

**BEFORE THE OHIO POWER SITING BOARD**

<b>In the Matter of the Application of</b>	)	
<b>Willowbrook Solar I, LLC</b>	)	
<b>for a Certificate of Environmental</b>	)	<b>Case No. 18-1024-EL-BGN</b>
<b>Compatibility and Public Need</b>	)	

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**DIRECT TESTIMONY OF LORI COLEMAN**

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

**A.1.** My name is Lori Coleman. I am a Project Manager (Scientist) for Cardno. My business address is 121 Continental Drive, Suite 308, Newark, Delaware 19713.

**Q.2. What are your duties as a Project Manager (Scientist)?**

**A.2.** I work for Cardno’s Science and Environment division, focusing on permitting and compliance for various energy projects in the Northeast and Midwest. I am responsible for procuring, managing and performing consulting work involving environmental permitting, terrestrial and aquatic ecological resource studies, wetland and stream delineations, and surface water quality assessments. As a Project Manager (Scientist), I manage and participate in environmental permitting projects, overseeing technical experts in biology/ecology, rare, threatened & endangered (“RTE”) species habitat assessments. I served as Cardno’s Project Manager for the Willowbrook Solar Project (“Project”). For Willowbrook Solar, I am responsible for coordinating field efforts for the wetland delineations, and habitat assessments, collaboratively drafting and reviewing the Ecological Assessment (“EA”), and providing overall coordinating between Open Road and EDR for the application filed by Willowbrook. I am responsible for the staffing, budgeting, invoicing, and quality control of environmental work for this project. I also support several projects with regard to Clean Water Act compliance;

specifically, NPDES permit applications and stormwater compliance for industrial clients in the Northeast.

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

**A.3.** I graduated from Millersville University in 2003 with a bachelor's degree in Biology, with a concentration in Ecology. I began my career as an environmental consultant, spending two years conducting due diligence projects across the country. I then moved on to a second consulting firm as an environmental scientist supporting a federal site assessment and remediation contract, beginning in 2005, where I was responsible for a variety of tasks related to EPA's CERCLA cleanup program. I have been working at Cardno since 2010, supporting and managing several energy sector projects for environmental permitting and compliance. I have served as a Deputy Project Manager on several utility-scale wind farms in Ohio, again working on the environmental documents (i.e., EAs) in support of the over-arching OPSB certificate application.

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

**A.4.** I am testifying on behalf of the Applicant, Willowbrook Solar I, LLC in support of its application filed in Case No. 18-1024-EL-BGN.

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

**A.5.** The purpose of my testimony is to describe studies my firm undertook on behalf of the Applicant, to summarize the results of those studies, and to summarize the permits that the Applicant expects to obtain prior to initiating construction in or near surface waters.

**Q.6. Please describe the studies that you and your firm undertook on behalf of the Applicant.**

1       **A.6.** Cardno undertook an EA on behalf of the Applicant, which was attached to the  
2       application as Exhibit G. The EA evaluated and summarized potential land use impacts,  
3       based on desktop assessment and on-site field studies of ecological resources. The purpose  
4       of the EA was to provide a stream and wetland delineation of the proposed facility locations  
5       including solar panels, access roads, and collection lines; to map and characterize  
6       ecological communities; and to screen for potential occurrence of RTE species.

7       **Q.7. What was your role in the studies conducted for the Application?**

8       **A.7.** My role was to provide management of the studies including planning, scheduling,  
9       organization, and management of the field and desktop investigations, to perform review  
10      and quality assurance on the study products (e.g., reports, figures, tables, and written  
11      analysis), and to provide communications with the Applicant regarding the studies'  
12      progress, results and project implications.

