Staff Report of Investigation

Nestlewood Solar Farm
Nestlewood Solar I LLC

Case No. 18-1546-EL-BGN

May 15, 2019

Ohio | Power Siting Board

Mike DeWine, Governor | **Sam Randazzo,** Chairman

In the Matter of the Application of Nestlewood Solar I LLC for a Certificate of Environmental Compatibility and Public Need to Construct an Electric Generating Facility in Brown and Clermont Counties, Ohio	**)** **)** **)** **)**	**Case No. 18-1546-EL-BGN**

Staff Report of Investigation

Submitted to the
OHIO POWER SITING BOARD

BEFORE THE POWER SITING BOARD OF THE STATE OF OHIO

In the Matter of the Application of Nestlewood Solar I LLC for a Certificate of Environmental Compatibility and Public Need to Construct an Electric Generating Facility in Brown and Clermont Counties, Ohio	**)** **)** **)** **)**	**Case No. 18-1546-EL-BGN**

Chairman, Public Utilities Commission
Director, Department of Agriculture
Director, Development Services Agency
Director, Environmental Protection Agency
Director, Department of Health
Director, Department of Natural Resources
Public Member
Ohio House of Representatives
Ohio Senate

To the Honorable Power Siting Board:

In accordance with the Ohio Revised Code (R.C.) 4906.07(C) and rules of the Ohio Power Siting Board (Board), the staff of the Public Utilities Commission of Ohio (Staff) has completed its investigation in the above matter and submits its findings and recommendations in this Staff Report for consideration by the Board.

The findings and recommendations contained in this report are the result of Staff coordination with the following agencies that are members of the Board: Ohio Environmental Protection Agency, the Ohio Department of Health, the Ohio Development Services Agency, the Ohio Department of Natural Resources, and the Ohio Department of Agriculture. In addition, Staff coordinated with the Ohio Department of Transportation, the Ohio Historic Preservation Office, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the U.S. Coast Guard.

In accordance with R.C. 4906.07(C) and 4906.12, copies of this Staff Report have been filed with the Docketing Division of the Public Utilities Commission of Ohio and served upon the Applicant or its authorized representative, the parties of record, and pursuant to Ohio Administrative Code 4906-3-06, the main public libraries of the political subdivisions in the project area.

The Staff Report presents the results of Staff's investigation conducted in accordance with R.C. Chapter 4906 and the rules of the Board, and does not purport to reflect the views of the Board nor should any party to the instant proceeding consider the Board in any manner constrained by the findings and recommendations set forth herein.

Respectfully submitted,

Tamara S. Turkenton
Director, Rates and Analysis
Public Utilities Commission of Ohio

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I. POWERS AND DUTIES

OHIO POWER SITING BOARD

The authority of the Ohio Power Siting Board (Board) is prescribed by Ohio Revised Code (R.C.) Chapter 4906. R.C. 4906.03 authorizes the Board to issue certificates of environmental compatibility and public need for the construction, operation, and maintenance of major utility facilities defined in R.C. 4906.01. Included within this definition of major utility facilities are: electric generating plants and associated facilities designed for, or capable of, operation at 50 megawatts (MW) or more; electric transmission lines and associated facilities of a design capacity of 100 kilovolts (kV) or more; and gas pipelines greater than 500 feet in length and more than nine inches in outside diameter, and associated facilities, designed for transporting gas at a maximum allowable operating pressure in excess of 125 pounds per square inch. In addition, pursuant to R.C. 4906.20, the Board authority applies to economically significant wind farms, defined in R.C. 4906.13(A) as wind turbines and associated facilities with a single interconnection to the electrical grid and designed for, or capable of, operation at an aggregate capacity of 5 MW or greater but less than 50 MW.

Membership of the Board is specified in R.C. 4906.02(A). The voting members include: the Chairman of the Public Utilities Commission of Ohio (PUCO or Commission) who serves as Chairman of the Board; the directors of the Ohio Environmental Protection Agency (Ohio EPA), the Ohio Department of Health, the Ohio Development Services Agency, the Ohio Department of Agriculture, and the Ohio Department of Natural Resources (ODNR); and a member of the public, specified as an engineer, appointed by the Governor from a list of three nominees provided by the Ohio Consumers' Counsel. Ex-officio Board members include two members (with alternates) from each house of the Ohio General Assembly.

NATURE OF INVESTIGATION

The Board has promulgated rules and regulations, found in Ohio Administrative Code (Ohio Adm.Code) 4906:1-01 et seq., which establish application procedures for major utility facilities and economically significant wind farms.

Application Procedures

Any person that wishes to construct a major utility facility or economically significant wind farm in this state must first submit to the Board an application for a certificate of environmental compatibility and public need.[1] The application must include a description of the facility and its location, a summary of environmental studies, a statement explaining the need for the facility and how it fits into the Applicant's energy forecasts (for transmission projects), and any other information the Applicant or Board may consider relevant.[2]

Within 60 days of receiving an application, the Chairman must determine whether the application is sufficiently complete to begin an investigation.[3] If an application is considered complete, the Board or an administrative law judge will cause a public hearing to be held 60 to 90 days after the

1. R.C. 4906.04 and 4906.20.
2. R.C. 4906.06(A) and 4906.20(B)(1).
3. Ohio Adm.Code 4906-3-06(A).

official filing date of the completed application.[4] At the public hearing, any person may provide written or oral testimony and may be examined by the parties.[5]

Staff Investigation and Report

The Chairman will also cause each application to be investigated and a report published by the Board's Staff not less than 15 days prior to the public hearing.[6] The report sets forth the nature of the investigation and contains the findings and conditions recommended by Staff.[7] The Board's Staff, which consists of career professionals drawn from the staff of the PUCO and other member agencies of the Board, coordinates its investigation among the agencies represented on the Board and with other interested agencies such as the Ohio Department of Transportation (ODOT), the Ohio Historic Preservation Office (OHPO), and the U.S. Fish and Wildlife Service (USFWS).

The technical investigations and evaluations are conducted pursuant to Ohio Adm.Code 4906-1-01 et seq. The recommended findings resulting from Staff's investigation are described in the Staff Report pursuant to R.C. 4906.07(C). The report does not represent the views or opinions of the Board and is only one piece of evidence that the Board may consider when making its decision. Once published, the report becomes a part of the record, is served upon all parties to the proceeding and is made available to any person upon request.[8] A record of the public hearings and all evidence, including the Staff Report, may be examined by the public at anytime.[9]

Board Decision

The Board may approve, modify and approve, or deny an application for a certificate of environmental compatibility and public need.[10] If the Board approves, or modifies and approves an application, it will issue a certificate subject to conditions. The certificate is also conditioned upon the facility being in compliance with applicable standards and rules adopted under the Ohio Revised Code.[11]

Upon rendering its decision, the Board must issue an opinion stating its reasons for approving, modifying and approving, or denying an application for a certificate of environmental compatibility and public need.[12] A copy of the Board's decision and its opinion is memorialized upon the record and must be served upon all parties to the proceeding.[13] Any party to the proceeding that believes its issues were not adequately addressed by the Board may submit within 30 days an application for rehearing.[14] An entry on rehearing will be issued by the Board within 30 days and may be appealed within 60 days to the Supreme Court of Ohio.[15]

4. R.C. 4906.07(A) and Ohio Adm.Code 4906-3-08.
5. R.C. 4906.08(C).
6. R.C. 4906.07.
7. Ohio Adm.Code 4906-3-06(C).
8. R.C. 4906.07(C) and 4906.10.
9. R.C. 4906.09 and 4906.12.
10. R.C. 4906.10(A).
11. R.C. 4906.10.
12. R.C. 4906.11.
13. R.C. 4906.10(C).
14. R.C. 4903.10 and 4906.12.
15. R.C. 4903.11, 4903.12, and 4906.12.

CRITERIA

Staff developed the recommendations and conditions in this *Staff Report of Investigation* pursuant to the criteria set forth in R.C. 4906.10(A), which reads, in part:

> The board shall not grant a certificate for the construction, operation, and maintenance of a major utility facility, either as proposed or as modified by the board, unless it finds and determines all of the following:
>
> (1) The basis of the need for the facility if the facility is an electric transmission line or gas pipeline;
>
> (2) The nature of the probable environmental impact;
>
> (3) That the facility represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations;
>
> (4) In the case of an electric transmission line or generating facility, that the facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems and that the facility will serve the interests of electric system economy and reliability;
>
> (5) That the facility will comply with Chapters 3704, 3734, and 6111 of the Revised Code and all rules and standards adopted under those chapters and under sections 1501.33, 1501.34, and 4561.32 of the Revised Code. In determining whether the facility will comply with all rules and standards adopted under section 4561.32 of the Revised Code, the board shall consult with the office of aviation of the division of multi-modal planning and programs of the department of transportation under section 4561.341 of the Revised Code;
>
> (6) That the facility will serve the public interest, convenience, and necessity;
>
> (7) In addition to the provisions contained in divisions (A)(1) to (6) of this section and rules adopted under those divisions, what its impact will be on the viability as agricultural land of any land in an existing agricultural district established under Chapter 929 of the Revised Code that is located within the site and alternative site of the proposed major utility facility. Rules adopted to evaluate impact under division (A)(7) of this section shall not require the compilation, creation, submission, or production of any information, document, or other data pertaining to land not located within the site and alternative site; and
>
> (8) That the facility incorporates maximum feasible water conservation practices as determined by the board, considering available technology and the nature and economics of the various alternatives.

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II. APPLICATION

APPLICANT

Nestlewood Solar I LLC (Applicant) is a wholly-owned affiliate of Lendlease Energy Development LLC, which is a wholly-owned affiliate of Lendlease Americas Inc.

