

**BEFORE THE OHIO POWER SITING BOARD**

<b>In the Matter of the Application of</b>	)	
<b>Ross County Solar, LLC for a Certificate</b>	)	<b>Case No. 20-1380-EL-BGN</b>
<b>of Environmental Compatibility and</b>	)	
<b>Public Need.</b>	)	

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**DIRECT TESTIMONY OF WILLIAM RISSE**

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**Q.1. Please state your name, title, and business address.**

**A.1.** My name is William Risse. I am a Permitting Specialist for National Grid Renewables, 8400 Normandale Lake Blvd., Suite 1200, Bloomington, Minnesota 55437. Ross County Solar, LLC (“Applicant”) is a subsidiary of National Grid Renewables. National Grid Renewables was previously known as Geronimo Energy, a National Grid Company, but recently underwent a rebranding effort to the current name. I am the Permitting Project Manager for the Ross County Solar Project (“Project”).

**Q.2. What are your duties as a Permitting Specialist?**

**A.2.** I am responsible for the development of a number of solar energy projects under development by National Grid Renewables. I am currently the permit lead for projects throughout the Midwest, including, but not limited to, Ohio, Minnesota, Nebraska, and Missouri. I am actively managing all aspects of the permitting process for utility-scale solar projects of up to 460 megawatts (“MW”) in size. My responsibilities as a Permitting Specialist include, but are not limited to, the following: scoping projects early in the development process to identify all plans and permits necessary for regulatory approval; assembling and managing consulting teams to prepare all necessary studies, reports, and applications to ensure compliance at the local, state, and federal level; coordinating with the National Grid Renewables internal team to ensure we are presenting full and accurate

1 information to regulators; and ensuring compliance with permit conditions and regulatory  
2 requirements leading up to and during construction of our facilities.

3 **Q.3. What is your education and professional background?**

4 **A.3.** I graduated from the University of Wisconsin - Stevens Point with a bachelor's  
5 degree in Natural Resource Management – Land Use Planning in 2012, and subsequently  
6 completed my master's degree in Environmental Planning at the University of Minnesota  
7 in 2014. I have worked at National Grid Renewables for approximately one and a half  
8 years. Before my time at National Grid Renewables, I worked as an environmental  
9 consultant for Merjent, Inc., a Minneapolis-based environmental consulting firm, for  
10 approximately five years. As a consultant, I served as a Project Manager or Deputy Project  
11 Manager for environmental permitting efforts related to natural gas infrastructure projects  
12 and mining throughout the United States. I contributed to local, state, and federal  
13 permitting efforts for various industrial clients. My experience included the preparation of  
14 state and federal environmental review documents, as well as local and state permit  
15 approvals. Prior to my time as a consultant, during my graduate school studies, I served as  
16 a Geospatial Support Assistant at the Polar Geospatial Center for approximately 2.5 years.  
17 In this role, I worked directly with world-renowned researchers to provide them with the  
18 geospatial support necessary to complete ongoing scientific research efforts in the Arctic  
19 and Antarctic. Further, I worked with multi-disciplinary teams to create connections and  
20 enhance knowledge of geospatial and environmental processes across various academic  
21 departments.

22 **Q.4. On whose behalf are you offering testimony?**

23 **A.4.** I am testifying on behalf of the Applicant.

1 **Q.5. What is the purpose of your testimony?**

2 **A.5.** There are four purposes to my testimony. First, I would like to provide background  
3 information concerning the Application and Exhibits filed on October 30, 2020 (Company  
4 Exhibits 1 and 1C). Second, I will summarize the major items in the Application and  
5 sponsor their admission into evidence along with the Exhibits, certificates of service,  
6 proofs of publication, and other letters required by Ohio Power Siting Board (“OPSB”) rules.  
7 Third, I will address concerns raised by the public via comments on the case docket  
8 for this proceeding. Finally, I will be responding to the recommendations made by the  
9 Staff in the Staff Report.

10 **Q.6. Would you please provide a summary and overview of the proposed Project?**

11 **A.6.** The Applicant is proposing to build an up to 120 MW solar-powered generating  
12 facility in Buckskin and Paint Townships in Ross County, Ohio (“Project Area”). The  
13 Project will consist of the fenceline, photovoltaic (“PV”) panel arrays, belowground or  
14 hybrid (with both belowground and aboveground) electrical collection lines, inverters,  
15 access roads, a substation (which includes transformers), an operations and maintenance  
16 (“O&M”) building, weather stations, and laydown yards. The energy generated by the  
17 Project will be delivered to a single point of interconnection at the existing Buckskin 69  
18 kilovolt (“kV”) substation, owned by AEP Ohio Transmission, Inc. The point of  
19 interconnection will consist of a short gen-tie line from the Project substation to the  
20 Buckskin substation, which will be expanded with two new 69 kV breakers (collectively,  
21 the “POI”). The POI, including the gen-tie, is included in the Application.

22 **Q.7. What is the general purpose of the Project?**

1       **A.7.** The general purpose of the Project is to produce and deliver clean, renewable  
2       electricity to the Ohio bulk power transmission system to serve the needs of electric utilities  
3       and their customers. The electricity generated by the Project will be delivered to the  
4       transmission grid operated by PJM Interconnection, LLC (“PJM”) for sale into the  
5       wholesale electric market.

6       **Q.8. Would you describe the Project Area, proposed Project, and the power generation**  
7       **potential of the solar farm?**

8       **A.8.** The Project is located on approximately 1,433 acres of privately owned land in the  
9       Project Area, most of which has been leased by the Applicant, as described further in the  
10      Application. The predominant land use in the Project Area is agriculture. Consequently,  
11      the Project will primarily be located on previously disturbed land that has been mostly  
12      cleared for agriculture and is generally level. These land features easily accommodate the  
13      installation of PV panels.

14      The Project Area is rural, which is compatible with the proposed Project. The Project Area  
15      has adequate open space available to avoid impacts to sensitive ecological resources. It  
16      also contains minimal known cultural resources. The Project’s design and engineering is  
17      not yet finalized, but it is expected to occupy approximately 926 acres of the 1,433 acres  
18      comprising the Project Area.

19      The Project will generate electricity from approximately 365,000 monocrystalline-bifacial  
20      PV panels. The panels will be secured on a single axis tracker racking system, with up to  
21      two modules stacked end-to-end, centered on the horizontal crossbar of the tracker, for a  
22      total width of approximately 13 feet, and installed in linear arrays. The panels will rotate  
23      up to 60 degrees in either direction from horizontal, centered along the horizontal crossbar

1 of the tracker. The height of the crossbar will be approximately 5.5 feet, giving the panels  
2 a ground clearance of approximately 3 feet at their highest position. Under flat conditions  
3 found across most of the Project Area, panels will reach approximately 15 feet off the  
4 ground when tilted to their highest position.

5 Single axis tracker designs vary by manufacturer, but generally consist of a series of  
6 mechanically linked horizontal steel support beams known as torque tubes, with a drive  
7 train system usually located in the center of the rows, dividing the array into two sides.  
8 Rows are aligned north to south and the PV panels pivot, tracking the sun's motion from  
9 east to west throughout the day.