13      **Q.8. What were Cardno's results from the assessment of endangered species in the Project**  
14      **Area?**

15      **A.8.** Cardno's assessment did not identify any State- or Federal-listed threatened or  
16      endangered plant or animal species in the area that the project will occupy (the "Project  
17      Area"). During Cardno's June 2018 field survey, two Ohio Species of Concern were  
18      observed in a wetland located in a parcel used for cattle grazing, including the Bobolink  
19      (*Dolichonyx oryzivorus*) and the Henslow's sparrow (*Ammodramus henslowii*). Based on  
20      a review of publicly available data, the Project Area identified in the Application and the  
21      surrounding area within a ¼-mile buffer are not expected to provide significant or  
22      permanent habitat for these sensitive species or any other RTE species. Due to this lack of  
23      adequate habitat in the immediate Project Area for these species, it is likely many of the

1 individuals would opt for higher quality habitat nearby such as Grant Lake Wildlife Area  
2 or Tranquility State Wildlife Area for roosting, foraging and breeding. Willowbrook Solar  
3 has prioritized avoidance measures for sensitive habitats, such as minimizing habitat  
4 fragmentation, siting infrastructure in uplands rather than wetlands, and minimizing  
5 perennial stream crossings. Based on current Project designs, significant impacts to these  
6 habitats are not anticipated.

7 **Q.9. Did you make any findings or observations relating to any aquatic resources?**

8 **A.9.** A total of 23 wetlands were delineated during field surveys, for a total of 9.82 acres  
9 within the Project Area. All wetlands, except for WL-006, were identified as palustrine  
10 emergent wetlands. Wetland WL-006 was a mix of scrub/shrub vegetation and emergent  
11 and was categorized as Palustrine Emergent Wetland/Palustrine Scrub/Shrub for that  
12 reason. Ten of the wetlands scored poorly on the Ohio Rapid Assessment Methodology  
13 (“ORAM”) and were identified as Category 1. The remaining thirteen wetlands were  
14 identified as Category 2/Modified 2. None of the wetlands were identified as Category 3.  
15 Cardno considers nine of the wetlands jurisdictional (3.67 acres), based on potential  
16 hydrologic connectivity to a potential water of the United States. No wetlands will be  
17 directly impacted by Project construction. Impacts to two wetlands (WL-005 and WL-  
18 014) will be avoided by using horizontal directional drilling (“HDD”) technology for the  
19 installation of buried collection lines at these resources.

20 A total of 31 waterbodies were delineated during field surveys within the Project Area; 18  
21 streams, 6 ponds, and 7 ditches. Using the Headwater Habitat Evaluation Index (“HHEI”)   
22 scoring, six of the waterbodies were designated as Primary Headwater Habitat (“PWHW”)   
23 Class I (4 streams, 2 ditches), indicating typically ephemeral flow regimes and poorly

1 defined channels and pools that likely had limited ecological value. An additional 18  
2 waterbodies were designated as PHWH Class II (13 streams, 5 ditches), which generally  
3 indicated intermittent flow regimes and moderate development of channel features that  
4 could provide ecological value. Only one waterbody, WB-025, was identified as a PHWH  
5 Class III which is a perennial, semi-forested tributary to Plum Run. The 6 ponds were not  
6 assessed using the HHEI, as they are non-flowing waterbodies.

7 During the field surveys, the Cardno team also recorded the presence or absence of  
8 freshwater mussels within the field-delineated streams, and Cardno observed no  
9 individuals or populations of freshwater mussel species.

10 The installation of the collection lines will require crossing 7 streams within the Project  
11 Area, with most of these streams having multiple crossings (20 crossings in total). In an  
12 effort to avoid impacts to four of these streams, Willowbrook Solar proposes to utilize  
13 HDD technology (10 crossings). Two of these HDD crossings include crossings of WB-  
14 025, the PHWH Class III unnamed tributary of Plum Run. Three streams (7 crossings)  
15 will be temporarily crossed by traditional open cut method (up to 110.32 linear feet). Two  
16 of these features are Class II intermittent streams (WB-003 and WB-004) and the other is  
17 a Class II perennial stream (Plum Run, WB-019). The open cut at Plum Run will be located  
18 adjacent to an access road culvert. These features will be crossed using open cut and will  
19 involve traditional excavation of the ditch for the collection line.

20 For all identified stream crossing points, effective construction techniques will be used to  
21 avoid and minimize stream impacts. The vast majority of these impacts will be temporary  
22 in nature.

**Q.10 What is your overall assessment of the potential environmental impacts of the Willowbrook Solar Project?**

**A.10** Overall, the Willowbrook Solar Project will have limited environmental impacts. The Project is proposed to be primarily built on land that has already been disturbed seasonally/annually for agriculture. The Project's most significant impact will come from the conversion of agricultural land to land to be used for the solar panel arrays. Willowbrook Solar has designed the Project to avoid and minimize impacts to wetlands, waterbodies, woodlots, and aquatic and terrestrial wildlife species where possible. If the proposed Willowbrook Solar Project were decommissioned, the landscape could be returned to its previous condition.

