

Staff Report of Investigation

Clearview Solar I, LLC Project
Clearview Solar I, LLC

Case No. 20-1362-EL-BGN

May 24, 2021



Mike DeWine, Governor | **Jenifer French**, Chair

In the Matter of the Application of)
Clearview Solar I, LLC for a Certificate) **Case No. 20-1362-EL-BGN**
of Environmental Compatibility and Public Need)

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)
Clearview Solar I, LLC for a Certificate) **Case No. 20-1362-EL-BGN**
of Environmental Compatibility and Public Need)

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

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, and the U.S. Army Corps of Engineers.

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 to be 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,



Theresa White
Executive Director
Ohio Power Siting Board

TABLE OF CONTENTS

I. POWERS AND DUTIES.....	1
Ohio Power Siting Board	1
Nature of Investigation.....	1
Criteria	3
II. APPLICATION.....	4
Applicant	4
History of the Application.....	4
Project Description	4
Project Map	8
III. CONSIDERATIONS AND RECOMMENDED FINDINGS	9
Basis of Need.....	9
Nature of Probable Environmental Impact.....	10
Minimum Adverse Environmental Impact.....	27
Electric Grid	30
Air, Water, Solid Waste, and Aviation	33
Public Interest, Convenience, and Necessity.....	35
Agricultural Districts and Agricultural Land	38
Water Conservation Practice	39
IV. RECOMMENDED CONDITIONS OF CERTIFICATE	40

I. POWERS AND DUTIES

OHIO POWER SITING BOARD

The authority of the Ohio Power Siting Board (Board or OPSB) 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 five MW or greater but less than 50 MW. R.C. 4906.13 excludes from economically significant wind farms, one or more wind turbines and associated facilities that are primarily dedicated to providing electricity to a single customer at a single location and that are designed for, or capable of, operation at an aggregate capacity of less than 20 MW, measured at the customer's point of interconnection (POI) to the electrical grid.

Membership of the Board is specified in R.C. 4906.02(A). The voting members include: the Chair of the Public Utilities Commission of Ohio (PUCO or Commission) who serves as Chair 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

1. R.C. 4906.04 and 4906.20.

2. R.C. 4906.06(A) and 4906.20(B)(1).

Within 60 days of receiving an application, the Chair 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 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 Chair will also cause each application to be investigated and a report published by the Board's Staff (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 any time.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

3. Ohio Adm.Code 4906-3-06(A).

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).

30 days an application for rehearing.¹⁴ An entry on rehearing would then be issued by the Board within 30 days and may be appealed within 60 days to the Supreme Court of Ohio.¹⁵

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 section 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.

¹⁴ R.C. 4903.10 and 4906.12.

¹⁵ R.C. 4903.11, 4903.12, and 4906.12.

II. APPLICATION

APPLICANT

Clearview Solar, LLC (Applicant) is owned by Clean Planet Renewable Energy, which is a joint venture partnership between MAP Energy, Inc. and Open Road Renewables, LLC (individually referenced as MAP and Open Road, respectively, but together, the Partners). MAP Energy, Inc. is a private renewable energy investment firm with a portfolio consisting of 11,000 MWs of operating wind and solar projects. Open Road Renewables, LLC develops utility scale solar projects and is responsible for several operating renewable energy projects within the PJM Interconnection, LLC (PJM) footprint. The Partners have had several other projects pending before or approved by the OPSB (Alamo Solar, LLC, Willowbrook Solar, LLC, and Angelina Solar, LLC).

HISTORY OF THE APPLICATION

On August 7, 2020, the Applicant filed a motion for waiver and request for approval to hold an alternative public informational meeting. The motion was later granted.

On September 17, 2020, the Applicant filed a pre-application notification letter regarding the project.

On October 6, 2020 and October 8, 2020, the Applicant held public informational meetings for the project.

On December 18, 2020, the Applicant filed the application for this project as well as a motion for waiver of certain Board rules. The motion was later granted.