10 While specific vendors for the PV panels and racking systems have not yet been selected,  
11 the manufacturer's specifications for representative equipment have been submitted as part  
12 of the Application. At a capacity of 120 MW, the Project is expected to operate with an  
13 average annual capacity factor between 22% and 24%, generating between 230,000 and  
14 252,000 megawatt-hours of electricity each year, depending on the final equipment models  
15 selected.

16 **Q.9. Were you involved in the preparation of the Application and Exhibits, and responses**  
17 **to OPSB Staff Data Requests?**

18 **A.9.** Yes, I was directly involved. The Application and Exhibits (Company Exhibits 1  
19 and 1C), as well as all of the Responses to the OPSB Staff Data Requests (Company Exhibit  
20 2), were prepared under my direction.

21 **Q.10. Were copies of the accepted Application served on local public officials and libraries**  
22 **in accordance with Ohio Adm.Code 4906-3-07(A)?**

1           **A.10.** Yes, I directed that such service take place and am sponsoring Company Exhibit 3,  
2           which is the proof of service of the Application.

3           **Q.11. Did the Applicant send letters to property owners and tenants within the Project Area**  
4           **or contiguous to the Project Area as required under the OPSB's application process?**

5           **A.11.** Yes, pursuant to Ohio Adm.Code 4906-3-03(B), I directed that a letter be sent to  
6           certain property owners on September 8, 2020 announcing the public informational  
7           meeting on September 30, 2020. Subsequent letters were mailed on February 2, 2021,  
8           pursuant to Ohio Adm.Code 4906-3-09(A)(1), and on March 24, 2021, pursuant to Ohio  
9           Adm.Code 4906-03-09(A)(2). See Company Exhibit 4, which I am sponsoring.

10          **Q.12. Did the Applicant cause notice of the public informational meeting, the Application,**  
11          **and the hearing dates to be published in local newspapers?**

12          **A.12.** Yes, notices were published in the Chillicothe Gazette, a newspaper of general  
13          circulation in Ross County, Ohio, and in the Hillsboro Times Gazette, a newspaper of  
14          general circulation in Highland County, Ohio, both for the public informational meeting  
15          and the public and evidentiary hearings. See Company Exhibit 4 consisting of the various  
16          proofs of notice and publication completed by the Applicant and filed with the OPSB.

17          **Q.13. Would you please list the consultants that the Applicant retained to assist in the**  
18          **preparation of and/or support of the Application and Exhibits, and their respective**  
19          **areas of responsibility?**

20          **A.13.** Yes. The Applicant worked with Environmental Design & Research, Landscape  
21          Architecture, Engineering & Environmental Services, D.P.C. ("EDR"), acting as lead  
22          consultant on the Application, to coordinate the studies used to generate the Application  
23          and associated Exhibits. The Applicant has also engaged consultants to support the

Application through testimony. The consultants and their respective subject areas of expertise that assisted in the preparation of the Application and testimony are:

- EDR – Visual Resources Assessment and Socioeconomic Report;
- Resource Systems Group, Inc. (“RSG”) – Noise Assessment;
- Hull & Associates, LLC (“Hull”) – Transportation and Traffic;
- Terracon Consultants, Inc. (“Terracon”) – Geotechnical Analysis
- Cardno, Inc. (“Cardno”) – Ecological Assessment, Cultural Resources and Panel Safety
- Westwood Professional Services, Inc. (“Westwood”) – Hydrology, Preliminary Engineering, and Decommissioning
- Applied Ecological Services, Inc. – Vegetation Management
- Harris Miller & Hanson Inc. (“HMMH”) – Glare Analysis
- CohnReznick LLP – Property Values

**Q.14. Do you believe that the proposed Project will have a positive impact on the local community?**

**A.14.** Yes. Based on modeling completed for the Project, the Project is predicted to create 199 on-site construction and project development jobs, with a projected wage rate of \$23 per hour and 45.6% employer payroll overhead. The present worth of construction payroll during the first year of construction is estimated to total \$9.5 million. It is also anticipated that the operation of the Project could generate 5 full-time jobs with a projected wage rate of \$24 per hour and 45.6% employer payroll overhead. The present worth of operation payroll during the first year of operation is estimated to total \$249,600. Along with the creation of these jobs, the community will benefit from tax payments from the Project.

1 Assuming that the Applicant will utilize the payment-in-lieu of tax (“PILOT”)  
2 arrangement, payments will be made to Ross County. These funds would be apportioned  
3 to the Greenfield Exempted Village School District, and Buckskin and Paint Townships,  
4 as well as other local tax recipients. Based on the maximum PILOT payment of  
5 \$9,000/MW and the Project capacity of 120 MW, the amount will total approximately  
6 \$1,080,000 annually over the lifespan of the Project. The Project is expected to achieve  
7 commercial operations as early as the fourth quarter of 2022 and have a lifespan of  
8 approximately 30 years. Finally, the proposed Project will have a beneficial impact on the  
9 local economy. The Project is expected to have a positive impact on economic output, a  
10 measurement of the value of goods and services produced and sold by backward linked  
11 industries. Economic output provides a general measurement of the amount of profit  
12 earned by manufacturers, retailers, and service providers connected to a given project. The  
13 value of economic output associated with the construction of the Project is estimated to be  
14 \$28 million.

15 **Q.15. Has the Project been designed to achieve minimum impacts?**

16 **A.15.** Yes. The Applicant has been working with landowners, elected representatives,  
17 and community members to discuss the development of the Project. Those discussions  
18 have been constructive. We have designed the Project to minimize the potential impacts  
19 of construction and operation to the extent practicable.

20 Temporary construction activities are expected to have typical and relatively limited  
21 impacts given their intermittent nature, time of day restrictions, and use of best  
22 management practices. Increased traffic during construction will be managed and will  
23 cease when the Project is operational. The Applicant will obtain all required permits and



1 authorizations including, for example, Nationwide Permits from the U.S. Army Corps of  
2 Engineers, if required. Following construction, roads will be restored to conditions as good  
3 as or better than those existing prior to construction.

4 As identified earlier, the Applicant also engaged consultants to study the potential  
5 environmental, ecological, cultural, and visual impacts of the Project. Those studies are  
6 attached to the Application as exhibits. Additionally, as Ryan Rupprecht of Cardno,  
7 Matthew Robinson of EDR, Matt Marquis and Mark Bonifas of Hull, August Christensen  
8 of Westwood, Eddie Duncan of RSG, Andrew Lines of CohnReznick LLP, and Brent  
9 Finley of Cardno explain in their separate testimony, impacts from the Project are expected  
10 to be minimal.

11 The Project has been sited to minimize adverse impacts. Clearing of woody vegetation has  
12 been minimized by careful layout and design. Although studies found that habitat for state  
13 or federally listed species within the Project Area is minimal, the Applicant will take  
14 measures to avoid impacts to potentially suitable habitat for rare bat species by limiting  
15 tree clearing to October 1st through March 31st. The Applicant will also ensure that  
16 suitable habitat for the upland sandpiper and northern harrier will be avoided during those  
17 species nesting periods.