Lendlease is an international property and infrastructure group, headquartered in Sydney, Australia with business operations on all five continents. Lendlease has put together a portfolio that develops, finances, and constructs power generation projects totaling 13 gigawatts (GW) across North America and the Caribbean.

In the United States, Lendlease has constructed approximately 140 megawatts (MW) of solar projects including a development portfolio of more than two GW of solar and battery storage projects across the US. The Applicant plans to bid the project for construction and select an operator from a group of reputable firms.

HISTORY OF THE APPLICATION

On October 22, 2018, the Applicant filed a pre-Application Notification letter regarding the proposed solar electric project.

On November 7, 2018, the Applicant held a public informational meeting regarding the proposed solar electric generating project.

On December 14, 2018, the Applicant filed the Nestlewood Solar I LLC application.

Also, December 14, 2018, the Applicant filed motion for waivers and memorandum in support from the requirements to submit the manufacturers' safety manuals or similar documents and any manufacturer recommended setbacks and a description of its plan for test borings, including appropriate closure plan.

On February 12, 2019, the director of Rates and Analysis Department of the PUCO, issued a letter of compliance regarding the application to the Applicant.

On March 15, 2019, the Applicant filled a motion for continuance of evidentiary hearing from June 10, 2019 to June 13, 2019.

On March 18, 2019, the Administrative Law Judge (ALJ) granted the Applicant's motion rescheduling the evidentiary hearing to June 13, 2019.

A local public hearing has been scheduled for May 30, 2019 at 6:00 pm at Hamersville Elementary and Middle School, 1950 State Route 125, Hamersville, Ohio 45130. The adjudicatory hearing will commence on June 13, 2019 at 10:00 am in Hearing Room 11-D at the offices of the Public Utilities Commission of Ohio, 180 East Broad Street, Columbus, Ohio 43215-3793.

This summary of the history of the application does not include every filing in case number 18-1546-EL-BGN. The docketing record for this case, which lists all documents filed to date, can be found online at http://dis.puc.state.oh.us.

PROJECT DESCRIPTION

The Applicant intends to build the Nestlewood Solar as an 80 MW solar-powered generating facility located in Clermont and Brown counties. The project would consist of an extensive array of ground-mounted photovoltaic (PV) modules, commonly referred to as solar panels. The project also would include associated support facilities, access roads, 34.5 kilovolt (kV) electrical collector cables, up to three meteorological stations, substation, a utility-owned switchyard, and 69 kV electric generation tie line, encompassing 464 acres within a 610 acre project area. The proposed layout is shown on the map in this report.

Solar Panels and Racking

The solar panels would be attached to metal racking. The racking would include piles driven into the ground. The solar panel arrays would be grouped in clusters that would be fenced for safety and security purposes, with locked gates at all entrances. For further security measures, the fencing around the facility would be topped with barbed wire.

The Applicant plans to utilize a tracking system for the solar panel arrays. The tracking arrays would consist of racking placed in a north-south direction which would be equipped with electric motors that would slowly rotate the panels throughout the day to keep them perpendicular to the angle of the sun, maximizing direct sunlight. Tracking arrays would face east at sunrise, rotate westward during the day, face west at sunset, and then reset to the east.

The Applicant has not yet selected the final solar panel technology to be utilized for this project. However, it has limited its consideration to two commonly used solar panel technologies that are substantially similar in design: crystalline or thin-film. According to the Applicant, crystalline modules are more efficient but cost more to manufacture than thin-film modules. Both solar panel technologies are comparable, and the Applicant plans to submit the final project designs to the Board Staff for review prior to construction.

The Applicant has not selected the specific module vendor, but indicated that it intends to use a manufacturer that has the capability and experience to provide approximately 284,000 PV panels for this project. The Applicant estimates the project would occupy a maximum of 464 acres of the project area.

DC Collector System, Inverters, and AC Collector System

The Applicant would install an underground collector system made up of a network of electric and communication lines that would transmit the electric power from the arrays to a central location. The Applicant proposes to install up to 20.5 miles of buried cable. Installation of the cable would require an approximately 20-foot-wide temporary work area along its entire length.

The electricity from the solar panels would be generated in direct current (DC). DC power from the solar panels would be delivered to circuits, which would be routed through cable trays, then to combiner boxes. Power from the combiner boxes would be transmitted to groups of components, collectively called an inverter, which would include a DC-to-alternating current (AC) inverter, a step-up transformer that would increase the voltage to 34.5 kV, and a cabinet containing power control electronics. The facility would include approximately 105 inverters.

Each inverter would deliver AC power to a common substation through a system of buried electric lines and associated communication lines. The Applicant intends for each portion of the AC

collector system to originate in one of the solar fields and terminate at the substation. The Applicant has committed that those portions of the AC collector system outside the fenced solar fields and fenced substation would be buried at least 36 inches below grade. The Applicant stated that it will use warning tape and register the underground facilities with Ohio Utilities Protection Service.

Substation and Transmission Line

The facility substation would occupy approximately 50,000 square feet of land adjacent to a proposed utility switchyard, which would occupy approximately 63,000 square feet of land. The major components of the Applicant's substation would be collection line feeder and breakers, a 34.5 kV bus, a main power transformer to step up the voltage to 69 kV, a high-voltage breaker, metering/relaying transformer, disconnect switches, an equipment enclosure containing power control electronics, and a 70-foot lightning mast.

One 69 kV electric transmission line, approximately 100 feet in length, would connect the project substation to the utility switchyard. Another 69 kV electric transmission line, approximately 600 feet in length, would connect the utility switchyard to the 69 kV electric transmission line.

Roads

The Applicant proposes to construct, operate, and maintain entrances for the project off of each public roadway that extends throughout the project area, allowing access to each solar panel array. Gravel access roads, extending into the project area from each entrance, would be approximately 20 feet wide and require minor grading to appropriately manage stormwater discharges, erosion, and sedimentation.

Laydown Areas

The Applicant proposes to use temporary laydown areas scattered within the project area boundary during the approximately 10 month construction period. Temporary use areas would be restored at the time of completion of the project unless there is a need to preserve for future project construction. The Applicant would address erosion and sediment control issues through best management practices (BMP) according to the *Ohio Rainwater and Land Development Manual* (ODNR, 2014), which would be incorporated in its Stormwater Pollution Prevention Plan (SWPPP). The Applicant would install erosion control methods prior to commencing construction in each particular area. The Applicant would remove all erosion control equipment in the reclaimed laydown areas once soils are stabilized.

Meteorological Stations

The project would include up to three solar meteorological stations that would be up to 15 feet tall. Their locations would be secured within the fenced area of the project or would occupy an enclosed area with a gated fence. The meteorological stations would include pyranometers, which measure solar resource. Meteorological stations would typically include an anemometer, a wind vane, a barometer, a rain gauge, a thermometer, and communications equipment.

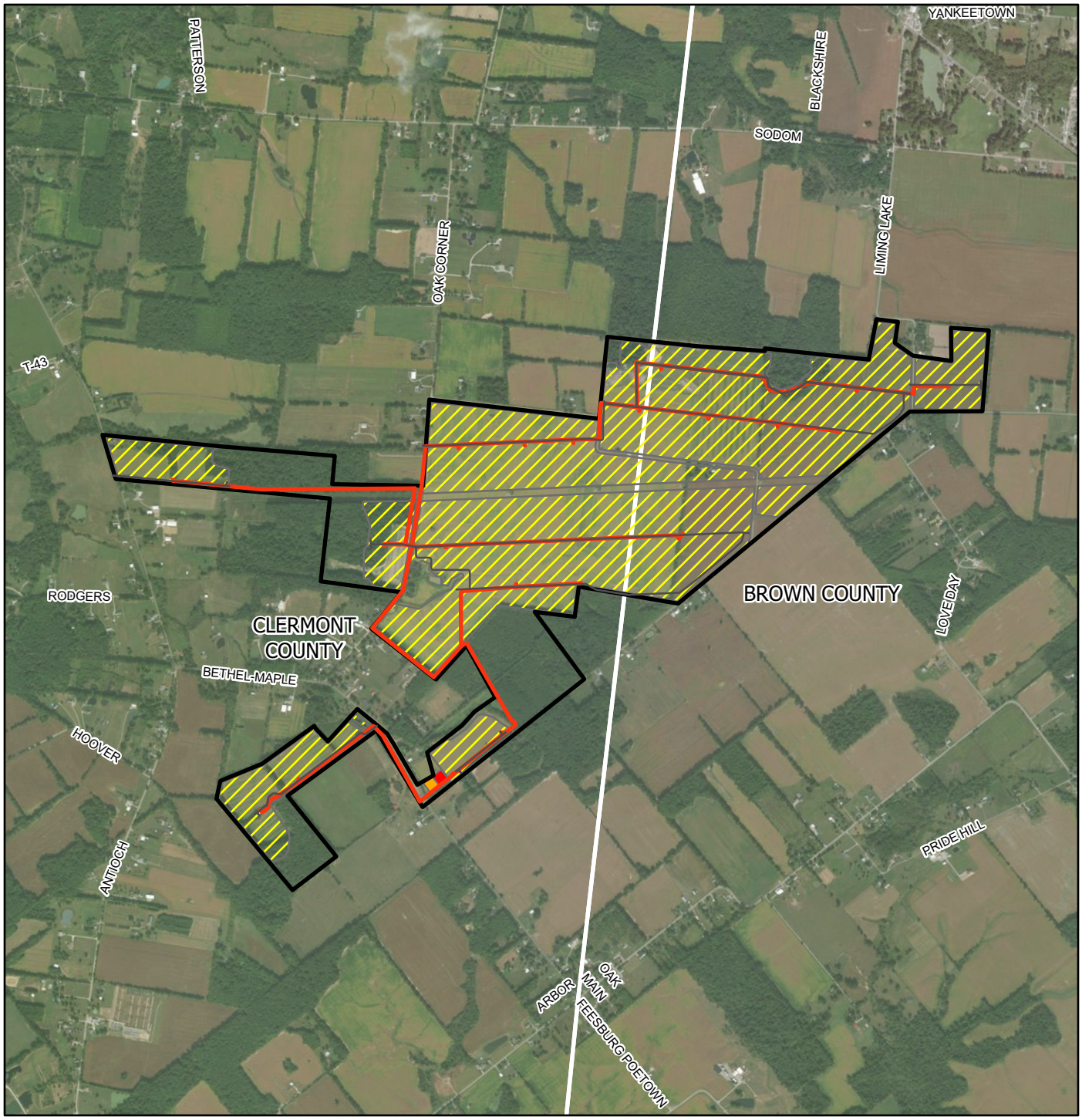
Lighting

The project would include permanent lighting as required for public safety and security purposes at the gates, substation, utility switchyard, and transformer/inverter pads. There would be no

permanent lighting associated with the solar panels themselves, the access roads, or any other component of the project.

