible from adjacent non-participating residences.

10 As explained in more detail in Alex Odom's testimony, a noise evaluation was
11 conducted to model the operational impact of the Project. This conservative study, which
12 included projected impacts, demonstrated that the Project will not increase sound levels by
13 more than 4 dBA at night and 2 dBA during the day at the closest non-participating
14 residences. These impacts will be considerably lesser to those non-participating receptors
15 at greater distances from the Project.

16 Herbicide use: The Applicant does not anticipate using any herbicides for regular
17 maintenance. Instead, the Applicant intends to prevent the establishment and propagation
18 of noxious weeds by heavily seeding for desirable species and preventing the introduction
19 of incidental weed import by washing vehicles. If, after using these strategies, noxious
20 weeds are found to be present on site, then the Applicant will remove the weeds and use a
21 targeted treatment of herbicide as necessary.

22 Visual impacts: As outlined in the Landscape Plan, attached to the VIA, the Applicant has
23 committed to mitigating the visual impact of the Project by instituting minimum setbacks,

1 using woven-wire fencing, maintaining existing vegetation and hedgerows, where feasible,
2 preserving and enhancing ground vegetation, with further enhancements using pollinator-
3 friendly species, installing native, non-invasive species that provide ecological benefits,
4 and softening the appearance of the fencing and solar arrays with extensive vegetative
5 screening. These efforts are discussed in more detail in Ms. Gresock's testimony and Mr.
6 English's testimony.

7 **Q14. Will the Project have positive economic impact on the local community?**

8 **A14.** Yes. Based on the Economic Impact Study attached to the Application, the Project
9 is expected to provide the local community with significant economic benefits.

10 The first economic benefit to the local economy will occur during the construction
11 phase of the Project. The Project is predicted to generate \$112 million of economic activity
12 during construction. Much of this will come from the projected \$16 million in wages
13 earned by the estimated 180 Ohio construction workers (out of 225 total construction jobs).
14 But there will also be benefits to local businesses as workers from other areas stay in local
15 hotels, purchase food from local restaurants, and spend money at other local businesses.
16 This is anticipated to infuse nearly \$7.5 million into the area economy.

17 The local economy will also benefit from the operation of the Project. The
18 Applicant anticipates requiring four high-paying, permanent full-time-equivalent jobs for
19 Ohio workers to maintain and operate the Project. The annual payroll, including benefits,
20 for those jobs is estimated to be \$443,000.

21 Last, the Project will generate a substantial tax revenue during both the construction
22 and operations periods. The Project will generate \$4.32 million in state and local taxes in
23 Ohio during the construction period. The Project will also generate an estimated \$1.90

1 million in state and local taxes for the life of the Project. This includes an estimated \$1.5
2 million in annual PILOT payments to the local community.

3 **Q15. Are there any existing solar arrays near the Project Area?**

4 **A15.** Yes. In addition to various residences that have solar panels mounted on their
5 homes and properties, Cedarville University currently has a large array of solar panels that
6 supply the University. The 2.15 MW array with 8,792 modules sits on ten acres and
7 provides approximately ten percent of the University's electricity needs. The array is
8 located on the southwest edge of campus, between the directly-adjacent homes on Palmer
9 Drive and behind Cedar Cliff Falls at Indian Mound Reserve Park. A picture of this array
10 that I took is attached to my testimony as Attachment B. The Village of Yellow Springs
11 has a solar array on about 6 and a half acres consisting of 3,024 solar panels utilizing
12 trackers. The array is located at the end of Ridgecrest Drive. Antioch College has a solar
13 array consisting of about 3,300 panels on five acres, which supplies the College. I would
14 note that the Cedarville University array has fencing and an inverter next to a residential
15 house on a residential street.

16 **Q16. Were you involved in the preparation of the April 16, 2021 Application and Exhibits**
17 **and responses to Staff Data Requests?**

18 **A16.** Yes, I was directly involved with the preparation of the Application, along with the
19 Figures and all the attached Exhibits (marked as Kingwood Exhibit 1 with confidential
20 portions of the Application marked as Kingwood Exhibit 1c). I also was responsible for
21 coordinating the responses to the OPSB Staff Data Requests (marked as Kingwood Exhibit
22 2 with confidential material marked as Kingwood Exhibit 2c).

1 **Q17. Were copies of the accepted Application served on local public officials and libraries**
2 **in accordance with Rule 4906-3-07(A) of the OAC?**

3 **A17.** Yes, I directed that such service take place on June 21, 2021, which is shown in
4 Kingwood Exhibit 3.