18 Minimal sound is expected to emanate from the Project due to the near-silent operating  
19 nature of solar arrays and by locating inverters sufficiently far from neighboring residences.  
20 Visual impacts of the Project will be mitigated by the flat nature of the terrain, low profile  
21 of the PV panels, preservation of natural vegetative buffers, and the planting of vegetative  
22 screening in select locations.

Other operational impacts will be minimal. The Project will generate no wastewater, no air emissions, and minimal solid waste. The Project will generate no odor and little light. Operational activities include routine maintenance and inspection of electrical equipment, as well as controlling vegetative growth through predominantly mechanical means. Lastly, the Applicant will implement a complaint resolution procedure to appropriately investigate and address any complaints regarding construction and operation of the Project.

**Q.16. How did the Applicant decide to locate the Project in Ross County?**

**A.16.** The Applicant chose to pursue the Project in southwestern Ohio for a variety of reasons, including the availability of manageable access to the bulk power transmission system, strong solar resources, sufficiently low population density, positive feedback from landowners and local officials, highly compatible land use, and few environmentally sensitive areas. First, adequate access to the existing bulk power transmission system by AEP Ohio Transmission Company, Inc., within the PJM regional transmission organization footprint, was an important siting criterion. The Applicant evaluated the capacity of the nearby transmission lines and costs of upgrades to accommodate a new point of interconnection and determined that a 120 MW project was viable in the Project Area.

Second, general topography and land use characteristics of the Project Area were also considered. Land use in the area is primarily agricultural and characterized by open spaces suitable for hosting a utility-scale solar power project. Ideal solar development areas are generally flat with limited variations in topography. The Project Area is also close to major transportation routes and supply chains.

1 Third, willing local participants are essential to the success of any solar project. After a  
2 suitable geographic area was established, the Applicant pursued willing landowners in the  
3 area supportive of the Project. As part of their outreach efforts, the Applicant regularly  
4 engaged local residents, community organizations, and governmental entities during the  
5 planning and development of the Project. As a farmer-friendly and community-focused  
6 company, National Grid Renewables develops projects that provide positive economic  
7 impact for landowners and community members. National Grid Renewables is committed  
8 to building renewable energy projects that provide the opportunities needed to repower  
9 rural American communities and economies. The Applicant is committed to providing  
10 each of our Project's landowners and community members with the best information  
11 possible, prompt responsiveness, and expert advice. National Grid Renewables' farmer-  
12 friendly and community-driven approach ensures that each of our projects is developed to  
13 benefit the host community and invigorate the local economy.

14 **Q.17. Will the Project adversely impact cultural historic resources?**

15 **A.17.** No. On behalf of the Applicant, Cardno conducted a cultural resources literature  
16 review for the two-mile study area around the Project Area, referencing Cardno's in-house  
17 resources, resources available on file at the Ohio State Historic Preservation Office  
18 ("OSHPO") in Columbus, Ohio, and public databases. Additionally, as further described  
19 in Exhibit T, Cardno conducted a Phase I History Architecture Reconnaissance Survey,  
20 within an approximately 0.5-mile to 2.5-mile study area, deemed the area of potential  
21 effect, on July 9, 2020, July 10, 2020, and August 17, 2020. Cardno did not identify any  
22 national historic landmarks within the two-mile study area. Cardno documented 83  
23 architectural resources within the area of potential effect. These properties are primarily

1 buildings and building complexes (e.g., farmsteads), but also includes other sites and  
2 structures such as remains of historic bridges and a cemetery. Based on an assessment of  
3 the project viewshed included in the Phase I History Architecture Reconnaissance Survey,  
4 included as Exhibit T to the Application, four of the seven resources potentially eligible  
5 for listing in the National Register of Historic Places may have at least a partial view of the  
6 Project. The Applicant submitted the Phase I History Architecture Reconnaissance Survey  
7 to the OSHPO to assess impacts to these resources.

8 Cardno also completed a Phase I Archaeological Reconnaissance for the Project Area in  
9 June and July of 2020, and submitted the Phase I Archaeological Reconnaissance to the  
10 OSHPO. Due to the sensitive nature of archaeological resources, this study was filed under  
11 seal as Exhibit U. The study identified seven resources within the Project Area that should  
12 be avoided, or otherwise would require additional archaeological work.

13 Following completion of reports discussed above, Ross County Solar executed a  
14 Memorandum of Understanding (“MOU”) between Ross County Solar and the Ohio State  
15 Historic Preservation Office for the Project. The MOU identifies avoidance and mitigation  
16 measures that the parties agreed would adequately mitigate for potential impacts to  
17 archaeological and architectural resources. These mitigation measures include avoidance  
18 of certain resources and also utilizing vegetative screening and exclusionary fencing to  
19 minimize impacts to other resources. The MOU has been marked as Company Exhibit 5,  
20 which I am sponsoring.

21 **Q.18. How will the Project protect existing drain tile in the Project Area?**

22 **A.18.** As further explained by Mr. Christensen, and as identified in Exhibit E (Drain Tile  
23 Mitigation Plan) of the Application, the Applicant has consulted with the owners of

1 agricultural land participating in the Project, as well as other readily available public  
2 resources to ascertain, to the extent practicable, the type, size, and location of all  
3 functioning drain tile in the Project Area. The Applicant used this information to map the  
4 expected locations of drain tile and physically mark the surface accordingly. This  
5 information will continue to be updated if additional locations are identified via ongoing  
6 discussions with landowners leading up to construction. To the extent the location of  
7 functioning drain tile mains are known, during construction the Applicant either will avoid  
8 them or repair any that are damaged. The Applicant will use commercially reasonable  
9 efforts during construction to promptly repair any such drain tile that is damaged. Also,  
10 during operation of the Project, if the Applicant becomes aware of circumstances indicating  
11 that the Project has damaged functioning drain tile, then the Applicant will promptly  
12 investigate the matter and, subject to any required permitting, use commercially reasonable  
13 efforts to promptly repair any such damage. Lateral drain tile lines that are damaged and  
14 contained within the Project Area may not be repaired, depending on the need to replace  
15 the lateral drain tile lines and subject to individual landowner agreements previously  
16 negotiated during the leasing process. With the above steps, and in consultation with our  
17 consultants and engineering teams, I do not anticipate any material changes to existing  
18 drainage flows to other properties surrounding the Project.

19 **Q.19. How will the Applicant address viewshed concerns?**

20 **A.19.** It is important to recognize that the Project will have a relatively modest visual  
21 impact on the area. The Project Area, which is primarily agricultural, is quite flat, and the  
22 Project will follow existing grades as practicable. Under flat conditions found across most  
23 of the Project Area, panels will reach approximately 15 feet off the ground when tilted to

1 their highest position. The rotation of the panels on the tracking rack system, as they follow  
2 the path of the sun, will be too slow for observers to perceive. Thus, the Project will have  
3 a relatively low visual profile.