Project Schedule

The Applicant expects to finalize design and commence construction of the solar farm in June 2019. The Applicant stated that delays to the start of construction could affect the project's eligibility for certain financial incentives, such as the full value of the federal investment tax credit.



Clermont & Brown counties

N

0 2,000

Scale in Feet

1:24,000

NAD 83 SP Ohio South (Feet)

- Collection Line
- Access Road
- Potential Solar Array
- Substation
- Switchyard
- Project Area
- County Boundary

Overview Map

18-1546-EL-BGN

Nestlewood Solar Facility

Maps are presented solely for the purpose of providing a visual representation of the project in the staff report, and are not intended to modify the project as presented by the Applicant in its certified application and supplemental materials.

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III. CONSIDERATIONS AND RECOMMENDED FINDINGS

In the Matter of the Application of Nestlewood Solar I LLC for a Certificate of Environmental Compatibility and Public Need to Construct an Electric Generating Facility in Brown and Clermont Counties, Ohio, Staff submits the following considerations and recommended findings pursuant to R.C. 4906.07(C) and 4906.10(A).

Considerations for R.C. 4906.10(A)(1)

BASIS OF NEED

Pursuant to R.C. 4906.10(A)(1), the Board must determine the basis of the need for the facility only if the facility is an electric transmission line or gas pipeline. The facility is neither an electric transmission line nor a gas pipeline. Therefore, Staff has found an analysis of R.C. 4906.10(A)(1) to be inapplicable to the facility in question.

Recommended Findings

Staff recommends that the Board find that the basis of need as specified under R.C. 4906.10(A)(1) is not applicable to this facility, as the facility is neither an electric transmission line nor a gas pipeline.

Considerations for R.C. 4906.10(A)(2)

NATURE OF PROBABLE ENVIRONMENTAL IMPACT

Pursuant to R.C. 4906.10(A)(2), the Board must determine the nature of the probable environmental impact of the proposed facility. Staff has found the following with regard to the nature of the probable environmental impact.

Socioeconomic Impacts

Land Use and Planning

The project is located in Lewis and Clark townships of Brown County and Tate and Franklin townships of Clermont County. Higher population areas in the vicinity of the project area include the villages of Hamersville, Bethel, and Felicity, with the nearest being the village of Hamersville, approximately 2 miles to the east. Clermont County has adopted a comprehensive plan which includes provisions for land use in Franklin and Tate townships. Though most provisions pertain to residential and agricultural land use, this project does not appear to contradict provisions in the plan.

The proposed solar farm would not interfere with surrounding agricultural land use and the development of the project could preserve land for future viable farming operations. After the life cycle of this project, once the panels and posts are removed, the majority of land could be returned to farming, or developed for other uses.

The Applicant proposes to construct the facility in an area totaling up to approximately 610 acres. Of the land acreage for the project, the majority is presently used for agricultural production. There are five existing structures on the project site; two abandoned residences, two barns and a garage. These structures would be demolished and removed prior to construction of the solar facility. Within one mile of the project area, 80 percent of the total acreage is presently agricultural in nature, while 19 percent is residential. Within 250 feet of the project area, the Applicant indicates that there are 71 structures, 28 of which are residential. The nearest non-participating residence is approximately 54 feet from the project area. The project footprint does not include any major population centers or major industries other than associated with farming operations.

Due to the proximity of residential structures to the project area, Staff recommends that the Applicant limit the hours of construction and have a complaint resolution plan in place to address potential construction and operational related concerns from nearby residents. Additionally, Staff recommends that the Applicant screen the facility from adjacent residences with a view of the facility by providing an opaque perimeter fence, as well as adding vegetative landscaping where feasible.

Within 10 miles of the project area are one state park, one nature preserve, two wildlife areas, four golf courses and 14 public parks. East Fork State Park is located over 4 miles to the northwest of the project area. Liming Park in Brown County is the nearest recreational public park located approximately 1.8 miles east of the project area. The Ohio River Scenic Byway is located along the Ohio River, at the edge of the 10 mile study area. Due to distance and existing structures and vegetation, there would likely be minimal impact, if any, to recreational areas as a result of construction and operation of this facility.

Cultural Resources

The Applicant enlisted a consultant to complete a cultural resources record review for the study area, defined as the area within ten miles of the project boundary. The Applicant conducted a literature review and evaluation of cultural resource surveys previously performed in the area. This review was based on data provided by the OHPO online geographic information system mapping, as well as other map collections and resources.

From the literature review, the cultural resources consultant determined that there are 19 sites, properties or buildings, and districts listed in the National Register of Historic Places (NRHP). The nearest NRHP listed property is a residential structure approximately 2.5 miles to the southwest, with no other NRHP listed properties within four miles. Six archaeological sites and 15 buildings within the study area have been determined to be eligible for NRHP listing. Additionally, there is one National Historic Landmark located within the 10 mile study area, the Ulysses S. Grant Boyhood Home, located approximately 7.4 miles to the west.

There were 299 Ohio Historic Inventory (OHI) structures or buildings that were identified within the 10 mile study area, none of which are located in the project area. The closest OHI structure is approximately 0.6 mile to the east.

The Applicant's consultant also identified that 351 Ohio Archaeological Inventory (OAI) recorded sites are located within the 10 mile study area, with the nearest site being located approximately 0.4 mile to the south. This is the only site located within 1 mile of the project area. There are 167 mapped cemeteries within 10 miles of the project area, one of which is within one mile. This cemetery is 0.9 mile east the project boundary.

The Applicant's cultural resources consultant stated that there are no anticipated direct physical impacts to recorded cultural resources as a result of this project. However, efforts to date have focused on existing records of known cultural resources. Because there would be the potential for indirect visual effects to properties and structures that previously have not been identified, and to verify that the site does not contain unknown cultural resources, a Phase I cultural resource survey should be performed. Such a study should include an archeological survey limited to areas of significant ground disturbance within the project area, and a reconnaissance survey for architectural resources that might be located in the viewshed of the project, and should be conducted in coordination with the OHPO and Staff.

Aesthetics

The Applicant included a Visual Impact Assessment (VIA) with the project application. The VIA utilized a panel component height for the project at a maximum height of 14 feet and, at the substation, a lightning mast at a maximum height of 70 feet.[16] The project would be enclosed by a seven foot tall wire fence. The Applicant intends on keeping as much existing vegetation that surrounds the project as possible, for additional screening.

The VIA considered aesthetic resources within a 5-mile radius, such as population centers, parks, a ballfield and cemeteries. The highest level of visual impact would be within 1 mile of the project where there is no existing natural vegetative screening. The Applicant has stated that it may be

16. Application at Exhibit J, "Visual Impact Assessment" at page 2.

appropriate for vegetative screening to be employed in some areas of the project, and that this will come into consideration when developing a landscape plan for the project.[17]

Due to the potential impacts on non-participating residences surrounding the facility, Staff recommends the Applicant incorporate a landscape and aesthetics plan to reduce impacts in areas where an adjacent non-participating parcel contains a residence with a direct line of sight to the project area.

Economics

The Applicant states that they would develop, construct, own, and operate the project. The Applicant would own all of the assets that comprise the project or that would be used to construct, own, and operate the project with the exception of the utility switchyard and the 69 kV line that would connect into the existing 69 kV South Bethel to Brown electric transmission line. The Applicant possesses development rights for all land within the project area via purchase options or lease agreements.

The Applicant states that their total estimated capital and intangible costs are expected to be $1,375/kilowatt (kW). The Applicant referenced *Lazard's Levelized Cost of Energy Analysis – Version 11.0* which states that the average capital costs for utility scale solar PV projects range between $1,100 to $1,400 per kW and that their costs would fall in this range. Staff verified the Applicant's assertion that the reported average cost of the affiliate facilities is not substantially different from Applicant's estimated cost for the proposed facility.

Operations and maintenance (O&M) costs for the project are stated in the application and are expected to be approximately $730,000, or $9/kW annually for the first two years of operation. The Applicant states that these costs should not be substantially different from other U.S solar facilities. Staff confirmed the Applicant's assertion that its O&M cost estimates were consistent with other U.S solar facilities per *Lazard's Levelized Cost of Energy Analysis – Version 12.0*.

The Applicant provided its estimates of the cost of delays in permitting and construction of the proposed facility. The loss in revenue as a result of delays is expected to be greater than $550,000 per month. The Applicant also stated that delays could prevent the project from meeting federal Investment Tax Credit deadlines which could result in the loss of those benefits to the Applicant. Additionally, delays could result in penalties to the extent that they would prevent the Applicant from meeting delivery deadlines under a potential power purchase agreement. The Applicant's characterization of its estimated costs of delays appears reasonable to Staff.