5 **Q18. Did the Applicant file and serve a copy of the letter sent to property owners and**
6 **tenants within the Project Area or contiguous to the Project Area?**

7 **A18.** Yes, pursuant to Ohio Adm.Code 4906-3-03(B), I directed that letters be sent to
8 participating property landowners and adjacent landowners/tenants on March 9, 2021 and
9 March 17, 2021 regarding the virtual public informational meeting on March 30, 2021 and
10 on June 8, 2021 regarding the in-person public informational meeting on June 29, 2021.
11 Subsequent letters were mailed on September 9, 2021 and September 14, 2021, pursuant
12 to Ohio Adm.Code 4906-3-09(A)(1), and on October 28, 2021, pursuant to Ohio
13 Adm.Code 4906-03-09(A)(2). Notices of those letters are attached as Kingwood Exhibit
14 4.

15 **Q19. Did the Applicant publish notice of the public informational meeting, the Application,**
16 **and the hearing dates in local newspapers?**

17 **A19.** Yes, notices were published in the Xenia Daily Gazette and the Fairborn Daily
18 Herald, newspapers of general circulation in Greene County, Ohio, for the public
19 informational meetings, the completed Application, and the public and adjudicatory
20 hearings. Except for the virtual public informational meeting, notices were also published
21 in the Yellow Springs News. Proof of publication for all notices are included in Kingwood
22 Exhibit 5.

1 **Q20. Would you please list the consultants that the Applicant retained to assist in the**
2 **preparation of the Application and Exhibits and their respective areas of**
3 **responsibility?**

4 **A20.** Yes. The Applicant hired Haley & Aldrich to serve as lead consultant on the
5 Application. Haley & Aldrich completed the Transportation Management Plan, the
6 Aquatic Resource Report, the Species Consultation, the Vegetation Management Plan, and
7 the Visual Impact Analysis. Other consultants that worked on the Project include
8 Silverlode Consultants (Economic Impact Study), CohnReznick (Property Value Impact
9 Study), Geotechnology, Inc. (Geotechnical Report), and Acentech (Project Noise
10 Evaluation).

11 **Q21. Will the Applicant be sponsoring witnesses to support the Application in addition to**
12 **your testimony?**

13 **A21.** Yes. In addition to my testimony, the Applicant will present testimony from Lynn
14 Gresock and Lee Saunders of Haley & Aldrich, Alex Odom of Acentech, Dr. John Nealon
15 of Geotechnology, Inc., Andrew Lines of CohnReznick, Brent Finley of Cardno, Noah
16 Waterhouse of EVS, Alex Roedel of NexTracker and Andrew English of PLANIT Studios.

17 **Q22. Have you reviewed the October 29, 2021 Staff Report of Investigation issued in this**
18 **proceeding?**

19 **A22.** Yes.

20 **Q23. Do you have observations or responses to any of the conditions listed in the Staff**
21 **Report of Investigation?**

22 **A23.** Yes, the Applicant generally agrees with Staff's recommended conditions but does
23 recommend some revisions as explained below.

1 Condition 12

2 The Applicant proposes adding a reference to R.C. 4906.13(B) to eliminate any confusion
3 at the local level with regard to the OPSB's jurisdiction over solar facilities over 50 MW.

4 Specifically, the Applicant recommends Condition 12 be modified as follows:

- 5 (12) Subject to the application of R.C. 4906.13(B), ~~The~~ certificate authority
6 provided in this case shall not exempt the facility from any other applicable and
7 lawful local, state, or federal rules or regulations nor be used to affect the
8 exercise of discretion of any other local, state, or federal permitting or licensing
9 authority with regard to areas subject to their supervision or control.

10
11 Condition 15

12 The Applicant proposes the following revisions to this condition to set a clear standard for
13 the fencing (small-wildlife permeable and aesthetically fitting but accounting for applicable
14 codes) and then provide Staff an opportunity to to confirm the design satisfies the standard.

15 Specifically, the Applicant recommends Condition 15 be modified as follows:

- 16 (15) Prior to commencement of construction, the Applicant shall submit to Staff
17 for its design for the perimeter fence for confirmation that the design complies
18 with this condition. approval a solar panel perimeter fence type that is Project
19 perimeter fencing shall be designed to be both small-wildlife permeable and
20 aesthetically fitting for a rural location, taking into account applicable codes
21 and NERC requirements. This condition shall not apply to substation fencing.
22

23 Condition 17

24 The Applicant proposes edits to Condition 17 to clarify that the Applicant will contact the
25 appropriate authority in the event threatened or endangered species are encountered during
26 construction. I also recommend deleting the last sentence of Condition 17 as annual
27 reporting of wildlife mortality, injury or entrapment is overly broad as it captures all
28 wildlife species, would impose an unnecessary administrative burden and cost on the
29 Project and does not relate to mortality or injury related to facility operations. Post

1 construction monitoring of wildlife mortality or injury at solar facilities is also unusual and
2 not necessary, and I am not aware of the Board requiring it for other projects. The
3 Applicant recommends Condition 17 be modified as follows:

- 4 (17) The Applicant shall contact Staff, the ODNR, and/or the USFWS as applicable
5 within 24 hours if state and/or federally listed threatened or endangered species
6 are encountered within the construction limits of disturbance during site
7 construction activities. Construction activities that could adversely impact the
8 identified plants or animals shall be immediately halted until an appropriate
9 course of action has been agreed upon by the Applicant, Staff and the
10 appropriate agencies. The Applicant shall also annually report all wildlife
11 mortality, injury, or entrapment that is discovered at the facility to OPSB Staff
12 and ODNR DOW.
13