4 The Applicant has submitted a Visual Resource Assessment, attached as Exhibit V to the  
5 Application, which includes a Landscape Mitigation Plan (Appendix C). As explained  
6 further by Mr. Robinson, the Applicant will follow the Landscape Mitigation Plan to  
7 mitigate viewshed impacts by utilizing screening to lessen the visual impact of the Project.  
8 The four module types outlined in the Landscape Mitigation Plan will utilize native  
9 vegetation, along with pollinator-friendly plant species, to blend the Project facilities into  
10 the existing landscape, and this selection of material aids in the creation of ecological  
11 habitat. Visual screening introduces natural, vertical elements that break up the horizontal  
12 lines created by the PV panel arrays and fence line. This helps the Project facilities blend  
13 into the background vegetation rather than stand out as a foreground element. The  
14 Applicant will also accommodate changes to the Landscape Mitigation Plan as a result of  
15 communication with adjoining landowners. Any Modifications to the Landscape  
16 Mitigation Plan as a result of final engineering or communication with non-participating  
17 landowners will be provided to Staff prior to implementation. Currently, Condition 14, as  
18 proposed in the Staff Report, does not allow for flexibility to accommodate landowner  
19 concerns or changes in final engineering to minimize impacts to the Project Area.  
20 Consequently, the Applicant requests the condition be modified as further described below.

21 **Q.20. Does the Applicant intend to develop a vegetation management plan for the Project?**

22 **A.20.** Yes. The Applicant has submitted a vegetation management plan as Exhibit D to  
23 the Application. As Exhibit D explains more fully, protection of vegetation will be

1 primarily accomplished through careful planning. Most Project components have been  
2 sited on agricultural land, thus avoiding significant impacts to existing vegetation and  
3 wetland areas. The Applicant will undertake measures to protect vegetation through the  
4 identification of sensitive areas, such as high quality wetlands, where no ground  
5 disturbance will be allowed. Areas of disturbance will be limited to the smallest size  
6 practicable, and mature trees will be preserved to the maximum extent practicable. Best  
7 management practices will be employed across the site during construction.

8 Following construction activities, temporarily disturbed areas will be re-established with  
9 native vegetation. Seed mixes for the Project have incorporated suggestions from the Ohio  
10 Department of Natural Resources and Ohio Pollinator Habitat Initiative, to re-establish  
11 vegetative cover in these areas. Two seed mixes are anticipated to be used, one within the  
12 PV panel array areas (both underneath and between arrays) and the other for hydric areas.

13 **Q.21. Will the Project comply with applicable safety and equipment standards?**

14 **A.21.** Yes. Additionally, I note that the various organizations referenced in the Staff  
15 Report of Investigation at page 31 may not have issued or published safety and equipment  
16 standards applicable to the Project. The Applicant will comply with those safety and  
17 equipment standards that are applicable to commercial-scale solar farms and are standard  
18 in the industry.

19 **Q.22. How will the Applicant ensure the security of the Project?**

20 **A.22.** The Project will be protected by a perimeter woven wire fence at least six feet in  
21 height, topped with a one foot barbed wire strand, security fencing, controlled access gates,  
22 electronic security systems, and potentially remote monitoring. Additionally, “No  
23 Trespassing” and “High Voltage Equipment” signs will be placed around the fence

1 perimeter, warning the public of the potential hazards within the fenced Project Area. Per  
2 the Lighting Plan, which is attached as Exhibit F to the Application, lighting that is switch-  
3 or motion-activated will be implemented at Project entrances, the O&M building, and  
4 inverters for additional safety and security.

5 **Q.23. How is the Applicant planning to decommission the Project at the end of the Project's**  
6 **useful life?**

7 **A.23.** As further explained by Mr. Christensen, the Applicant has included a  
8 Decommissioning Plan as Exhibit N to the Application. The plan provides for the removal  
9 and sale, re-use, recycling, or proper disposal of all components of the Project, including  
10 components containing rare or valuable materials. Decommissioning is expected to take  
11 12 to 18 months.

12 **Q.24. Will there be any financial assurance requirements associated with the**  
13 **decommissioning?**

14 **A.24.** Yes. As Mr. Christensen will explain, the Applicant is committed to providing for  
15 financial security to ensure that adequate funds are available for decommissioning. The  
16 Applicant will post a performance bond with the OPSB as the obligee based on the net cost  
17 of decommissioning (taking into account the salvage value of the panels and other  
18 equipment) prior to commercial operation of the Project. Based on the preliminary layout  
19 and assumptions at that time, the net cost of decommissioning was calculated at the time  
20 to be \$4,694,666. Following commencement of commercial operation, the Applicant will  
21 reevaluate decommissioning costs through an Ohio-licensed engineering firm or  
22 professional engineer every five years thereafter during the life of the Project. If this  
23 evaluation shows that the net decommissioning cost for the Project has increased or



1 decreased, the Applicant will adjust the amount of the performance bond accordingly. My  
2 understanding, based on recent discussions with engineering professionals from multiple  
3 firms, is that decommissioning costs may decrease in the coming months and years as best  
4 practices for decommissioning are further established, and a resale market for solar panels  
5 matures. Decommissioning costs, especially early in the Project's life when accounting  
6 for salvage value, could be a positive number. Given the possible fluctuation in costs and  
7 with possible changes in costs as a result of the final Project layout, the Applicant will  
8 update the net decommissioning cost prior to posting financial security.

9 **Q.25. Will agricultural fields within the Project Area be suitable for farming after the**  
10 **Project is decommissioned?**

11 **A.25.** Yes. The Project will have only modest impacts to the land. The PV panels and  
12 racking will be installed on steel piles that will be pile-driven into the ground to a depth  
13 generally between eight and fifteen feet. Inverters will be installed on gravel pads, which  
14 can be lifted out of place. The Project's substation will be installed on poured concrete and  
15 aggregate material, but will not cover a large area. Access roads will be constructed of  
16 aggregate material, not paved, and participating landowners may choose to retain the roads  
17 for their own use following decommissioning. There will not be any long-term impacts  
18 from the Project that would preclude its use for farming after the useful life of the Project.  
19 In addition, the Decommissioning Plan, which is attached as Exhibit N to the Application,  
20 indicates that the goal is to restore the Project Area to agriculture use, unless other  
21 economical land uses are desired by the relevant landowner, at the end of the Project's  
22 operational life. Restoration will include a return to the same or functionally similar

1           preconstruction drainage patterns, including farm drainage tiles, decompaction of soil, and  
2           seeding, when appropriate.

3   **Q.26. Will construction of the Project result in intrusive amounts of traffic, noise, or dust?**

4           **A.26.** No. The amount of dust generated will be relatively low for the Project's acreage.  
5           Given the relatively flat nature of the surrounding area, relatively little topsoil will be  
6           removed. There will be minimal grading and other earth-moving activities, and virtually  
7           no excavation except for trenching of underground collection lines. As with other  
8           construction activities, dust emissions will be localized to the area of activity and  
9           temporary. Best management practices in the construction industry will be used to  
10          minimize the amount of dust created by construction. Additionally, as detailed in the  
11          testimonies of Mr. Bonifas and Mr. Duncan, traffic and noise resulting from construction  
12          of the Project should be insignificant.