Nestlewood Solar retained the services of Tetra Tech, Inc. (Tetra Tech), a California based consulting and engineering services firm, to prepare the report analyzing the economic impact of the Nestlewood Solar Farm project. Tetra Tech used the National Renewable Energy Laboratory's (NREL) Jobs and Economic Development Impact (JEDI) model, as well as data from the Ohio Department of Taxation, to estimate the economic impact of the construction and operation of the solar farm. Staff verified that the methodology of the JEDI model was appropriate for this study and independently evaluated the impacts observed by the Applicant using a solar PV JEDI model from the NREL website. Staff believes that the estimated impacts reported by the Applicant are reasonable.

17. Application at Exhibit J, "Visual Impact Assessment" at p. 8.

In this model, "earnings" are comprised of direct (on-site) wages, indirect (supply-chain labor) wages, and induced (through spending by persons in first two categories). "Output" in this model refers to the value of goods and services produced by direct, indirect, and induced labor. Based on the results of the JEDI model analysis conducted by Tetra Tech, the Nestlewood Solar Farm project is expected to have the following impacts:

Jobs

- 314 new temporary construction related jobs for the state of Ohio
- 5 long-term operational jobs for the state of Ohio

Earnings

- $18.5 million in local earnings during construction for the state of Ohio
- $300,000 in annual earnings during facility operations for the state of Ohio

Output

- $36.1 million in local output during construction for the state of Ohio
- $500,000 in local annual output during facility operations for the state of Ohio

Taxes

Tetra Tech additionally estimated revenue derived from lease payments and local tax revenue or payments in lieu of taxes (PILOT). Lease payments would include annual payments made to property owners that for properties that contain components of the facility. The Nestlewood Solar Farm project would generate an estimated $560,000 annually in tax revenue for Brown and Clermont counties. The payments assume a PILOT plan in which Nestlewood Solar would pay $7,000/MW for 80 MW, on an annual basis.

Glare

Glare is the phenomenon where sunlight reflects from a surface to create a duration of bright light. Glare also encompasses glint, which is a momentary flash of bright light. Potential impacts of this reflection from solar panel could be a brief reduction in visibility, afterimage, a safety risk to pilots, or a perceived nuisance to neighbors.

The Applicant stated the project will have a low reflectivity. The Applicant may also use an anti-glare coating and intends to use a tracking array system, both of which would reduce the potential for glare. Staff notes that aesthetic impact mitigation measures that include vegetative plantings would also further reduce potential impacts as part of a landscape and lighting plan.

Decommissioning

The Applicant holds land rights to, and expects to operate, the solar farm for up to 40 years. The Applicant states it will prepare a comprehensive decommissioning plan. The plan would specify the responsible parties, outline a 9 month (or less) decommissioning schedule, outline projected decommissioning/restoration costs, require restoration of the project area, and require proper disposal of all project components.

The Applicant stated that it will also provide for financial security to ensure that funds are available for decommissioning and land restoration. The Applicant stated that, prior to construction, it will retain an independent and registered professional engineer to calculate the net decommissioning

costs for the solar farm as outlined in the plan.[18] The Applicant stated that cost estimates will be recalculated approximately every five years over the life of the project, and that it will post a surety bond or similar financial assurance instrument in the amount of the net decommissioning cost.

All Staff recommendations for the requirements discussed in this section of the *Staff Report of Investigation* are included under the **Socioeconomic Conditions** heading of the Recommended Conditions of Certificate section.

Ecological Impacts

Public and Private Water Supply

The Applicant does not anticipate significant adverse impacts to public or private water supplies. Solar energy facilities are constructed and generate electricity without impacts to surface or groundwater. The homes within the project area reside in rural sections of Clermont and Brown Counties and obtain their water from a municipal water authority. The project area is located within the Clermont Public Water System Source Water Protection Area (SWPA). However, the proposed project does not represent an activity that is a restricted use within the SWPA.

The construction and operation of a solar energy facilities does not generate wastewater discharges. The Applicant would also not impact any private groundwater wells because the construction in the project area would not extend beyond 10 feet below the surface. The Applicant's review of SWPA rules and regulations indicates that the construction of the solar facility would not be considered an activity that would be restricted within either a surface water or groundwater SWPA.

Geology

The bedrock that underlies Brown and Clermont Counties is hard fossiliferous limestone and soft calcareous gray shale of Ordovician and Silurian age. The physiography of the project area, which is in southwest Ohio, is characterized by rolling ground moraine of till plain dissected by numerous streams.

Deposits of glacial till cover the bedrock over most of the project area. The till material is made up of a very compact mix of sand, gravel, and boulders and has a very high content of lime. The project site is in a broad flat lying area with very little relief. The depth to bedrock can range from 20 inches to over 40 feet. The depth to bedrock can be a limiting factor to home construction, road building, installation of septic systems, the construction of ponds, and other activities involving exaction. Groundwater levels are typically shallow.

The project area does not have any active or past mining activity. There are no records of underground mines in the project area.

Staff reviewed the state of Ohio database and interactive map for oil and gas drilling and exploration in both counties for this project site. There are no current oil and gas drilling operations within the project area.

Brown County has a limited history of seismic activity. In 1957, an earthquake with a magnitude 2.9 on the Richter scale occurred in southeast Brown County. The epicenter was marked just off the bank of the Ohio River. The other recorded seismic event occurred most recently east of the

18. Application at page 39.

project site. On March 3, 2019, an earthquake with a magnitude of 2.5 on the Richter scale occurred in Franklin Township. Clermont County has recorded three seismic events, all occurring in the 1800s in Stonelick and Batavia townships, approximately 10 miles northeast of the project area. All three seismic events had magnitudes between 2.5 and 2.9 on the Richter scale.

Karst topography is commonly found in this portion of the State. However, the Applicant did not identify any Karst features in the project area. The Applicant would employ design and construction methods to avoid or minimize the affects of Karst features revealed through further site-specific investigation.

The Applicant would perform additional site-specific drilling and subsurface work and provide Staff with a report of their findings. Staff finds that the geology within the project area does not present conditions that would limit or negatively impact the design, construction, and future operation of this facility.

Soils and Soil Suitability

The soils in the project area, as characterized in the *Soil Survey of Brown County, Ohio*, and the *Soil Survey of Clermont County, Ohio,* generally consist of silt loam. Clermont silt loam is the dominant mapped soil unit in the project area. It is commonly found on flats and till plains. Clermont silt loam consists of poorly drained, nearly level soils that formed in loess and the underlying glacial till. Depth to the water table is shallow and the water capacity is considered high.

The other less common mapped soil unit found at the project area is the Westboro-Schaeffer silt loam. Westboro-Schaeffer silt loam consists of poorly drained soils commonly found on till plains. The depth to the water table is shallow. The water capacity is considered high for this soil unit.

Prior to construction, the Applicant would perform more site-specific test borings at the project area to determine specific criteria related to subsurface soil properties, static water level, rock quality description, percent recovery, and depth and description of bedrock contact. Present site conditions would not adversely effect or negate the design, construction, and future operation of this solar facility.

Surface Waters

The Applicant delineated five streams within the project area. The Applicant proposes to impact a perennial stream, Poplar Creek, with the installation of an access road and collection line in a common area of impact. The Applicant also proposes to impact Poplar Creek in a second location through the installation of a collection line. Staff recommends that in-water work associated with collection lines in perennial streams be avoided through the use of horizontal directional drilling (HDD).

The Applicant delineated 10 wetlands within the project area, including three category 1 wetlands and seven category 2 wetlands. No wetlands would be impacted. One wetland would be crossed by a collection line. However, collection line impacts to this wetland would be avoided through the use of HDD. Because the project would use HDD, Staff recommends that, prior to construction, the Applicant provide a frac-out contingency plan detailing monitoring, containment measures, cleanup, and restoration in the event of an inadvertent return. Wooded wetlands would not be

cleared, and the Applicant has committed to maintaining a minimum 15-foot clearing buffer surrounding wooded wetlands.

Specifics about how surface waters would be further protected from indirect construction stormwater impacts using erosion and sedimentation controls would be outlined in the Applicant's SWPPP. Direct impacts, including the proposed access road crossing would be covered under the U.S. Army Corps of Engineers (USACE) Nationwide Permit Program. The project would not impact any lakes, ponds, or 100-year floodplains.

Threatened and Endangered Species

The Applicant requested information from the ODNR and the USFWS regarding state and federal listed threatened or endangered plant and animal species. Staff gathered additional information through field assessments and review of published ecological information. The following table provides the results of the information requests, field assessments, and document review.

MAMMALS				
Common Name	**Scientific Name**	**Federal Status**	**State Status**	**Presence in Project Area**
Indiana bat	*Myotis sodalis*	Endangered	Endangered	Historical range includes the project area. Presence within project area has been documented.
northern long-eared bat	*Myotis septentrionalis*	Threatened	Threatened	Historical range includes the project area.
BIRDS				
Common Name	**Scientific Name**	**Federal Status**	**State Status**	**Presence in Project Area**
Northern harrier	*Circus cyaneus*	N/A	Endangered	Historical range includes the project area. Suitable habitat not present in project area.
REPTILES				
Common Name	**Scientific Name**	**Federal Status**	**State Status**	**Presence in Project Area**
Kirtland's snake	*Clonophis kirtlandii*	N/A	Threatened	ODNR-approved herpetologist determined that two locations within the project area that had potential for use as habitat by the Kirtland's snake.