**Q.11. What permits related to construction disturbance in or near surface waters need to be obtained?**

**A.11.** The Project should not impact any wetland areas. Permits need to be obtained prior to construction of the Project in or near surface waters, all of which are related to surface water impacts. Prior to the start of construction, the Applicant currently expects to obtain the following permits:

- The Ohio National Pollutant Discharge Elimination System (NPDES) construction storm water general permit, Ohio EPA Permit No. OHC000005.
- A nationwide permit under Section 404 of the Clean Water Act and associated water quality certification under Section 401 of the Clean Water Act, (if necessary as determined after final engineering).

**Q.12. What is the typical process for obtaining the Ohio NPDES permit?**

1       **A.12.** Facility construction will require an Ohio NPDES construction storm water  
2       general permit, Ohio EPA Permit No. OHC000005. To obtain this permit, the Applicant  
3       must develop a Stormwater Pollution Prevention Plan (SWP3), and file a Notice of Intent  
4       (“NOI”) letter with the Ohio EPA at least 21 days prior to the commencement of  
5       construction activities. The NOI and associated fee for the Construction Activities  
6       General Permit will be filed at least 21 days prior to commencement of construction  
7       activities. The Applicant anticipates full and complete compliance with this permit.

8       **Q.13. Have you reviewed the February 4, 2019 Staff Report of Investigation issued in this**  
9       **proceeding?**

10      **A.13.** Yes.

11      **Q.14. Do you have observations or responses to any of the information or the conditions**  
12      **listed in the Staff Report of Investigation?**

13      **A.14.** Yes. The Staff Report of Investigation noted that the “historical range [of the  
14      Sloan’s crayfish] includes the project area. Potentially located in perennial streams within  
15      the project area.” Staff Report of Investigation at 19. The field study conducted by Cardno  
16      did not identify any sign of the Sloan’s crayfish. In addition, the Applicant is proposing  
17      minimal impacts to perennial streams within the Project Area. Condition 19 in the Staff  
18      Report of Investigation limits in-stream work during some periods, but does not limit its  
19      applicability to perennial streams. The Applicant is proposing modifications to this  
20      Condition 19, as presented in Mr. Herling’s testimony, to clarify that the limits under  
21      Condition 19 are confined to in-water work in perennial waterbodies, which are the  
22      potential habitat for Sloan’s crayfish. Additionally, the Applicant will provide

1 environmental inspectors, specifically trained for Sloan's crayfish, onsite during the in-  
2 water work at perennial stream crossings.

3 **Q.15 Do you have any other comments?**

4 **A.15.** Yes. The Staff Report of Investigation also includes Condition 25, which limits  
5 clearing in certain wooded areas, including clearing which would "reduce connecting  
6 corridors between one woodlot and another." The EA completed by Cardno concluded  
7 that the clearing of select windrows between Project parcels would be unlikely to have any  
8 negative effect on potential bats using the area. Additionally, the Project as proposed,  
9 which includes the clearing of some windrows, is unlikely to have a significant impact on  
10 local wildlife or national bird populations provided that the Project observes seasonal  
11 restrictions on tree clearing (October 1 to March 31) to protect bat species. As  
12 acknowledged in the Staff Report of Investigation itself, "the clearing proposed in this  
13 project would not be expected to impact any species on the population level ...." Staff  
14 Report of Investigation at 20. Although habitat fragmentation in general can have a  
15 negative impact on wildlife species, the clearing of selected windrows and woodlot edges  
16 around the heavily cultivated land in the Project Area is unlikely to implicate these  
17 concerns. The Applicant is proposing modifications to Condition 25, as presented in Mr.  
18 Herling's testimony.

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

20 **A.16.** Yes, it does.



## **CERTIFICATE OF SERVICE**

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/s/ Michael J. Settineri

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Summary: Testimony of Lori Coleman electronically filed by Mr. Michael J. Settineri on behalf of WILLOWBROOK SOLAR I LLC