13   **Q.27. Will the Project have an impact on telephone, radio, or other signals or electronic**  
14    **devices?**

15          **A.27.** No. The Applicant is not aware of any research conducted to date that indicates  
16          utility-scale solar generation facilities interfere with communication systems. PV panel  
17          arrays generate weak electromagnetic fields ("EMFs") during the day that dissipate at short  
18          distances. Specifically, PV panel arrays generate EMFs in the same extremely low  
19          frequency range as electrical appliances and wiring found in most homes and buildings.  
20          Accordingly, the Applicant does not anticipate interference with radio or television  
21          reception due to weak EMFs that will be produced by the Project.

22   **Q.28. Is there a potential risk of hazardous or toxic substances being released into the**  
23    **environment because of the construction and operation of the Project?**

1       **A.28.** No. Additional testimony from Brent Finley provides evidence of the minimal risk  
2       of environmental hazards posed by the PV panels associated with the Project. The EPA-  
3       approved method for determining whether a hazardous substance is likely to leach into the  
4       ground and ground water is the Toxicity Characteristic Leaching Procedure (“TCLP”). The  
5       panel manufacturers being considered by the Applicant complete TCLP testing as part of  
6       the product development process and have determined that all existing products passed  
7       TCLP testing. To be clear, the Applicant will utilize panels that have completed TCLP  
8       testing or an equivalent test (if the TCLP is replaced in the future).

9       **Q.29. Will the Project decrease adjacent property values?**

10       **A.29.** No. In my role as a Permitting Specialist, I have reviewed data to understand the  
11       impact, if any, of solar farms on property sales, and have reviewed property value studies  
12       that National Grid Renewables has commissioned for other solar projects in the United  
13       States. Those studies determined that proximity to solar farms once constructed does not  
14       affect the sale price of properties, whether residential or agricultural. Additionally, the  
15       testimony of Mr. Lines addresses the potential impact of the Project on property values in  
16       the area surrounding the Project.

17       **Q.30. Have you reviewed the public comments filed on the case docket for this proceeding?**

18       **A.30.** Yes. The comments identify the following concerns: the suitability of siting the  
19       Project in Ohio; the suitability of siting the Project on agricultural land; viewshed impacts;  
20       diminishing property values; the destruction of habitat for wildlife; and health concerns  
21       related to PV panels.

22       I will address each of these concerns. As I have noted earlier in my testimony, the  
23       Applicant chose Ross County as the Project site because the flat topography of the area is

1 ideal for solar development. The Project Area also has adequate access to the bulk  
2 transmission power system and major transportation routes. Moreover, local landowners  
3 and community members are supportive of the Project. Furthermore, once the Applicant  
4 decommissions the Project pursuant to the Decommissioning Plan, it will return the land  
5 to agricultural use. While sunlit hours decrease in the winter, PV panels are still able to  
6 collect sunlight and produce electricity during daylight hours. PV panels also produce  
7 electricity during cloudy or rainy days, but will not be quite as efficient as they are on clear  
8 sunny days. The Applicant has assessed the Ohio climate and has determined that the  
9 Project can still produce adequate electricity that it will be economically viable at the  
10 proposed location.

11 As I noted earlier, we expect the Project to generate minimal impacts. The Project will  
12 have a relatively low visual profile due to the flat topography and any visual impacts will  
13 be mitigated by screening consisting of native vegetation. As explained by Mr. Duncan,  
14 sound propagation modeling indicates that sound levels at all non-participating residences  
15 during the daytime and nighttime will be less than the Project's design goals for operational  
16 sound. Due to the agricultural nature of the Project Area, as indicated in the Ecological  
17 Assessment included as Exhibit S to the Application, the Project is unlikely to have a  
18 significant impact on wildlife or sensitive species utilizing the Project Area. Moreover,  
19 the Applicant will observe seasonal restrictions on tree clearing to protect endangered bat  
20 species, and implement techniques to avoid upland sandpiper and northern harrier habitat  
21 during their nesting seasons.

22 I have also discussed that, based on my review of various studies, properties adjacent to  
23 solar farms, whether agricultural or residential, do not diminish in value due to their

1 proximity to an operating solar farm. The testimony of Mr. Lines provides additional  
2 support for this conclusion. Additionally, it was brought to Ross County Solar's attention  
3 that Makenzie Wharton and her fiancé, who own a home adjacent to the Project Area, are  
4 actively marketing their home. While we are confident that the facility will not impact area  
5 property values, my team is developing visual renderings that the homeowners can show  
6 potential buyers. Additionally, we have also reached out to the homeowners and stated our  
7 willingness to help educate potential buyers regarding the Project, and have provided  
8 contact information so that they can reach us. We also expressed to the homeowners our  
9 willingness to work with any potential buyers to implement landscape screening that they  
10 will find most visually appealing. In addition to these considerations, we have also  
11 provided other educational materials, talking points, studies, and information to assist the  
12 homeowners in educating potential buyers on the low profile, virtually noiseless nature of  
13 the Project.

14 Last, as I previously discussed, and as further supported by the testimony of Brent Finley,  
15 due to the fact that the PV panels are fully encapsulated, unlikely to shatter, and not  
16 expected to leach hazardous materials into the ground or ground water, the risk to the  
17 environment from the PV panels will be minimal. Further, while PV panel arrays generate  
18 EMFs, these EMFs are relatively weak – being similar to those generated by electrical  
19 appliances and wiring found in most homes.

20 Since and before the public hearing on April 6, 2021, Ross County Solar has made an effort  
21 to reach out to some of the concerned citizens who attended the hearing and voiced their  
22 concerns about the Project. As noted above, we communicated with Ms. Wharton and her  
23 fiancé, who are actively selling their home. We also had a representative reach out to Ms.

1 Christy Barnhart, and in conversation with her, reaffirmed our commitment to landscape  
2 screening adjacent to her property. Our representative also touched on the positive benefits  
3 to soil health and potential benefits from long term native ground cover for area wildlife.  
4 Following the public hearing, we made an effort to reach out to Mr. Ludwig, and indicated  
5 our willingness to speak to him regarding his concerns. A National Grid Renewables  
6 representative was able to reach Mr. Ludwig and speak with him regarding the Project in  
7 more detail on April 13th. They spoke to him regarding property value studies, our process  
8 to select a final module for the site, and the minimal anticipated impacts to area traffic.  
9 Additionally, prior to the initiation of the permitting process and the public hearing, in July  
10 of 2020, a Ross County Solar representative documented dropping a letter at Mr. Ludwig's  
11 door when he was not home. The letter, which was generally distributed to residents in the  
12 area surrounding the Project, included preliminary Project details along with the Project  
13 team's contact information should the public have questions. This outreach occurred  
14 almost two months before Ross County Solar initiated the permitting process and issued  
15 required notifications for the Project under the Board's rules.

16 Prior to the public hearing, Ross County Solar connected on at least two occasions with  
17 Mr. and Mrs. Meyers to provide them resources regarding the minimal impacts of the  
18 Project on the surrounding area. I personally spoke with Ms. Meyers at length to discuss  
19 studies relating to property values, information on panel toxicity, in addition to outlining  
20 the financial benefits and significant tax revenues for area residents.