14 Condition 18

15 The Applicant proposes revisions to the language in Condition 18 to account for the ability
16 to coordinate with the ODNR and/or the USFWS on alternative courses of action. The
17 OPSB has approved such coordination with these agencies in prior proceedings for solar
18 projects. Specifically, the Applicant recommends Condition 18 be modified as follows:

- 19 (18) If the Applicant encounters any new listed plant or animal species or suitable
20 habitat of these species prior to construction, the Applicant shall ~~include the~~
21 ~~location~~ identify avoidance areas or alternatively explain appropriate
22 mitigation measures for these species to accommodate construction activities.
23 This information will be included in the final engineering drawings and
24 associated mapping, as required in condition 4. The Applicant shall avoid
25 impacts to these species and explain how impacts would be avoided during
26 construction. Coordination with the ODNR and USFWS may also allow for
27 a different course of action.
28

29 Condition 19

30 The Applicant proposes edits to Condition 19, which clarify that post construction
31 stormwater guidance from the Ohio Environmental Protection Agency (“Ohio EPA”) will
32 be properly implemented in the Project Area as applicable. Specifically, the Applicant
33 recommends Condition 19 be modified as follows:

- 1 (19) The Applicant shall ~~construct the facility in a manner that~~ incorporate post
2 construction stormwater management under OHC00005 (Part III.G.2.e, pp. 19-
3 27) ~~in accordance with~~ as applicable and will also incorporate applicable
4 guidance from the Ohio Environmental Protection Agency's Guidance on Post-
5 Construction Storm Water Controls for Solar Panel Arrays (dated October
6 2019).

7
8 Condition 20

9 The Applicant proposes edits to Condition 20, which clarify the selection and role of the
10 environmental specialist. Specifically, the Applicant recommends Condition 20 be
11 modified as follows:

- 12 (20) The Applicant shall have an environmental specialist on site during construction
13 activities that may affect sensitive areas, to be mutually agreed upon by the
14 Applicant and Staff. Sensitive areas which would be impacted during
15 construction shall be identified on a map provided to Staff, and may include,
16 but are not limited to wetlands ~~and~~, streams, and locations of threatened or
17 endangered species habitat. The environmental specialist shall be familiar with
18 water quality protection issues and potential threatened or endangered species
19 of plants and animals that may be encountered during project construction. The
20 environmental specialist mutually agreed upon by Staff and the Applicant shall
21 be authorized to report any issues simultaneously to Staff and the Applicant.
22 To allow time for the Applicant and Staff to respond to any reported issues, the
23 environmental specialist shall have authority to stop ~~construction to assure that~~
24 construction activities in or near the impacted sensitive area(s) for up to 48
25 hours if the construction activities are creating unforeseen environmental
26 impacts unforeseen environmental impacts ~~do not progress and recommend~~
27 ~~procedures to resolve the impact.~~ A map shall be provided to Staff showing
28 sensitive areas ~~which would be impacted during construction with information~~
29 ~~on when the environmental specialist would be present in the sensitive areas~~
30 identified on the map.

31
32 Condition 21

33 The Applicant proposes edits to Condition 21, which clarify the purpose of seasonal cutting
34 restriction with regard to protected bat species. Specifically, the Applicant recommends
35 Condition 21 be modified as follows:

- 36 (21) The Applicant shall adhere to seasonal cutting dates of October 1 through
37 March 31 for the removal of trees three inches or greater in diameter to avoid
38 potential impacts to Indiana bats, northern long-eared bats, little brown bats,

1 and ~~the~~ tricolored bats unless coordination with the Ohio Department of
2 Natural Resources (ODNR) and the U.S. Fish and Wildlife Service (USFWS)
3 allows a different course of action. If coordination with these agencies allows
4 clearing between April 1 and September 30, the Applicant shall docket proof
5 of completed coordination on the case docket prior to clearing trees.
6

7 Condition 23

8 The Applicant proposes edits to Condition 23, which are consistent with language from
9 other Board approved projects and that improve the condition by applying the condition
10 requirement for the life of the project and ensuring the Applicant will follow all applicable
11 state laws regarding noxious weeds. Specifically, the Applicant recommends Condition 23
12 be modified as follows:

- 13 (23) The Applicant shall take steps to prevent establishment and/or further
14 propagation of noxious weeds identified in Ohio Adm.Code Chapter 901:5-37
15 during implementation of any pollinator-friendly plantings, as well as during
16 construction, operation, and decommissioning. This would be achieved
17 through appropriate seed selection, and annual vegetative surveys consistent
18 with the vegetation management plan included in the application. If noxious
19 weeds are found to be present, the Applicant shall remove and treat them with
20 herbicide as necessary, and shall follow all applicable state laws regarding
21 noxious weeds.
22