On February 16, 2021, the Executive Director of the OPSB issued a letter of compliance regarding the application to the Applicant.

On March 12, 2021, the Champaign County Board of Commissioners filed a motion to intervene in this case.

On April 27, 2021, the Ohio Farm Bureau Federation filed a motion to intervene in this case.

A local public hearing has been scheduled for June 8, 2021, at 6:00 p.m.

The evidentiary hearing is scheduled to commence on July 1, 2021, at 10:00 a.m.

This summary of the history of the application does not include every filing in case number 20-1362-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 construct the Clearview Solar Project, a 144 MW solar-powered generating facility in Adams Township, Champaign County. The project would consist of large arrays of photovoltaic (PV) modules, commonly referred to as solar panels, ground-mounted on a tracking rack system. The project would occupy approximately 1,075 acres within an approximate 1,195-acre project area comprised of private land secured by the Applicant through agreements

with the landowners. The project would include associated facilities such as access roads, underground electric collection lines, weather stations, inverters, and transformers, a collection substation, and a 138 kV generation interconnection (gen-tie) electric transmission line. The project would be secured by perimeter fencing which would be six-feet tall and accessed through gated entrances. The Applicant would ensure that solar modules are setback a minimum of 150 feet from adjacent non-participating residences, and at least 25 feet from both non-participating property lines and public roads.

Solar Panels and Racking

The solar panels would be attached to metal racking. The racking would include steel piles driven approximately five to 10 feet into the ground. PV modules have not yet been procured for the project.¹⁶ All of the PV modules under consideration meet International Electrotechnical Commission (IEC) 61730 which requires the module to provide safe electrical and mechanical operation and are designed for the prevention of electrical shock, fire hazards, and personal injury due to mechanical and environmental stresses and IEC 61215 which requires that the modules pass tests to determine the electrical and thermal characteristics of the module and to show, as far as possible within reasonable constraints of cost and time, that the module is capable of withstanding prolonged exposure in general open-air climates. The Applicant anticipates that the facility would be comprised of 325 to 480-watt panels. Depending on the module selected, the facility would include somewhere between 360,000 to 620,308 panels. The solar panel arrays would be grouped in large clusters that would be fenced in with gated entrances and electronic security systems. The highest point of each module would be approximately 15 feet. The project's arrays would be mounted on a single-axis tracking system to track the sun as it moves through the sky each day.

Collection 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 solar arrays to a central location. Some portions of the collector system would be buried while others would be above ground.

The underground lines would be installed by direct burial method or horizontal directional drilling (HDD). The below grade portion of the collector system would be buried at least 36 inches. 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 inverter¹⁷, 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. This would be housed in a power conversion station mounted on a concrete foundation.

16. Current solar panel technology are one of two basic types: crystalline or thin-film. Crystalline modules are silicon-based. Thin-film modules use several alternative semi-conducting compositions (such as cadmium telluride or copper indium gallium selenide). When the selected panel is a thin-film module, the panels typically contain only exceedingly small amounts of potentially hazardous materials, all of which are safely encased in polymer and tempered glass within an aluminum frame.

17. The Applicant proposes to use the SMA SC4600-UP inverter.

Collection Substation and 138 kV Gen-tie Transmission Line

The facility collection substation would occupy approximately 1.1 acres of land under an existing transmission line along Champaign-Logan Road approximately a half mile east of the intersection with Snapptown Road. The major components of the Applicant's collection substation would include a 138 kV dead end support structure tie-in, 34.5 kV bus, main power transformers, a high-voltage breaker, disconnect switches, an equipment enclosure, and lighting masts.

The Applicant has proposed a short 138kV gen-tie transmission line that would connect the Applicant's substation to a future Dayton Power and Light Company's (DP&L) substation (Utility Substation). The Applicant expects that the gen-tie would be up to 200 feet in length. The gen-tie line would have a self-supporting 25-foot tall dead-end steel structure located at the Utility Substation and then the gen-tie would connect to equipment at the Utility Substation. The Utility Substation will be the subject of a future separate application to the OPSB.