MUSSELS				
Common Name	**Scientific Name**	**Federal Status**	**State Status**	**Presence in Project Area**
sheepnose	*Plethobasus cyphyus*	Endangered	Endangered	Historical range includes the project area.
fanshell	*Cyprogenia stegaria*	Endangered	Endangered	Historical range includes the project area.
pink mucket	*Lampsilis orbiculata*	Endangered	Endangered	Historical range includes the project area.
rayed bean	*Villosa fabalis*	Endangered	Endangered	Historical range includes the project area.
snuffbox	*Epioblasma triquetra*	Endangered	Endangered	Historical range includes the project area.
ebonyshell	*Fusconaia ebena*	N/A	Endangered	Historical range includes the project area.
butterfly	*Ellipsaria lineolata*	N/A	Endangered	Historical range includes the project area.
washboard	*Megalonaias nervosa*	N/A	Endangered	Historical range includes the project area.
elephant-ear	*Elliptio crassidens*	N/A	Endangered	Historical range includes the project area.
little spectaclecase	*Villosa lienosa*	N/A	Endangered	Historical range includes the project area.
Ohio pigtoe	*Pleurobema cordatum*	N/A	Endangered	Historical range includes the project area.
monkeyface	*Quadrula metanevra*	N/A	Endangered	Historical range includes the project area.
wartyback	*Quadrula nodulata*	N/A	Endangered	Historical range includes the project area.
fawnsfoot	*Truncilla donaciformis*	N/A	Threatened	Historical range includes the project area.
threehorn wartyback	*Obliquaria reflexa*	N/A	Threatened	Historical range includes the project area.

FISH				
Common Name	**Scientific Name**	**Federal Status**	**State Status**	**Presence in Project Area**
northern madtom	*Noturus stigmosus*	N/A	Endangered	Historical range includes the project area. Potentially located in perennial streams within the project area.
mountain madtom	*Noturus eleutherus*	N/A	Threatened	Historical range includes the project area. Potentially located in perennial streams within the project area.
shortnose gar	*Lepisosteus platostomus*	N/A	Endangered	Historical range includes the project area. Potentially located in perennial streams within the project area.
shovelnose sturgeon	*Scaphirhynchus platorynchus*	N/A	Endangered	Historical range includes the project area. Potentially located in perennial streams within the project area.
bigeye shiner	*Notropis boops*	N/A	Threatened	Historical range includes the project area. Potentially located in perennial streams within the project area.
river darter	*Percina shumardi*	N/A	Threatened	Historical range includes the project area. Potentially located in perennial streams within the project area.
channel darter	*Percina copelandi*	N/A	Threatened	Historical range includes the project area. Potentially located in perennial streams within the project area.
goldeye	*Hiodon alosoides*	N/A	Endangered	Historical range includes the project area. Potentially located in perennial streams within the project area.
paddlefish	*Polyodon spathula*	N/A	Threatened	Historical range includes the project area. Potentially located in perennial streams within the project area.

The Applicant did not identify any listed plant or animal species during field surveys. Further, the ODNR and the USFWS did not identify any concerns regarding impacts to listed plant species. In the event that the Applicant encounters listed plant or animal species during construction, Staff recommends that the Applicant contact Staff, the ODNR, and the USFWS, as applicable within 24 hours and that construction activities that could adversely impact the identified plants or animals be immediately halted until an appropriate course of action has been agreed upon. Staff also recommends that if the Applicant encounters any listed plant or animal species prior to construction, the Applicant include the location and how impacts would be avoided in a final access plan to be provided to Staff prior to the preconstruction conference.

The project area is within the range of state and federal endangered Indiana bat (*Myotis sodalis*) and the state and federal threatened northern long-eared bat (*Myotis septentrionalis*). Presence of these species has been established within the project area and the project is in proximity to a known Indiana bat maternity roost tree. As tree roosting species in the summer months, the habitat of these species may be impacted by the project. In order to avoid impacts to the Indiana bat and

northern long-eared bat, Staff recommends the Applicant adhere to seasonal tree cutting dates of October 1 through March 31 for all trees three inches or greater in diameter, unless coordination efforts with the ODNR and the USFWS allows a different course of action. The project is not expected to impact any bat hibernacula.

The project is within the range of the Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. Per the ODNR's recommendation, the Applicant contacted an ODNR-approved herpetologist to complete a habitat review of the site. The herpetologist's report identified two locations of potentially suitable Kirtland's snake habitat within the project area and recommended a more detailed presence/absence survey be conducted unless these potential habitat areas would be avoided. Because a collection line is proposed within one of these habitat areas, Staff recommends that the Applicant complete further coordination with the ODNR, including that additional presence/absence surveys be conducted for the species during the appropriate season, to assure impacts are avoided.

The ODNR stated that the project must not have an impact on freshwater native mussels. This applies to both listed and non-listed species. Per the *Ohio Mussel Survey Protocol* (2016), all Group 2, 3, and 4 streams require a mussel survey if impacts would occur. Also per the Ohio Mussel Survey Protocol, Group 1 streams and unlisted streams with a watershed of 10 square miles or larger above the point of impact require assessment using the *Reconnaissance Survey for Unionid Mussels* if impacts would occur. Further mussel surveys may be recommended for these streams based on the results. If impacts to mussels cannot be avoided, as a last resort, the ODNR recommends a professional malacologist collect and relocate the mussels to suitable and similar habitat upstream of the project site. Mussel surveys and any subsequent mussel relocation should be done in accordance with the *Ohio Mussel Survey Protocol*. The Applicant identified Poplar Creek as a group 1 stream. A reconnaissance survey for Unionid mussels and further coordination with the ODNR and Staff would be necessary prior any in-water work in this stream.

Vegetation

The following table reflects the different vegetative communities present in the project area and associated impact for the facility.

VEGETATION	
Vegetation Community Type	**Total Disturbance (Acres)**
Forest land	38.1
Scrub Shrub	0.5
Developed	3.2
Agricultural Lands	422.6
Total	464.4

Impacts would occur primarily within agricultural lands. Staff recommends that the Applicant be required to provide a vegetation management plan for review prior to the preconstruction conference. The plan would identify all areas of proposed vegetation clearing for the project, specifying the extent of the clearing, and describing how such clearing work would be done as to minimize removal of woody vegetation. Staff recommends that the plan also include the implementation and maintenance of native pollinator-friendly plantings in selected locations along

the outside border of the solar fields and incorporate plantings of legumes and wildflowers in areas between the solar panels. Plantings should be selected in consultation with the Ohio Pollinator Habitat Initiative. These features would enhance the visual appeal of the project, enrich local wildlife habitat, and benefit the local farming community. Pollinator plantings would help reduce erosion; reduce fertilizer, herbicide, and pesticide use; discourage invasive species; and improve water quality.

All Staff recommendations for the requirements discussed in this section of the *Staff Report of Investigation* are included under the **Ecological Conditions** heading of the Recommended Conditions of Certificate section.

Public Services, Facilities, and Safety

Wind Velocity

The Applicant stated that components of the proposed facility are not susceptible to damage from high winds. The Applicant has indicated that it will incorporate local geotechnical conditions and relevant portions of the American Society of Civil Engineers Standard 7-10 for wind loads during the final project design. The Applicant also notes that its single access tracker model can be stowed in a flat setting during adverse wind conditions. To minimize and mitigate any potential damage from high wind velocities, the Applicant proposes to install the project support equipment at sufficient depths based on the site-specific soil conditions to preclude any adverse influence from high wind velocities.

Roads and Bridges

The principal impact on public services would be increases in truck traffic on routes leading to the project area. The Applicant foresees only modest impacts to roads, bridges, and traffic in the local community. The Applicant has committed to coordinate with County Engineers to schedule the construction effort to ensure safe and efficient maintenance of existing traffic patterns and usages.

During operation, facility related traffic would be minimal and would not be expected to significantly impact local roadways. Potential emergency service requirements would be coordinated with local officials during construction and operation.

The Applicant does not anticipate the need to acquire any special hauling permits or other significant transportation permits for this project. The Applicant has provided a preliminary Transportation Management Plan to address any damage to public roads and bridges and agreed to remedies to resolve and/or repair those damages promptly to their former condition by the Applicant under the guidance of the appropriate authority.

Noise

Noise impacts from construction activities would include site clearing, installation of mechanical and electrical equipment, and commissioning and testing of equipment. Many of the construction activities would generate significant noise levels during the 10 months of construction. However, the adverse impact of construction noise would be temporary and intermittent, would occur away from most residential structures, and would be limited to daytime working hours. The Applicant would use mitigation practices such as maintaining engines and mufflers in good operating order, limiting construction activities to daylight hours, and establishing a complaint resolution process.

Operational noise impacts for a solar generation facility would be relatively minor and occur only during the day. Operational noise sources include inverters, the step up transformer at the new substation, and tracking motors.

The Applicant conducted an ambient noise level study in order to understand the existing noise levels near the proposed facility. Noise impacts to non-participating receptors were modeled. The model showed that operational noise impacts would be approximately the same as or less than ambient noise levels. No non-participating receptors were modeled to receive noise impacts greater than the daytime ambient noise level plus 5 dBA. Therefore the project would be expected to have minimal adverse noise impacts on the adjacent community.

All Staff recommendations for the requirements discussed in this section of the *Staff Report of Investigation* are included under the **Public Services, Facilities, and Safety Conditions** heading of the Recommended Conditions of Certificate section.

Recommended Findings

Staff recommends that the Board find that the Applicant has determined the nature of the probable environmental impact for the proposed facility, and therefore complies with the requirements specified in R.C. 4906.10(A)(2), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate.

Considerations for R.C. 4906.10(A)(3)

MINIMUM ADVERSE ENVIRONMENTAL IMPACT

Pursuant to R.C. 4906.10(A)(3), the proposed facility must represent the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, along with other pertinent considerations.

Site Selection

According to the Applicant, southwestern Ohio presents several factors that are favorable to solar generation projects: a strong transmission grid, and available solar resources. Within the southwestern Ohio region, the study area was chosen primarily due to its proximity to the existing electric transmission system and the character of the land in the general area surrounding the project.