23 Condition 26

24 The Applicant proposes edits to Condition 26, which clarify the components of the Project
25 that will be outside Camp Clifton Day Camp's inner management protection zones. As an
26 initial matter, as supported by Mr. Saunders' and Mr. Finley's testimony, drinking water
27 sources in and around the Project Area will not be impacted by the Project. Therefore, any
28 restriction on the location of the Project equipment for the purpose of drinking water
29 protection is not warranted. That being said, the Applicant does not object to restricting
30 the substation equipment outside the inner management protection zones for Camp Clifton
31 given the location of the substation equipment being outside the zones. However, given

1 that there is no risk of water contamination from the placement or operation of solar arrays,
2 the Applicant is not willing to agree to remove panels located in that zone which if
3 removed, would result in restricting more than 100 acres of the Project Area and
4 significantly reducing certain participating landowners' lease income. The Applicant
5 recommends Condition 26 be modified as follows:

- 6 (26) At least 30 days prior to the preconstruction conference, the Applicant shall
7 demonstrate that ~~its solar and~~ the substation equipment are outside the inner
8 management protection zone(s) for the Camp Clifton Day Camp source water
9 protection area.

10
11 Condition 28

12 The Applicant proposes revisions to the language in this condition consistent with
13 conditions approved in prior cases but still provides for written confirmation of all pre-
14 construction activities. The revisions take into account that there may be multiple pre-
15 construction conferences and that the pre-construction compliance submittals may differ
16 for each phase of construction. For example, tree clearing pre-construction submittals may
17 not require compliance with all pre-construction conditions. The Applicant recommends
18 Condition 28 be modified as follows:

- 19 (28) At least 30 days prior to the start of construction, the Applicant shall file a copy
20 of the final complaint resolution plan on the public docket. At least seven days
21 prior to the start of construction and at least seven days prior to the start of facility
22 operations, the Applicant shall notify via mail affected property owners and
23 tenants who were provided notice of the public informational meeting and OPSB
24 hearings; local officials who received a copy of the application; residences
25 located within one mile of the certificated boundary; other applicable parties who
26 have requested updates regarding the project; airports, schools, and libraries
27 located within one mile of the certificated boundary; parties to this case; and
28 emergency responders. These notices shall provide information about the project,
29 including contact information and a copy of the project inquiry and complaint
30 resolution plan. These notices shall provide information about the project,
31 including contact information and a copy of the project inquiry and complaint
32 resolution plan. The start of construction notice shall include ~~written confirmation~~
33 ~~that the Applicant has complied with all preconstruction-related conditions of the~~

1 ~~certificate, as well as a timeline for construction and restoration activities. The~~
2 ~~start of facility operations notice shall include written confirmation that the~~
3 ~~Applicant has complied with all preconstruction-related conditions of the~~
4 ~~certificate, as well as a timeline for the start of operations. The Applicant shall file~~
5 ~~a copy of these notices on the public docket, including written confirmation that~~
6 ~~the Applicant has complied with all preconstruction-related conditions of the~~
7 ~~certificate.~~ During the construction and operation of the facility, the Applicant
8 shall submit to Staff a complaint summary report by the fifteenth day of April,
9 July, October, and January of each year for the first five years of operation. The
10 report shall include a list of all complaints received through the Applicant's
11 complaint resolution process, a description of the actions taken toward the
12 resolution of each complaint, and a status update if the complaint has yet to be
13 resolved. The Applicant shall file a copy of these complaint summaries on the
14 public docket.

15
16 Condition 30

17 The Applicant proposes revisions to the language in this condition to provide more clarity
18 and allow for modeling across the entire Project area rather than a specific test at one site.
19 This condition has been approved by the Board as recently as February 17, 2022 in Case
20 No. 20-1405-EL-BGN for a project in Union County, Ohio. In that case the Board adopted
21 the same language presented in a stipulation. The Applicant recommends Condition 30 be
22 modified as follows:

- 23 (30) If the inverters or substation transformer chosen for the project have a higher
24 sound power output than the models used in the noise model, the Applicant shall
25 submit, 30 days prior to construction, the results from an updated noise model
26 for the project using the expected sound power output from the models chosen
27 for the project, to show that sound levels will not exceed the average daytime
28 ambient level in dBA for the nearest sound monitoring location for the Project
29 Noise Evaluation attached to the application as Exhibit K plus five dBA at any
30 non-participating sensitive receptor and will be submitted at least 30 days prior
31 to construction. If noise data is not available from the inverter or transformer
32 manufacturer, an operational noise test may be performed to comply with this
33 condition. The test must be performed on a sunny day between 10 a.m. and 2
34 p.m. in the months of May August, at a distance equal to the minimum distance
35 from an inverter to a non-participating residence. If the test shows the
36 operational noise level is greater than project area ambient Leq level plus five
37 dBA additional noise mitigation will be required. This condition is complied
38 with if the test shows the operational noise level is equal or less than project
39 area ambient Leq level plus five dBA. The Applicant shall file a report on the