The collection substation is shown on the map in this report.

Roads

The Applicant proposes to construct new access roads for construction, operation, and maintenance of the solar facility. The access roads would be up to 25 feet wide during construction. After construction, the finished access roads would be approximately 16 feet in width.

Construction Laydown Area

The Applicant proposes to use approximately five to seven construction laydown areas with a collective acreage of 10.3 acres. The laydown areas would be utilized for material and equipment storage, construction parking, and construction trailers.

Lighting

Lighting would be installed at the inverters, substation, supervisory control and data acquisition (SCADA) structure, and at project access points. The Applicant indicates that lighting design would be limited to what is necessary for safe and secure operations. The Applicant indicates that motion-activated lighting would be used only when needed.

SCADA

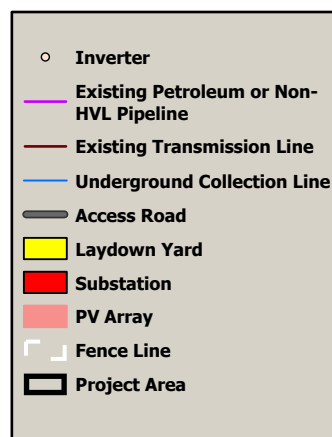
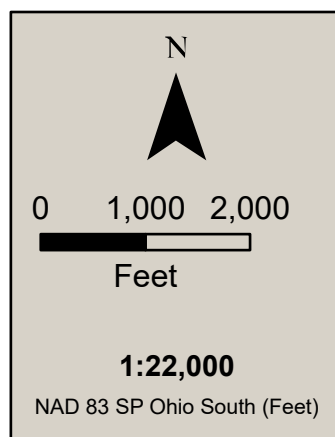
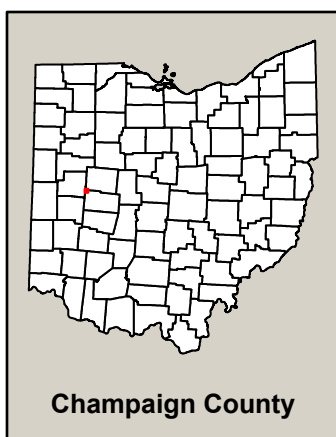
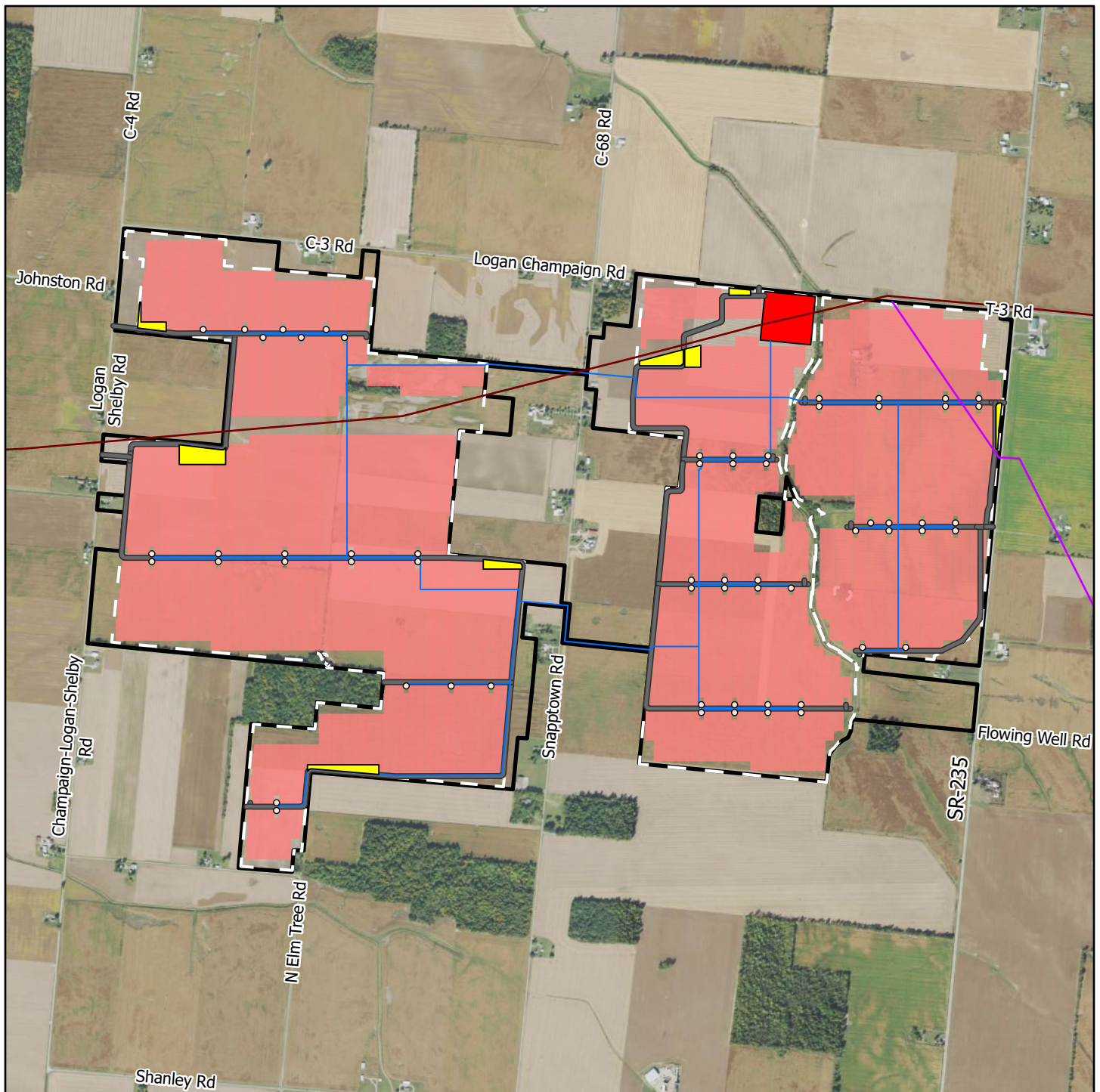
A structure would be located at the substation facility to shelter the SCADA equipment. A SCADA system includes computers and communication equipment which would be used to remotely monitor the status of the solar facility. The structure's purpose would be solely devoted to housing the SCADA equipment. It would have electricity but no water or septic service.