The Applicant determined the specific location of the project by using the following criteria: (1) willingness of property owners to lease land for solar energy development and other components of the project; (2) project needed to be in close proximity to adequate electrical point of interconnection; (3) access to the project site from the surrounding area through a network of public roads; (4) area has great potential for solar energy development based upon the statewide solar resource map; (5) minimal impacts to the environment and sensitive features such as streams, wetlands, and potential wildlife habitat; and (6) land use compatible to other similarly suitable parcels that are contiguous or in close proximity to the project.

During the public informational meeting, the Applicant solicited written comments from attendees. These comments, related to project aesthetics, displacement of farming activities and wildlife habitat, stormwater, flooding and surface drainage, and the mitigation of visual impacts, are addressed in the application.

Minimizing Impacts

Of the approximately 610 acres of leased land, approximately 4764 acres would be occupied by permanent facilities. Agricultural land accounts for approximately 91 percent of all land that would be impacted by the proposed facility.

Relatively few previously recorded cultural resources were identified in the immediate vicinity of the project. The Applicant is currently in the process of designing a systematic Phase I survey program for the project, in conjunction with input from the OHPO, to assure impacts to cultural resources are minimized.

The proposed facility would have an overall positive impact on the local economy due to the increase in construction spending, wages, purchasing of goods and services, annual lease payments to the local landowners, and potential PILOT revenue. The Applicant estimates that the results of a forthcoming arrangement with Brown and Clermont Counties would produce annual PILOT revenue of approximately $560,000 for the surrounding communities and school district.

To minimize impacts to wetlands and streams, The Applicant has committed to using HDD to install underground electric collection cable under all streams. Construction of the facility would not require work within mapped 100-year floodplains.

Impacts to any state and federal listed wildlife species can be avoided by following best management practices and seasonal restrictions for construction in certain habitat types, as detailed by the USFWS and the ODNR.

Noise impacts are expected to be primarily limited to construction activities. The adverse impact of construction noise would be temporary and intermittent, would occur away from most residential structures, and would be limited to daytime working hours.

During the construction period, local, state, and county roads would experience a temporary increase in truck traffic due to deliveries of equipment and materials. A final delivery route plan and road use agreement would be developed through discussions with local officials.

Due to the low profile of the project combined with vegetation in the area, the visual impacts would be most prominent to landowners in the immediate vicinity of the facility. Through measures committed to by the Applicant, as well as the landscape and aesthetics plan recommended by the Staff, aesthetics impacts would be minimized.

The Applicant would submit a plan to decommission the solar facility. The plan would include costs to properly dispose of the project's components at the end of their useful life, plans to restore the land to original conditions, and financial instruments to fund the decommissioning of the solar facility.

Conclusion

Staff concludes that the proposed project would result in both temporary and permanent impacts to the project area and surrounding areas. Due to the nature of potential impacts to land use, cultural resources, surface water resources, wildlife, and Staff's recommended conditions to further mitigate these impacts, Staff concludes that the project, implementing the conditions set forth in this report, represents the minimum adverse environmental impact.

Recommended Findings

Staff recommends that the Board find that the proposed facility represents the minimum adverse environmental impact, and therefore complies with the requirements specified in R.C. 4906.10(A)(3), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate.

CONSIDERATIONS FOR R.C. 4906.10(A)(4)

ELECTRIC GRID

Pursuant to R.C. 4906.10(A)(4), the Board must determine that the proposed electric facilities are consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems, and that the facilities will serve the interests of electric system economy and reliability. The purpose of this section of the report is to evaluate the impact of integrating the proposed facility into the bulk power system (BPS).

The facility proposed by the Applicant is a solar photovoltaic generating facility to be located in Clermont and Brown Counties, capable of producing 80 MW. The proposed facility would interconnect the to Duke Energy's (Duke) South Bethel-Brown 69 kV line via a new 69 kV switching substation configured as a three breaker ring bus.

NERC Planning Criteria

The North American Electric Reliability Corporation (NERC) is responsible for the development and enforcement of the federal government's approved reliability standards, which are applicable to all owners, operators, and users of the BPS. As an owner, operator, and/or user of the BPS, the Applicant is subject to compliance with various NERC reliability standards. NERC reliability standards are included as part of the system evaluations conducted by PJM Interconnection, LLC (PJM).[19]

PJM

The Applicant submitted its generation interconnection request for 70 MW to PJM on February 28, 2017. PJM gave the application a queue position of AC2-088. The System Impact Study (SIS) was released by PJM in March 2017. On September 29, 2017, the Applicant requested an incremental increase of 10 MW. PJM gave this application a queue position of AD1-136. The SIS was released by PJM in January 2018.

PJM studied the interconnection as an injection into Duke's electric grid via the South Bethel-Brown 69 kV line. The Applicant requested an injection of 80 MW, of which 43.8 MW could be available in the PJM capacity market. The capacity market ensures the adequate availability of necessary generation resources can be called upon to meet current and future demand.[20, 21]

PJM Network Impacts

PJM analyzed the proposed facility interconnected to the BPS. A 2021 summer peak power flow model was used to evaluate the regional reliability impacts. The studies revealed no reliability

19. PJM Interconnection, LLC is the regional transmission organization charged with planning for upgrades and administrating the generation queue for the regional transmission system in Ohio. Generators wanting to interconnect to the bulk electric transmission system located in the PJM control area are required to submit an interconnection application for review of system impacts. The interconnection process provides for the construction of expansions and upgrades of the PJM transmission system, as needed to maintain compliance with reliability criteria with the addition of generation in its footprint.

20. PJM Interconnection, LLC, "System Impact Study, Queue Number AC2-088," accessed April 29, 2019, https://www.pjm.com/planning/services-requests.aspx.

21. PJM Interconnection, LLC, "System Impact Study, Queue Number AD1-136," accessed April 29, 2019, https://www.pjm.com/planning/services-requests.aspx.

criteria violations. The below chart displays the results of the PJM SIS for the PJM regional footprint.[22]

PJM REGIONAL SYSTEM IMPACTS (Summer Peak)	
Generator Deliverability - System Normal & Single Contingency Outage	
Plant Output: Capacity Level – 43.8 MW	No problems identified

Category C and D - Multiple Contingency Outages	
Plant Output: 80 MW	No problems identified

Contribution to Previously Identified Overloads - Network Impacts

PJM studied overloading where the proposed facility may affect earlier projects in the PJM queue. The results identified no network impacts.

Potential Congestion due to Local Energy Deliverability- Energy Delivery Impacts

PJM studied the delivery of the energy portion. Network upgrades under this section would allow for the delivery of energy with operational restrictions. The upgrades are at the discretion of the Applicant. The results identified no energy delivery impacts.

Short Circuit Analysis

The short circuit analysis study, which is part of the SIS, evaluates the interrupting capabilities of circuit breakers that would be impacted by the proposed generation addition. The results identified no circuit breaker problems.

Duke Network Impacts

Duke performed load flow analysis using a 2021 a summer peak model. Their study revealed that an in-line switch near Brown substation would overload to 102.7 percent during certain contingencies. Duke would replace the switch with a higher capacity switch and a new mounting structure near Brown substation. The cost is expected to be $200,000.

Conclusion

PJM analyzed the bulk electric system, with the Facility interconnected to the BPS, for compliance with NERC reliability standards and PJM reliability criteria. The PJM system studies indicated that no reliability violations would occur during single and multiple contingencies. In addition, no potential violations were found during the short circuit analysis.

During Duke's analysis, they found a switch would need to re replaced to correct a loading issue at summer peak.

The facility would provide additional electrical generation to the regional transmission grid, would be consistent with plans for expansion of the regional power system, and would serve the interests of electric system economy and reliability.

22. PJM Interconnection, LLC, "System Impact Study, Queue Number AD1-136," accessed April 29, 2019, https://www.pjm.com/planning/services-requests.aspx.

Recommended Findings

Staff recommends that the Board find that the proposed facility is consistent with regional plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems, and that the facility would serve the interests of electric system economy and reliability. Therefore, Staff recommends that the Board find that the facility complies with the requirements specified in R.C. 4906.10(A)(4), provided that any certificate issued by the Board for the proposed facilities include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate.

Considerations for R.C. 4906.10(A)(5)

AIR, WATER, SOLID WASTE, AND AVIATION

Pursuant to R.C. 4906.10(A)(5), the facility must comply with Ohio law regarding air and water pollution control, withdrawal of waters of the state, solid and hazardous wastes, and air navigation.

Air

Air quality permits are not required for construction or operation of the proposed facility. However, fugitive dust rules adopted under R.C. Chapter 3704 may be applicable to the construction of the proposed facility. The Applicant would control temporary and localized fugitive dust by using stabilization measures such as water and/or dust suppressant such as calcium carbonate, and temporary paving or gravel surfacing. These methods of dust control are typically used to comply with fugitive dust rules.

This project would not include any stationary sources of air emissions and, therefore, would not require air pollution control equipment.

Water

Neither construction nor operation of the proposed facility would require the use of significant amounts of water. Therefore, the requirements under R.C. 1501.33 and 1501.34 are not applicable to this project.

Although the project area is large, storm water pollution from the project's construction activities would be limited in scope. Applicant anticipates obtaining the following environmental permits. The Applicant would mitigate potential water quality impacts associated with aquatic discharges by:

- Obtaining National Pollution Discharge Elimination System (NPDES) Construction Storm Water General Permits from the Ohio EPA with submittal of a SWPPP to direct the implementation of construction related stormwater BMP.
- Pursuing the USACE Section 404 or Nationwide Permit program for stream crossings and wetland impacts.