1 ~~public docket that shows either 1) for the chosen inverter and substation~~
2 ~~transformer that sound levels will not exceed the daytime ambient level plus~~
3 ~~five dBA at any non-participating sensitive receptor or 2) results of the~~
4 ~~operational noise test showing that sound levels will not exceed the daytime~~
5 ~~ambient level plus five dBA at any non-participating sensitive receptor.~~
6 nonparticipating sensitive receptor. If transformer manufacturer data is not
7 available, the model will be updated with sound emission data following the
8 NEMA TR1 standard. If inverter manufacturer data is not available, a similar
9 inverter model will be used to update the sound propagation model prior to
10 construction. Once constructed, sound level measurements will be made in
11 close proximity to the inverter to determine the sound power level of the
12 installed inverter. If the sound power level of the installed inverter is 2 dBA or
13 more above the sound power level used in the updated preconstruction model,
14 then the sound propagation model will be updated to ensure project-wide
15 compliance with the applicable sound level limit. If the sound power level is
16 determined to be less than 2 dBA above the sound power level used in the
17 updated preconstruction model, then the project will be deemed in-compliance.
18 If the equipment chosen for the project are at the same (or lower) sound power
19 outlet as the models used in the noise model, no further action is needed for
20 compliance of this condition.

21 Condition 31

22
23 The Applicant is proposing revisions to Condition 31 to clarify that soil compaction should
24 be avoided and the area of avoidance (i.e., the facility footprint). The revisions also
25 acknowledge that drain tile can be replaced or rerouted in addition to being repaired.
26 Specifically, the Applicant proposes the following revisions to this condition:

- 27 (31) The Applicant shall avoid, where possible, or minimize to the extent
28 practicable, any damage to functioning field tile drainage systems and
29 compaction to soils within the facility footprint resulting from the construction,
30 operation, and/or maintenance of the facility in agricultural areas. Damaged
31 field tile systems shall be promptly repaired or rerouted to at least original
32 conditions or modern equivalent at the Applicant's expense to ensure proper
33 drainage. However, if the affected landowner agrees to not having the
34 damaged field tile system repaired, they may do so only if the field tile systems
35 of adjacent landowners remain unaffected by the non-repair, non-replacement,
36 or non-rerouting of the landowner's field tile system.

1 Condition 32

2 The Applicant is proposing revisions to this condition to reflect its proposed approach for
3 documenting existing drain tile conditions. Specifically, the Applicant proposes the
4 following revisions to this condition:

- 5 (32) The Applicant shall ensure that ~~nearby~~ parcels adjacent to the Project area are
6 protected from unwanted drainage problems due to construction and operation
7 of the project. The Applicant shall ensure this by ~~implementing one of the~~
8 ~~following:~~ 1) conducting a search of the Project as necessary to locate drain tiles
9 between the Project area properties and adjacent parcels, consulting with
10 owners of all parcels adjacent to the properties making up the Project as to
11 locations of drain tiles on those parcels, consulting with the Greene Soil &
12 Water Conservation District (the "District") and the Greene County Engineer
13 to determine the location of any tile located in a county maintenance ditch; and
14 subsequently a) documenting benchmark conditions of surface and subsurface
15 drainage systems prior to construction, including the location of laterals, mains,
16 grassed waterways, and county maintenance/repair ditches or 2) The Applicant
17 ~~will make efforts to conduct a perimeter dig utilizing a tile search trench and~~
18 ~~consult with owners of all parcels adjacent to the property, the county soil and~~
19 ~~water conservation district, and the county to request drainage system~~
20 ~~information over those parcels. The Applicant shall consult with the county~~
21 ~~engineer for tile located in a county maintenance/repair ditch. b) locate and if~~
22 ~~necessary replace, repair or reroute field tile drainage systems on the Project~~
23 ~~properties. c) agree to compensate parcels owners affected by damage to~~
24 ~~functioning field tile drainage systems and soils resulting from the construction,~~
25 ~~operation, and/or maintenance of the facility in agricultural areas for damage to~~
26 ~~crops or other agricultural activities.~~

27 Condition 33

28 The Applicant is proposing revisions to this condition to account for the fact that the
29 Applicant may not have land rights after decommissioning is complete. Specifically, the
30 Applicant proposes the following revisions to this condition:

- 31 (33) At least 30 days prior to the preconstruction conference, the Applicant shall
32 submit an updated decommissioning plan and total decommissioning cost
33 estimate without regard to salvage value on the public docket that includes: (a)
34 a provision that the decommissioning financial assurance mechanism include a
35 performance bond where the company is the principal, the insurance company
36 is the surety, and the Ohio Power Siting Board is the obligee; (b) a timeline of
37 up to one year for removal of the equipment ; (c) a provision to monitor the site

1 for at least one additional year to ensure successful revegetation and
2 rehabilitation subject to landowner permission to access the site; (d) a provision
3 where the performance bond is posted prior to the commencement of
4 construction; (e) a provision that the performance bond is for the total
5 decommissioning cost and excludes salvage value; (f) a provision to coordinate
6 repair of public roads damaged or modified during the decommissioning and
7 reclamation process; (g) a provision that the decommissioning plan be prepared
8 by a professional engineer registered with the state board of registration for
9 professional engineers and surveyors; (h) and a provision stating that the bond
10 shall be recalculated every five years by an engineer retained by the Applicant.