21 Ross County Solar is committed to the dissemination of information to the community, and  
22 to maintaining a dialogue. We have provided various avenues of communication to assist  
23 local residents in contacting us. While the COVID-19 pandemic has admittedly made

1 outreach more difficult than usual, additional strategies that we have implemented to reach  
2 the public have included a dedicated Project specific phone number, email address, and  
3 website. We have left Project specific materials, including company contact information,  
4 with both the Buckskin Township Trustees and the Paint Township Trustees so that  
5 materials and information can be easily distributed to area residents should they have  
6 questions or concerns. As noted earlier in my testimony, we have also distributed letter  
7 and newspaper notifications in compliance with applicable statutes and rules. We remain  
8 available to speak with members of the public regarding our plans and will continue to  
9 maintain a dialogue with the community as we approach construction should we receive a  
10 Certificate.

11 **Q.31. Will the Applicant be sponsoring witnesses to support the Application in addition to**  
12 **your testimony?**

13 **A.31.** In addition to my testimony, as I indicated earlier, the Applicant will present  
14 testimony by Ryan Rupprecht of Cardno, Matthew Robinson of EDR, Matt Marquis and  
15 Mark Bonifas of Hull, August Christensen of Westwood, and Eddie Duncan of RSG,  
16 relative to certain studies contained in the Application, Andrew Lines of CohnReznick LLP  
17 regarding property values, and Brent Finley of Cardno regarding toxicity and leakage  
18 concerns related to PV panels.

19 **Q.32. Have you reviewed the Staff Report of Investigation issued on March 22, 2021 and**  
20 **does the Applicant have any concerns with or proposed revisions to any of the**  
21 **conditions recommended by Staff in the Staff Report?**

22 **A.32.** Yes, I have reviewed the Staff Report. The Applicant is generally satisfied with  
23 the Recommended Conditions but recommends revisions as presented below in my

1 testimony. I believe the modifications presented to the conditions are reasonable and will  
2 result in the same level of oversight by the OPSB Staff. Additionally, the modifications  
3 will allow the Applicant some flexibility to work with adjoining landowners and minor  
4 changes emanating from final engineering to ensure the Project has minimal impacts on  
5 nearby residences. As a result, the Applicant recommends the following revisions:

6 Conditions 1, 19, and 23

7 The Applicant suggests minor revisions to these conditions for clarity. Specifically the  
8 Applicant recommends that these conditions be modified as follows:

- 9 (1) The Applicant shall install the facility, utilize equipment and construction practices,  
10 and implement mitigation measures as described in the application and as modified  
11 and/or clarified in supplemental filings, replies to data requests, and recommendations  
12 in ~~this~~ the Staff Report of Investigation as modified by the Stipulation.
- 13 (19) The Applicant shall adhere to seasonal cutting dates of October 1 through March 31  
14 for the removal of trees three inches or greater in diameter to avoid impacts to Indiana  
15 bats and northern long-eared bats, unless coordination with the ~~Ohio Department of~~  
16 ~~Natural Resources (ODNR) and/or the U.S. Fish and Wildlife Service (USFWS)~~  
17 allows a different course of action.
- 18 (23) The Applicant shall contact Staff, the ODNR, and/or the USFWS within 24 hours if  
19 state or federal listed species are encountered during construction activities.  
20 Construction activities that could adversely impact the identified plants or animals  
21 shall be immediately halted until an appropriate course of action has been agreed  
22 upon by the Applicant, Staff and the appropriate agencies.

23 Condition 4

24 Condition 4 should be modified so that the Applicant can provide all relevant  
25 documentation and information to Staff at least seven days before the applicable  
26 construction activity as opposed to within seven days of issuance or receipt. Because of  
27 potential delays in transmission, this would seem to be a more orderly process for all  
28 parties. Additionally, Applicant recommends removal of reference to karst because the  
29 Geotechnical Report submitted as Exhibit C to the Application confirms karst is not a



1 concern in the Project Area. Finally, similar language has been recently approved by the  
2 Board in another National Grid Renewables project, the Yellowbud Solar Project, Case  
3 No. 20-972-EL-BGN. Specifically, the Applicant recommends Condition 4 be modified  
4 as follows:

5 Separate preconstruction conferences may be held for the different phases of civil  
6 construction and equipment installation. At least 30 days prior to the  
7 preconstruction conference, the Applicant shall submit to Staff, for review and  
8 acceptance, one set of detailed engineering drawings of the final project design and  
9 mapping in the form of PDF, which the Applicant shall also file on the docket of  
10 this case, and geographically referenced data (such as shapefiles or KMZ files)  
11 based on final engineering drawings to confirm that the final design is in  
12 conformance with the certificate. Mapping shall include the limits of disturbance,  
13 permanent and temporary infrastructure locations, areas of vegetation removal and  
14 vegetative restoration as applicable, and specifically denote any adjustments made  
15 from the siting detailed in the application. ~~All final geotechnical study results shall~~  
16 ~~be included in this submission.~~—The detailed engineering drawings of the final  
17 project design shall account for geological features ~~(included, but not limited to~~  
18 ~~Karst topography and groundwater depth)~~ and include the identity of the registered  
19 professional engineer(s), structural engineer(s), or engineering firm(s), licensed to  
20 practice engineering in the state of Ohio who reviewed and approved the designs.  
21 All final geotechnical study results shall be included in the submission of the final  
22 project design to Staff.  
23

#### 24 Condition 5

25 The Applicant recommends deletion of Staff-proposed Condition 5 as being redundant  
26 because the submission of final geotechnical study results will be submitted to Staff  
27 pursuant to Condition 4.

#### 28 New Condition 5

29 A new condition should be added to provide the Applicant flexibility during the  
30 construction process. Again, the Board approved a similar condition in the Yellowbud  
31 Solar Project case. Specifically, the Applicant proposes the following language:

32 If any changes to the project layout are made after the submission of final  
33 engineering drawings, the Applicant shall provide all such changes to Staff in hard  
34 copy and as geographically-referenced electronic data. All changes are subject to

1                   Staff review to ensure compliance with all conditions of the certificate, prior to  
2                   construction in those areas.

3  
4                   Condition 8

5                   The Applicant proposes minor changes to this condition to match a similar condition  
6                   approved by the OPSB in the Yellowbud Solar Project case:

7                   Prior to the commencement of construction activities in areas that require permits  
8                   or authorizations by federal or state laws and regulations, the Applicant shall obtain  
9                   and comply with such permits or authorizations. The Applicant shall provide  
10                  copies of permits and authorizations, including all supporting documentation, to  
11                  Staff no less than within seven days of issuance or receipt by the Applicant prior  
12                  to the applicable construction activities. The Applicant shall provide a schedule  
13                  of construction activities and acquisition of corresponding permits for each  
14                  activity at the preconstruction conference.

15                  Condition 9

16                 The Applicant proposes removing this condition because regardless of the modifier as to  
17                 R.C. 4906.13, it could easily create confusion at the local level. R.C. 4906.13 does not  
18                 allow local authorities to exercise any discretion with regard to the licensure of a solar  
19                 facility and local authorities cannot require “any approval, consent, permit, certificate, or  
20                 other condition for the construction or operation of a major utility facility \* \* \* authorized  
21                 by a certificate issued pursuant to Chapter 4906 of the Revised Code.” The condition  
22                 though could be viewed by local authorities and residents (who may not be familiar with  
23                 R.C. 4906.13) as implying that the Project is subject to local oversight. To avoid that issue  
24                 and given the lack of clarity with the condition as written, it should be deleted.