During construction of the facility, the Applicant would hire an independent contractor to supply portable sanitary waste units. Storm water flows and dewatering discharge would be handled using velocity dissipation and sediment control, such as diversion berms and silt fence. The Applicant does not anticipate that it would need to implement a Spill Prevention, Control, and Countermeasure Plan (SPCC). Staff agrees that the requirement of an SPCC would be unlikely.

The project would not require an NPDES permit for operation of the facility, because solar panels generate electricity without water discharge. Water would be used for occasional cleaning of the solar panels a few times per year as needed.

With these measures, construction and operation of this facility would comply with requirements of R.C. Chapter 6111, and the rules and laws adopted under that chapter.

Solid Waste

The project area is located in a rural setting with very little solid waste present. During site preparation, several on-site structures would be demolished. The debris from these demolitions would be disposed of in accordance with applicable waste disposal requirements.

Debris generated from construction activities would include items such as crates, nails, boxes, containers, packing materials, damaged/unusable parts, litter, and miscellaneous debris. The Applicant stated that materials with reuse or salvage value would be removed for such use. The Applicant stated that all construction-related debris would be disposed of at a licensed municipal landfill.

Operation of the project would generate small amounts of non-hazardous solid waste, which would be reused, recycled, or disposed of in accordance with federal, state, and local requirements.

The Applicant's solid waste disposal plans would comply with solid waste disposal requirements set forth in R.C. Chapter 3734.

Aviation

The height of the tallest above ground structure, a single lightning mast located at the substation, would be approximately 70 feet.

There are no public use airports, helicopter pads, or landing strips within five miles of the project area. According to the Federal Aviation Administration, the closest public-use airport is the Brown County Airport which is just over eight miles from the proposed solar farm project. There are no private use airports or helicopter pads within or adjacent to the project area.

Because the solar farm is outside the vicinity of the Brown County Airport an aeronautical study regarding glare is not warranted (14 CFR 77.17(a)(2)).

In accordance with R.C. 4906.10(A)(5), Staff contacted the ODOT Office of Aviation during the review of this application in order to coordinate review of potential impacts of the facility on local airports. As of the date of this filing, no such concerns have been identified.

All Staff recommendations for the requirements discussed in this section can be found under the **Air, Water, Solid Waste, and Aviation Conditions** heading of the Recommended Conditions of Certificate.

Recommended Findings

Staff recommends that the Board find that the proposed facility complies with the requirements specified in R.C. 4906.10(A)(5), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate.

Considerations for R.C. 4906.10(A)(6)

PUBLIC INTEREST, CONVENIENCE, AND NECESSITY

Pursuant to R.C. 4906.10(A)(6), the Board must determine that the facility will serve the public interest, convenience, and necessity.

Safety

The Applicant stated that it would comply with safety standards applicable to commercial scale solar farms set by the National Fire Protection Association. In addition, the Applicant has indicated that it would use equipment compliant with applicable National Electrical Code and National Electrical Safety Code, and American National Standards Institute standards.

The Applicant intends to use warning signs, fencing, and locked gates to restrict access to the potential hazards within the solar project area. Additionally, the Applicant intends to design its facility with setbacks to public roads, adjacent property lines, and habitable residences.

Most construction activities would occur on private land away from roads and residences. The Applicant would work with local fire departments and other emergency responders to provide training for response to emergencies related to a solar farm. The Applicant stated that it intends to restrict public access to the facility during construction by enclosing the project area with a seven foot tall chain-link fence. The Applicant also intends to develop and implement an emergency response plan and consult with potentially affected local officials and emergency response personnel.

Public Interaction and Participation

The Applicant hosted a public informational meeting for this project. Attendees were provided the opportunity to view maps of the project, speak with representatives of the Applicant, and provide written comments.

The Applicant served copies of the complete application on the Brown and Clermont county commissioners, the Clark Township Trustees in Brown County, the Brown County Department of Economic Development, the Brown County Planning Commission, the Brown County Soil and Water Conservation District, the Tate Township Trustees in Clermont County, the Clermont County Office of Economic Development, the Clermont County Planning Commission, and the Clermont County Soil and Water Conservation District. The Applicant sent a copy of the complete application to the Brown County Library and the Clermont County Public Library. Copies of the complete application are also available for public inspection at the offices of the PUCO and on the PUCO online docketing information system website.

The Applicant has committed to notify, via mail, affected property owners and tenants who were provided notice of the public informational meeting, as well as anyone who requests updates regarding the project, no later than seven days prior to the start of construction. The Applicant stated that this notice will provide information about construction and will include the contact information of a representative who will receive complaints, concerns, or comments about the project. Staff recommends that the local officials who the Applicant served with a copy of the application receive this notice and that a similar notice be mailed to the same individuals and officials at least seven days prior to the start of facility operation.

During construction, the Applicant has committed to implementing the complaint resolution program outlined in Appendix D of its application. The Applicant proposes to update and continue to implement the complaint resolution program during facility operation.

The Administrative Law Judge scheduled a local public hearing for May 30, 2019 at 6:00 pm at Hamersville Elementary and Middle School, 1950 State Route 125, Hamersville, Ohio 45130. The adjudicatory hearing will commence on June 13, 2019 at 10:00 am in Hearing Room 11-D at the offices of the Public Utilities Commission of Ohio, 180 East Broad Street, Columbus, Ohio 43215-3793.

As of the filing of this staff report, the Board has not received any notices or petitions for leave to intervene in this case. However, the Board has received public comments from three individuals and a petition signed by 30 individuals regarding this project. The comments and the petition are available for Board members and the public to view online in the case record at http://dis.puc.state.oh.us.

All Staff recommendations for the requirements discussed in this section of the *Staff Report of Investigation* are included under the Recommended Conditions of Certificate section.

Recommended Findings

Staff recommends that the Board find that the proposed facility would serve the public interest, convenience, and necessity, and therefore complies with the requirements specified in R.C. 4906.10(A)(6), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate.

Considerations for R.C. 4906.10(A)(7)

AGRICULTURAL DISTRICTS AND AGRICULTURAL LAND

Pursuant to R.C. 4906.10(A)(7), the Board must determine the facility's impact on the agricultural viability of any land in an existing agricultural district within the project area of the proposed facility. The agricultural district program was established under R.C. Chapter 929. Agricultural district land is exempt from sewer, water, or electrical service tax assessments.

Agricultural land can be classified as an agricultural district through an application and approval process that is administered through local county auditors' offices. Eligible land must be devoted exclusively to agricultural production or be qualified for compensation under a land conservation program for the proceeding three calendar years. Furthermore, eligible land must be at least 10 acres or produce a minimum average gross annual income of $2,500.

There are approximately 2.25 acres of agricultural district land within the project area as designated by Clermont and Brown Counties that would be impacted by the construction of the proposed facility. Of the 2.25 acres of agricultural land, the Applicant proposes to temporarily disturb 0.6 acre for the purpose of installing the collector system for the project. Additionally, construction of the proposed facility would result in the loss of 464 acres of agricultural land. However, the repurposed land could be restored for agricultural use when the project is decommissioned.

Construction and, to a lesser extent, operation of the proposed facility would disturb the existing soil and could lead to broken drainage tiles. The Applicant has committed to take steps in order to address such potential impacts to farmland, including: repairing all drainage tiles damaged during construction and restoring temporarily impacted land to its original use. In order to avoid impacts to drain tiles, the Applicant stated that it would work with the landowner and research public records in an attempt to locate drain tiles as accurately as possible prior to construction.

The Applicant has also committed to promptly identify, document, and repair any drain tile damaged by the construction and operation of the project. Excavated top soil would be separated during construction and returned as topsoil after construction, unless otherwise requested by the landowner. Restored topsoil would be seeded after construction to prevent erosion.

The decommissioning plan for the proposed project calls for returning the affected land to original or similar conditions. This plan includes repairing any drainage tiles and the de-compaction of soil.

Recommended Findings

Staff recommends that the Board find that the impact of the proposed facility on the viability of existing agricultural land in an agricultural district has been determined, and therefore complies with the requirements specified in R.C. 4906.10(A)(7), provided that any certificate issued by the Board for the proposed facility include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate.

Considerations for R.C. 4906.10(A)(8)

WATER CONSERVATION PRACTICE

Pursuant to R.C. 4906.10(A)(8), the proposed facility must incorporate maximum feasible water conservation practices, considering available technology and the nature and economics of the various alternatives.

Construction of the proposed facility would not require the use of significant amounts of water. Water may be utilized for dust control during earthwork activities as needed.

Operation of the proposed facility would not require the use of significant amounts of water. Therefore, the requirements under R.C. 1501.33 and 1501.34 are not applicable to this project.

Recommended Findings

The Staff recommends that the Board find that the proposed facility would incorporate maximum feasible water conservation practices, and therefore complies with the requirements specified in R.C. 4906(A)(8). Further, the Staff recommends that any certificate issued by the Board for the certification of the proposed facility include the conditions specified in the section of this *Staff Report of Investigation* entitled Recommended Conditions of Certificate.

IV. RECOMMENDED CONDITIONS OF CERTIFICATE

Following a review of the application filed by the Nestlewood Solar I LLC, and the record compiled to date in this proceeding, Staff recommends that a number of conditions become part of any certificate issued for the proposed facility. These recommended conditions may be modified as a result of public or other input received subsequent to the issuance of this report. At this time, Staff recommends the following conditions:

GENERAL CONDITIONS

Staff recommends the following conditions to ensure conformance with the proposed plans and procedures as outlined in the case record to date, and to ensure compliance with all conditions listed in this Staff Report:

(1) The Applicant shall install the facility, utilize equipment and construction practices, and implement mitigation measures as described in the application and as modified and/or clarified in supplemental filings, replies to data requests, and recommendations in this *Staff Report of Investigation*.