11
12 Condition 34

13
14 The Applicant is proposing deleting this condition because it has completed the
15 architectural and archaeological surveys for the entire Project Area and received
16 concurrence from the State Historic Preservation Office that no further coordination is
17 required.

- 18 (34) ~~Prior to the commencement of construction, the Applicant shall finalize a~~
19 ~~MOU with OHPO to avoid cultural resources with potential adverse effects~~
20 ~~due to the project and to outline procedures to be followed if previously~~
21 ~~unidentified sites are discovered during construction. The Applicant shall~~
22 ~~submit the MOU to Staff and file the MOU on the docket of this case. The~~
23 ~~Applicant shall not construct within the 15 percent of the archaeological survey~~
24 ~~area not yet surveyed for archaeological resources.~~

25
26 Condition 35

27 The Applicant is proposing revisions to this condition to include the flexibility to recycle
28 the solar panels. Specifically, the Applicant proposes the following revisions to this
29 condition:

- 30 (35) At the time of solar panel end of life disposal, retired panels that will not be
31 recycled and that are marked for disposal shall be sent to an engineered landfill
32 with various barriers and methods designed to prevent leaching of materials
33 into soils and groundwater.
34

1 Condition 36

2 The Applicant is proposing to delete Condition 36, because the substance of the Condition
3 was already included in Condition 15 and Condition 36 appears to be a mistake in the
4 Staff's list of conditions.

5 **Q24. Have you reviewed the eight criteria the Board considers when determining whether**
6 **to issue a certificate for a major utility facility pursuant to R.C. 4906.10?**

7 **A24.** Yes, I have reviewed the statute and the criteria.

8 **Q25. Do you believe the Project as presented in the Application and responses to Staff's**
9 **data requests satisfies the criteria for a certificate of environmental compatibility and**
10 **public need?**

11 **A25.** Yes. I believe that the Project, as demonstrated by the Application, the responses
12 to Staff's data requests, and the Applicant's testimony in this matter, meets all relevant
13 criteria. More detail about why I believe each criterion is met is below:

14 R.C. 4906.10(A)(1)

15 This criterion does not apply to this Project because the Project is not an electric
16 transmission line or gas pipeline.

17 R.C. 4906.10(A)(2) (nature of probable environmental impact) and (A)(3) (minimum
18 adverse environmental impact)

19 As explained in my testimony, the Applicant has sited this Project in a rural area to
20 minimize environmental impacts. In addition, the application of Staff's recommended
21 conditions with the revisions I propose will further minimize impacts. Some of the ways
22 that Project impacts will be minimized are using wildlife permeable fencing, creating
23 pollinator-friendly habitats after construction, horizontal drilling under perennial streams,

1 coordinating with local stakeholders to avoid drainage impacts resulting from damage to
2 drainage tiles and ensuring that necessary drainage systems are not adversely impacted by
3 the Project. The Project will implement mitigation strategies to prevent impacts from
4 project lighting; will site the Facility fence line at least 30 feet from the public roads edge
5 line as would be required by Staff's recommended Condition 37, provide different levels
6 of screening as shown in the Landscape Plan, provide a performance bond prior to
7 construction for the full cost of decommissioning without taking into account salvage value
8 to ensure decommissioning at the end of the Project life, and implement a vegetation
9 management plan that includes noxious weed control for the Project. Importantly, the vast
10 majority of the Project will be located in existing agricultural fields and minimum tree
11 clearing will be required. More detail about all of these efforts and Project siting are
12 described throughout the Application, in the responses to Staff's data requests, and further
13 detailed by the Applicant's supporting witnesses. As a result, the OPSB should find, as its
14 Staff recommended, that the Applicant meets these two criteria.

15 R.C. 4906.10(A)(4) (regional plans for expansion of the electric grid)

16 In order to interconnect new generation facilities to the electric transmission grid,
17 a project owner has to receive approval from PJM, the regional transmission organization
18 that coordinates the movement of wholesale electricity in all of Ohio and all or parts of
19 surrounding states. This process includes completion of three studies, completed in a series
20 (the Feasibility Study, the System Impact Study, and the Facilities Study). The PJM
21 process concludes with the execution of an Interconnection Service Agreement ("ISA")
22 and Interconnection Construction Service Agreement ("ICSA") with PJM and the
23 transmission line owner (in this case American Transmission Systems Inc. ("ATSI") which

1 is a subsidiary of FirstEnergy Corp.). The Feasibility Study and System Impact Study were
2 submitted with the Application. The PJM reports determined that the existing
3 infrastructure has sufficient capacity to accept the electricity from the Project at a
4 reasonable cost and with no adverse impacts to the local transmission system. The
5 Applicant has also executed the ISA and ICSA with PJM and ATSI, which represents a
6 significant milestone and investment in the Project by the Applicant. Accordingly, the
7 Project is consistent with regional plans for expansion of the regional power system and
8 will serve the interests of electric system economy and reliability, pursuant to R.C.
9 4906.10(A)(4).