25                  Condition 10

26                 The Applicant proposes revisions to the language in this condition to match a similar  
27                 condition approved in the Yellowbud Solar Project case. Notably, the revised language  
28                 still provides for written confirmation of all pre-construction activities.

At least 30 days prior to the start of construction, the Applicant shall file a copy of the final complaint resolution plan on the public docket. At least seven days prior to the start of construction and at least seven days prior to the start of facility operations, the Applicant shall notify via mail affected property owners and tenants including those individuals who were provided notice of the public informational meeting, residences located within one mile of the project area, parties to this case, county commissioners, township trustees, emergency responders, airports, schools, and libraries, as well as anyone who has requested updates regarding the project. These notices shall provide information about the project, including contact information, ~~and a copy of the complaint resolution plan, and a reference to the Board's docketing system for additional information.~~ The start of construction notice shall include ~~written confirmation that the Applicant has complied with all preconstruction-related conditions of the certificate, as well as a timeline for construction and restoration activities.~~ The start of facility operations notice shall include ~~written confirmation that the Applicant has complied with all preconstruction-related conditions of the certificate, as well as a timeline for the start of operations.~~ The Applicant shall file a copy of these notices on the public docket, including written confirmation that the Applicant has complied with all preconstruction-related conditions of the certificate. During the construction and operation of the facility, the Applicant shall submit to Staff a complaint summary report by the fifteenth day of April, July, October, and January of each year for the first five years of operation. The report shall include a list of all complaints received through the Applicant's complaint resolution process, a description of the actions taken toward the resolution of each complaint, and a status update if the complaint has yet to be resolved.

#### Condition 11

The Applicant proposes revisions to this condition to reflect that the emergency plan will require review and input from the primary contractor of the Project. The revisions still allow for the plan to be provided to Staff prior to the preconstruction conference.

Specifically, the Applicant recommends Condition 11 be modified as follows:

~~At least 30 days prior to the preconstruction conference, the Applicant shall provide Staff a copy of , for review and acceptance,~~ the fire protection, safety, and medical emergency plan(s) to be used during construction and operation of the facility.

#### Condition 14

The Applicant proposes revisions to this condition to ensure planting modules proposed in the Landscape Mitigation Plan are implemented while also allowing for changes as a result

of final engineering (to minimize impacts) or as a result of communications with adjoining landowners. Specifically, the Applicant recommends Condition 14 be modified as follows:

The Applicant shall implement the landscape mitigation planting modules listed in Section 5 of the Visual Resource Assessment and Landscape Mitigation Plan and ~~the~~ implement the lighting in the Lighting Plan. Any modifications to the Landscape Mitigation Plan and Lighting Plan as a result of final engineering or communication with non-participating property owners shall be provided to Staff prior to implementation. 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. The Applicant shall maintain all fencing along the perimeter of the project in good repair for the term of the project and shall promptly repair any damage as needed.

#### Condition 15

The Applicant proposes changes to this condition to utilize noise data previously submitted as part of the Application to designate areas where pile driving cannot occur between 7:00 a.m. and 9:00 a.m. Specifically, the Applicant recommends Condition 15 be modified as follows:

General construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m., or until dusk when sunset occurs after 7:00 p.m. Impact pile driving shall be limited to the hours between 9:00 a.m. and 7:00 p.m. or until dusk when sunset occurs after 7:00 p.m. Impact pile driving may occur between 7:00 a.m. and 9:00 a.m. if the noise impact at non-participating receptors is not greater than daytime ambient Leq plus 10 dBA. Prior to pile driving activities, the Applicant will provide a map to Staff indicating areas where pile driving cannot occur between 7:00 a.m. and 9:00 a.m., based on the daytime ambient Leq plus 10 dBA from the sound data previously collected to support Exhibit Q of the Application. ~~If impact pile driving is required between 7:00 a.m. and 9:00 a.m., the Applicant shall install a noise monitor in a representative location to catalog that this threshold is not being exceeded.~~ Hoe ram operations, if required, shall be limited to the hours between 10:00 a.m. and 4:00 p.m., Monday through Friday. Construction activities that do not involve noise increases above ambient levels at sensitive receptors are permitted outside of daylight hours when necessary. The Applicant shall notify property owners or affected tenants within the meaning of Ohio Adm.Code 4906-3-03(B)(2) of upcoming construction activities including potential for nighttime construction.

#### Condition 16

1 The Applicant has revised this condition to account for any changes in sound power output  
2 for the final transformer and inverter, when selected. The revision also identifies the  
3 Project Area average daytime ambient level Leq of 44 dBA for clarity. As further  
4 explained by Mr. Duncan, the Applicant proposes revisions for this condition to allow for  
5 modeling across the entire Project Area prior to construction utilizing sound emission data  
6 from the NEMA TR1 standard if the transformer manufacturer data is not available and  
7 similar inverter model data if inverter manufacturer data is not available. Once the final  
8 inverter is installed, sound level measurements can be made in close proximity to the  
9 installed inverter to determine whether modeling is necessary using the actual sound level  
10 measurements. Modeling across the entire Project Area is a better approach to determine  
11 potential impacts, rather than Staff's approach of conducting specific test at one site. Also,  
12 while Staff suggests that the test be conducted on a sunny day, wind conditions can greatly  
13 impact sound readings. The better approach is to continue to rely on modeling to predict  
14 whether the final equipment selections will result in any operational noise impacts.  
15 Specifically, the Applicant recommends Condition 16 be modified as follows:

16 If the inverters or substation transformer chosen for the project have a higher sound  
17 power output than the models used in the noise model, the Applicant shall submit,  
18 30 days prior to construction, the results from an updated noise model for the  
19 project using the expected sound power output from the models chosen for the  
20 project, to show that sound levels will not exceed the project area average daytime  
21 ambient level of 44 dBA plus five dBA at any nonparticipating sensitive receptor  
22 and will be submitted at least 30 days prior to construction. If noise data is not  
23 available from the inverter or transformer manufacturer, an operational noise test  
24 may be performed to comply with this condition. The test must be performed  
25 during the on a sunny day in the months of May-August, at a distance equal to the  
26 minimum distance from an inverter to a non-participating residence. If the test  
27 shows the operational noise level is greater than project area ambient Leq level plus  
28 five dBA additional noise mitigation will be required. This condition is complied  
29 with if the test shows the operational noise level is less than project area ambient  
30 Leq level plus five dBA. If transformer manufacturer data is not available, the  
31 model will be updated with sound emission data following the NEMA TR1

1           standard. If inverter manufacturer data is not available, a similar inverter model  
2           will be used to update the sound propagation model prior to construction. Once  
3           constructed, sound level measurements will be made in close proximity to the  
4           inverter to determine the sound power level of the installed inverter. If the sound  
5           power level of the installed inverter is 2 dBA or more above the sound power level  
6           used in the updated pre-construction model, then the sound propagation model will  
7           be updated to ensure project-wide compliance with the applicable sound level limit.  
8           If the sound power level is determined to be less than 2 dBA above the sound power  
9           level used in the updated pre-construction model, then the project will be deemed  
10           in-compliance.