(2) The Applicant shall conduct a preconstruction conference prior to the commencement of any construction activities. Staff, the Applicant, and representatives of the primary contractor and all subcontractors for the project shall attend the preconstruction conference. The conference shall include a presentation of the measures to be taken by the Applicant and contractors to ensure compliance with all conditions of the certificate, and discussion of the procedures for on-site investigations by Staff during construction. Prior to the conference, the Applicant shall provide a proposed conference agenda for Staff review. The Applicant may conduct separate preconstruction conferences for each stage of construction.

(3) The Applicant shall submit one set of detailed engineering drawings of the final project design to Staff at least 30 days before the preconstruction conference. This final design shall include all conditions of the certificate and references at the locations where the Applicant and/or its contractors must adhere to a specific condition in order to comply with the certificate. The final project layout shall be provided in hard copy and as geographically-referenced electronic data.

(4) If any changes to the project layout are made after the submission of final engineering drawings, the Applicant shall provide all such changes to Staff in hard copy and as geographically-referenced electronic data. All changes are subject to Staff review to ensure compliance with all conditions of the certificate, prior to construction in those areas.

(5) Within 60 days after the commencement of commercial operation, the Applicant shall submit to Staff a copy of the as-built specifications for the entire facility. If the Applicant demonstrates that good cause prevents it from submitting a copy of the as-built specifications for the entire facility within 60 days after commencement of commercial operation, it may request an extension of time for the filing of such as-built specifications. The Applicant shall use reasonable efforts to provide as-built drawings in both hard copy and as geographically referenced electronic data.

(6) The certificate shall become invalid if the Applicant has not commenced a continuous course of construction of the proposed facility within five years of the date of journalization of the certificate, unless the Board grants a waiver or extension of time.

(7) As the information becomes known, the Applicant shall file in this proceeding the date on which construction will begin, the date on which construction was completed, and the date on which the facility begins commercial operation.

(8) Prior to the commencement of construction activities in areas that require permits or authorizations by federal or state laws and regulations, the Applicant shall obtain and comply with such permits or authorizations. The Applicant shall provide copies of permits and authorizations, including all supporting documentation, to Staff within seven days of issuance or receipt by the Applicant. The Applicant shall provide a schedule of construction activities and acquisition of corresponding permits for each activity at the preconstruction conference.

(9) The Applicant shall not commence any construction of the facility until it has as executed an Interconnection Service Agreement and Interconnection Construction Service Agreement with PJM Interconnection, which includes construction, operation, and maintenance of system upgrades necessary to integrate the proposed generating facility into the regional transmission system reliably and safely. The Applicant shall docket in the case record a letter stating that the Agreement has been signed or a copy of the executed Interconnection Service Agreement and Interconnection Construction Service Agreement.

SOCIOECONOMIC CONDITIONS

Staff recommends the following conditions to address the impacts discussed in the **Socioeconomic Impacts** section of the Nature of Probable Environmental Impact:

(10) 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. Monday through Friday; hoe ram and blasting 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.

(11) Prior to the commencement of construction, the Applicant shall prepare a Phase I cultural resources survey program for the project area in conjunction with Staff and the Ohio Historic Preservation Office (OHPO). If the resulting survey work discloses a find of cultural, archaeological, or architectural significance, or a site that could be eligible for inclusion on the National Register of Historic Places, then the Applicant shall submit a modification, or mitigation plan detailing how such site(s) will be avoided or impacts minimized. Any such mitigation effort, if needed, shall be developed in coordination with the OHPO and submitted to Staff for review and acceptance.

(12) Prior to the commencement of construction, the Applicant shall prepare a landscape and lighting plan that addresses the aesthetic and lighting impacts of the facility where an adjacent non-participating parcel contains a residence with a direct line of sight to the project area. The plan shall include measures such as alternate fencing, vegetative screening, good neighbor agreements, or other measures subject to staff review. The Applicant shall provide the plan to Staff for review and confirmation that it complies with this condition.

(13) At least 30 days before the preconstruction conference, the Applicant shall provide Staff with a copy of its public information program that informs affected property owners and tenants, as well as local officials, about the nature of the project; provides contact information for personnel who are familiar with the project and can respond to questions, comments, and complaints; and outlines the proposed timeline for project construction, restoration activities, and operation.

(14) At least 30 days before the commencement of commercial operation, the Applicant shall provide Staff with a copy of an updated complaint resolution program for use during facility operation.

(15) At least seven days prior to the commencement of construction, the Applicant shall notify, via mail, affected property owners and tenants who were provided notice of the public informational meeting and local public hearing, local officials who received a copy of the application, residences located within 1 mile of construction activities, and anyone who has requested updates regarding the project. This notice shall include a timeline for project construction and restoration activities, and facility operation; a copy of the complaint resolution program; and contact information for personnel who are familiar with the project and can respond to questions, comments, and complaints.

(16) At least seven days prior to the commencement of commercial operation, the Applicant shall notify via mail affected property owners and tenants who were provided notice of the public informational meeting and local public hearing, local officials who received a copy of the application, residences located within 1 mile of the facility, and anyone who has requested updates regarding the project. This notice shall provide information about the start of operation and any remaining restoration activities; a copy of the complaint resolution program; and contact information for personnel who are familiar with the facility and can respond to questions, comments, and complaints.

(17) During 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 through the fifth year of operation. The report should include a list of all complaints received through the Applicant's complaint resolution procedure, a description of the actions taken toward a resolution of each complaint, and a status update if the complaint has yet to be resolved.

(18) The Applicant shall avoid, where possible, or minimize to the extent practicable, any damage to functioning field tile drainage systems and soils resulting from the construction, operation, and/or maintenance of the facility in agricultural areas. Damaged field tile systems shall be promptly repaired to at least original conditions or modern equivalent at the Applicant’s expense. If the affected landowner agrees to not

having the field tile system repaired, they may do so only if the field tile systems of adjacent landowners is unaffected by the non-repair of the landowner's field tile system.

(19) Within 30 days after issuance or receipt, the Applicant shall provide Staff a copy of any arrangement or resulting resolution adopted by Brown or Clermont county relating to the Payment in Lieu of Taxes (PILOT) program.

ECOLOGICAL CONDITIONS

Staff recommends the following conditions to address the impacts discussed in the **Ecological Impacts** section of the Nature of Probable Environmental Impact:

(20) The Applicant shall use horizontal directional drilling or other boring techniques to avoid in-water work in perennial streams.

(21) Prior to the use of horizontal directional drilling, the Applicant shall provide a frac-out contingency plan detailing monitoring, environmental specialist presence, containment measures, cleanup, and restoration.

(22) The Applicant shall adhere to seasonal cutting dates of October 1 through March 31 for the removal of trees three inches or greater in diameter to avoid impacts to Indiana bats and northern long-eared bats, unless coordination with the Ohio Department of Natural Resources (ODNR) and the U.S. Fish and Wildlife Service (USFWS) allows a different course of action.

(23) Construction in northern harrier preferred nesting habitat types shall be avoided during the species' nesting period of May 15 through August 1, unless coordination with the ODNR allow a different course of action.

(24) The Applicant shall complete further coordination with the ODNR regarding the Kirkland's snake, including additional presence/absence surveys in identified habitat areas which would be impacted, to assure impacts are avoided.

(25) Prior to any in-water work, the Applicant shall provide information to Staff and the ODNR indicating that no mussel impacts would occur at stream crossings. If this is not possible, then the appropriate survey(s) shall be performed in coordination with the ODNR and Staff. If mussels found in the project area cannot be avoided, a professional malacologist shall collect and relocate the mussels to suitable and similar habitat. All surveys, assessments, and relocation plans shall be completed in accordance with the Ohio Mussel Survey Protocol and provided to Staff and the ODNR for review to ensure compliance with this recommendation.

(26) The Applicant shall have an environmental specialist on site during construction activities that may affect sensitive areas as shown on the Applicant's final approved construction plan as approved by Staff. Sensitive areas include, but are not limited to, areas of vegetation clearing, designated wetlands and streams, and locations of threatened or endangered species or their identified habitat. 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.

(27) The Applicant shall contact Staff, the ODNR, and the USFWS within 24 hours if state or federal listed species are encountered during construction activities. Construction activities that could adversely impact the identified plants or animals shall be immediately halted until an appropriate course of action has been agreed upon by the Applicant, Staff and the appropriate agencies.

(28) Prior to the preconstruction conference, the Applicant shall submit a vegetation management plan to Staff for review and confirmation that it complies with this condition. The plan would identify all areas of proposed vegetation clearing for the project, specifying the extent of the clearing, and describing how such clearing work would be done as to minimize removal of woody vegetation. The plan shall describe how trees and shrubs along access routes, at construction staging areas, during maintenance operations, and in proximity to any other project facilities would be protected from damage. The plan shall also describe the implementation and maintenance of pollinator-friendly plantings and describe any planned herbicide use.

PUBLIC SERVICES, FACILITIES, AND SAFETY CONDITIONS

Staff recommends the following conditions to address the impacts discussed in the **Public Services, Facilities, and Safety** section of the Nature of Probable Environmental Impact:

(29) Prior to commencement of construction activities that require transportation permits, the Applicant shall obtain all such permits. The Applicant shall coordinate with the appropriate authority regarding any temporary road closures, lane closures, road access restrictions, and traffic control necessary for construction and operation of the proposed facility. Coordination shall include, but not be limited to, the county engineer, the Ohio Department of Transportation, local law enforcement, and health and safety officials. The Applicant shall detail this coordination as part of a final traffic plan submitted to Staff prior to the preconstruction conference for review and confirmation by Staff that it complies with this condition.

(30) The Applicant shall provide the Board's Staff a copy of the transportation management plan and any road use agreement(s) 30 days prior to the preconstruction conference.

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Summary: Staff Report of Investigation electronically filed by Mr. Matt Butler on behalf of Staff of OPSB