10 R.C. 4906.10(A)(5) (compliance with air, water, solid waste, and aviation laws)

11 The Applicant will comply with all air, water, solid waste, and aviation laws. The
12 Project is emission free which means that air pollution controls are not necessary. As to
13 water, the Applicant will follow Ohio EPA's guidance on post-construction stormwater
14 controls and will obtain coverage under the Ohio EPA Construction General Stormwater
15 Permit. Moreover, the Applicant will avoid impacts to wetlands and perennial streams
16 during construction and operation of the Project. The Project was sited to avoid the
17 wetlands, and the Applicant will use HDD or similar methods to avoid impacts to all
18 perennial streams and to intermittent and ephemeral streams when water is present. As a
19 result, the only potential impacts to streams would be temporary impacts to intermittent
20 and ephemeral streams during construction, and only if no water is present. For such
21 temporary impacts, the Applicant would receive coverage under the United States Army
22 Corps of Engineers Nationwide Permit program, as necessary. The Project is expected to
23 generate minimal solid waste, and as noted in the Application, any solid waste generated

1 from construction or operation of the Project will be reused, recycled or disposed of in
2 accordance with applicable requirements. Additionally, Staff's recommended Condition
3 35 requires the Applicant to dispose of the solar panels in an appropriate landfill. As
4 mentioned above, the Applicant agrees to such a requirement, unless the panels can be
5 recycled. There are no issues with aviation given the nature of the facility (a solar facility).
6 All parts of the Project will be lower than 200 feet in height and no component will exceed
7 the slope ratio of a proximate airport. The Federal Aviation Authority issued a
8 Determination of No Hazard to Air Aviation to the Project on February 18, 2021.

9 Overall, the Applicant meets this criterion because it will be able to adhere to
10 applicable air, water, solid waste, and aviation laws.

11 R.C. 4906.10(A)(6) (public interest convenience and necessity)

12 The Project will serve the public interest and is necessary for a number of reasons.
13 First, the Project will create temporary and permanent jobs, which will have a positive
14 impact on the state and local economy. Second, the Project will provide direct payments
15 to the local community, either through full assessment of personal property and real
16 property taxes or through a PILOT agreement. It is my understanding that the personal
17 property tax that would be applicable to the Project absent the PILOT would create new
18 tax revenue just as the PILOT will create new tax revenue. And as mentioned above, the
19 annual projected PILOT payment would be \$1.5 million. These payments would go to
20 support the local school districts, Greene County, and each of the three townships, with no
21 added demand on the schools and negligible demand on county and township services.
22 Third, due to the accelerating pace of coal retirements and consumer demand for renewable
23 energy, replacement energy resources, such as solar projects, are critical. One role of solar

1 projects is to provide peak energy in the late afternoon, when energy usage is often highest,
2 which is important to maintain grid reliability. Beyond the impacts for grid reliability,
3 however, demand for renewable energy continues to increase. Meeting that demand is vital
4 to attract and retain significant economic investment in Ohio, as many projects—such as
5 Intel’s recently announced semiconductor manufacturing facility that I mentioned earlier
6 in my testimony—are publicly demanding that the projects are 100% powered by
7 renewable energy. That need has been recognized by the Ohio Chamber of Commerce’s
8 February 7, 2022 letter to the Board and I agree with the Chamber’s position in the letter
9 that failing to provide renewable energy will hinder similar economic development
10 opportunities in Ohio. I received a copy of that letter directly from the Ohio Chamber of
11 Commerce, and that copy is attached to my testimony as Attachment C. Fourth, the Project
12 will be constructed and operated in a safe manner and in accordance with all applicable
13 codes. Finally, the Applicant has committed to communicate with local stakeholders and
14 has already worked with—and will continue to work with—the local community to address
15 issues and concerns. While there is opposition to the Project, the public comments on the
16 case docket show that there is also strong support for the Project. Reviewing the public
17 comments on the docket and not counting multiple comments from the same people or
18 from intervenors in this case, the total comments in support for the project number 45 while
19 those expressing concern or opposition total 83. I did not include 76 letters of support from
20 the International Brotherhood of Electrical Workers but if included, that would show 121
21 letters of support versus 83 comments in opposition. I also think it is important for the
22 Board to recognize the support and public hearing testimony from the IBEW as to what
23 this Project means to the IBEW members that live and work in the general vicinity of the

1 Project. We will also continue to interact with local public entities including the Greene
2 County Board of Commissioners even though it passed a resolution in opposition of the
3 Application.