#### 11           Condition 17

12           The Applicant has revised this condition to follow language adopted by the Board in the  
13           Yellowbud Solar Project case. Specifically, the Applicant recommends Condition 17 be  
14           modified as follows:

15           The Applicant shall avoid, where possible, or minimize to the extent practicable,  
16           any damage to functioning field tile drainage systems and soils resulting from the  
17           construction, operation, and/or maintenance of the facility in agricultural areas.  
18           Damaged field tile systems shall be promptly repaired to at least original conditions  
19           or modern equivalent at the Applicant's expense. ~~However, if the~~ affected  
20           landowner may agree to not having the damaged field tile system repaired, ~~they~~  
21           ~~may do so~~ only if the field tile systems of adjacent landowners remain ~~are~~ unaffected  
22           by the non-repair of the landowner's field tile system.

#### 23           Condition 18

24           The Applicant has revised this condition to reflect that mitigation measures can often be  
25           implemented in lieu of total avoidance. Specifically, the Applicant recommends  
26           Condition 18 be modified as follows:

27           If prior to construction the Applicant encounters any new listed threatened or  
28           endangered plant or animal species or suitable habitat of these species within the  
29           construction limits of disturbance ~~prior to construction, the Applicant shall include~~  
30           ~~the location in the final engineering drawings and associated mapping, as required~~  
31           ~~in condition 4. The Applicant shall~~ identify avoidance areas or alternatively  
32           explain appropriate mitigation measures for these species to accommodate  
33           construction activities. This information will be included with the final engineering  
34           drawings per condition 4. Coordination with the Ohio Department of Natural  
35           Resources (ODNR) and/or the U.S. Fish and Wildlife Service (USFWS) may also  
36           allow a different course of action. ~~avoid impacts to these species and explain how~~  
37           ~~impacts would be avoided during construction.~~

Conditions 20, 21, and 22

The Applicant proposes revisions to the language in conditions 20 and 21 to account for the ability to coordinate with the ODNR on alternative courses of action. The revisions to condition 22 are intended to clarify the intent of the condition. All of the edits to conditions 20, 21 and 22 were approved in the Yellowbud Solar Project case.

Specifically, the Applicant recommends Conditions 20, 21, and 22 be modified as follows:

(20) Construction in northern harrier preferred nesting habitat types shall be avoided during the species' nesting period of May 15 through August 1 unless coordination by the Applicant with ODNR allows a different course of action during the period. Mapping of these habitat areas shall be provided to the construction contractor along with instructions to avoid these areas during the restricted dates, unless coordination with the ODNR allows a different course of action.

(21) Construction in upland sandpiper preferred nesting habitat types shall be avoided during the species' nesting period of April 15 through July 31 unless coordination by the Applicant with ODNR allows a different course of action during the period. Mapping of these habitat areas shall be provided to the construction contractor along with instructions to avoid these areas during the restricted dates, unless coordination with the ODNR allows a different course of action.

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

1                    Condition 24

2                    The Applicant revised this condition to ensure that coordination occurs with the township  
3                    trustees and the Ross County Engineer. Specifically, the Applicant recommends  
4                    Condition 24 be modified as follows:

5                    Prior to commencement of construction activities that require transportation  
6                    permits, the Applicant shall obtain all such permits. The Applicant shall coordinate  
7                    with the appropriate authority regarding any temporary road closures, road use  
8                    agreements, driveway permits, lane closures, road access restrictions, and traffic  
9                    control necessary for construction and operation of the proposed facility.  
10                   Coordination shall include, but not be limited to, the county engineer, Buckskin  
11                   Township Trustees, Paint Township Trustees, the Ohio Department of  
12                   Transportation, local law enforcement, and health and safety officials. The  
13                   Applicant shall detail this coordination as part of a final transportation management  
14                   plan submitted to Staff prior to the preconstruction conference for review and  
15                   confirmation by Staff that it complies with this condition.

16                   Condition 25

17                   The Applicant revised this condition to clarify that the water well identified in the  
18                   condition may be in a different location than in the publicly available dataset.  
19                   Specifically, the Applicant recommends Condition 25 be modified as follows:

20                   At least 30 days prior to the preconstruction conference, the Applicant shall  
21                   provide the status (i.e. avoidance, mitigation measures, or capping) of each water  
22                   well within the project area. The Applicant shall indicate to Staff whether the  
23                   nearest solar components to each uncapped well within the project area meets or  
24                   exceeds any applicable minimum isolation distances outlined in Ohio Adm.Code  
25                   3701-28-7. ~~For that water well which is approximately 30 feet from solar~~  
26                   ~~equipment (The location of ODNR Water Well ID 211507),~~ will be field verified  
27                   prior to construction and depending on final determined location, and if necessary,  
28                   ~~that the Applicant shall relocate the solar equipment at least 50 feet from the~~  
29                   location of that water well. Alternatively, relocation of the solar equipment shall  
30                   not be required if the Applicant can demonstrate or demonstrate that the well is for  
31                   nonpotable use, or seal and abandon the water well.

32                   **Q.33. Do you believe the Applicant's proposed revisions to the Staff's recommended**  
33                   **conditions are reasonable?**



1       **A.33.** Yes, as I state above, I believe the modifications presented to the conditions are  
2       reasonable and will result in the same level of oversight by the OPSB Staff. Additionally,  
3       the modifications will allow the Applicant flexibility to work with adjoining landowners  
4       and minor changes emanating from final engineering to ensure the Project has minimal  
5       impacts on nearby residences. The conditions as revised in my testimony continue to  
6       ensure that the Project will have minimal impact to the environment and surrounding  
7       community.

8       **Q.34. What do you recommend the Ohio Power Siting Board do with regard to the revisions**  
9       **proposed by the Applicant?**

10       **A.34.** I recommend the Board adopt the revisions proposed by the Applicant. I have  
11       reviewed the statutory criteria which must guide the Board's decision on the Application.  
12       I believe that the information in the Application along with the testimony and exhibits in  
13       this proceeding provide a firm basis for the Board to determine that all of the statutory  
14       criteria has been met and that a Certificate can be issued using the Applicant's revised  
15       conditions in this testimony.

16       **Q.35. Does this conclude your direct testimony?**

17       **A.35.** Yes, it does. However, I reserve the right to offer testimony in support of any  
18       stipulation reached in this case or, if necessary, in rebuttal.

## **CERTIFICATE OF SERVICE**

The Ohio Power Siting Board's e-filing system will electronically serve notice of the filing of this document on the parties referenced in the service list of the docket card who have electronically subscribed to this case. In addition, the undersigned certifies that a courtesy copy of the foregoing document is also being served upon the persons below via electronic mail this 14th day of April 2021.

/s/ Anna Sanyal  
Anna Sanyal

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Summary: Testimony Direct Testimony of William Risse electronically filed by Ms. Anna Sanyal on behalf of Ross County Solar, LLC