4 R.C. 4906.10(A)(7) (agricultural districts and agricultural land)

5 Of the 1,200 acre Project, approximately 1,027 acres will be located on land
6 currently being used for agriculture. This includes 205 acres of agricultural district land.
7 Despite this, the Project supports future agricultural use of the land in multiple ways. First,
8 very little of the land being used for the Project will be permanently taken out of
9 agricultural use. As explained in the Application, at the end of the Project's useful life, the
10 project components will be removed, and the underlying Project Area will be restored for
11 potential agricultural use. Second, the land supporting the solar arrays will be fallow for
12 the Project duration, which will allow the restoration of nutrients in the soil, which would
13 not occur during active agricultural usage. Third, the Applicant has committed to using
14 pollinator-friendly plantings, which have been shown to benefit adjacent crops. Fourth,
15 the Applicant has committed to work with local landowners and the county officials to
16 protect drain tiles such that there are no off-site impacts. Last, as many of the participating
17 landowners testified during the public hearing, the participation in the Project provides an
18 income stream to the farmers that diversifies their income stream and keeps the farm in
19 their family. Overall, the agricultural land on which the Project is being sited will be
20 returned to agricultural use at the end of the useful life of the Project, the Project is not
21 expected to have negative impacts to surrounding agricultural land, and the Project has
22 been designed to provide benefits to adjacent agricultural area.

23 R.C. 4906.10(A)(8) (water conservation practice)

1 As noted in the Application, construction and operation of the Project is only
2 expected to utilize a minimal amount of water for occasional cleaning of panels if necessary
3 and watering of vegetative screening as it becomes established. Based on the minimal
4 water usage related to the Project, the Project incorporates maximum feasible water
5 conservation practices.

6 **Q26. Do you agree with the Staff’s recommendation in the Staff Report and**
7 **Recommendation that a certificate should not be issued?**

8 **A26.** No, I strongly disagree with Staff’s recommendation for a number of reasons. First,
9 the Staff Report of Investigation on whether the public interest criteria would be satisfied
10 contained a number of irregularities that to me show that Staff did not base its
11 recommendation on the Application. Staff mischaracterized the public comments in the
12 report by overstating the opposition, mischaracterized township resolutions as being in
13 opposition to the Project and failed to consider that many of the interveners in the
14 proceeding filed public comments, some even filed multiple comments. Staff also failed
15 to account for the number of support letters, such as the 76 separate letters in support, which
16 were filed as a single document. Similarly, Staff characterized the local opposition as being
17 “... prominent, one-sided, and compelling” and that it considered the opposition expressed
18 at the “local public hearings.” But the public hearing for the Project had not occurred when
19 the Report was issued and the language in that section of the Staff Report appears to have
20 been cut and pasted from the Republic Wind proceeding’s Opinion and Order from June
21 24, 2021. This coupled with the timing of the Greene County Resolution being passed on
22 October 28, 2021 and being put on the docket the same day (October 29, 2021) that the
23 Staff Report issued raises significant concerns about the basis and reasoning for Staff’s

1 recommendation that the Project does not meet the public interest criteria of R.C.
2 4906.10(A).

3 Second, as a developer of an electric generation project in Ohio, Staff's application
4 of the public interest standard in this proceeding should not be based on whether a township
5 or county agrees with the project. That is not in the statute, and could result in future
6 transmission projects, pipeline projects and electric generation plants being blocked solely
7 because a local public entity does not want the project. While the interests of the township
8 and county are certainly relevant and those interests can properly be expressed by
9 participating in a proceeding, the public interest, convenience, and necessity criteria should
10 not be based on whether local governmental bodies oppose a project. While Senate Bill 52
11 will allow county board of commissioners to have a say on where future solar and wind
12 projects are sited, my understanding is that this Project is grandfathered from Senate Bill
13 52's requirements.

14 Thus, I do not agree with Staff's recommendation. For the many reasons stated
15 above, this Project will serve the public interest, convenience, and necessity. Ohio is seeing
16 significant demand for clean, renewable energy because companies doing business or
17 relocating to Ohio seek renewable energy. Satisfying that demand, creating significant new
18 tax revenue, generating electricity without emissions, preserving farmland for future
19 generations, providing income to participating landowners, creating construction and
20 operation jobs coupled with siting the Project primarily in agricultural fields with landscape
21 screening, wild-life permeable fencing (not chain-link) and minimal environmental impacts
22 are all in the public interest, convenience and necessity.

1 **Q27. Does this conclude your direct testimony?**

2 **A27.** Yes, it does. However, I reserve the right to offer testimony in support of any
3 stipulation reached in this case or, if necessary, in rebuttal.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served upon the following via email on
this 23rd day of February, 2022.

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Summary: Testimony Direct Testimony of Dylan Stickney electronically filed by Mr.
Michael J. Settineri on behalf of Kingwood Solar I LLC