Weather Stations

The project would include up to six weather stations. These stations contain devices to measure solar irradiance, barometric pressure, rain gauge, temperature (i.e. thermometers), and wind speed. Solar irradiance is the amount of solar energy per square meter received from the sun. The weather stations would measure wind speed to ensure the solar panels can withstand wind speed in the area and, when wind speeds become too high, the racking systems include a stowing feature that activate to tilt the panels to a certain angle to reduce wind loading on the solar panels. These stations would also contain communications equipment.

Project Schedule

The Applicant expects to finalize the interconnection agreement in mid-2021. Construction would start near the end of 2021 and would last most of the following year. Construction is expected to be completed and the solar facility placed in service by the end of 2022. The Applicant stated that delays to this timeline could impact project financing, including the Applicant's ability to procure PV modules and facility components. Further, delays may push the in-service date back, causing significant financial burden, according to the Applicant.



Overview Map

20-1362-EL-BGN

Clearview Solar

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.

III. CONSIDERATIONS AND RECOMMENDED FINDINGS

In the Matter of the Application of Clearview Solar I, LLC for a Certificate of Environmental Compatibility and Public Need, 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. 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

Regional Planning

The Applicant identified a comprehensive plan for Champaign county. This county plan promotes preservation of farmland resources, protection of water quality, economic growth, land use decisions leading to preservation and protection of the County's natural resources, rural character, and small-town atmosphere. Staff agrees with the Applicant's analysis that the solar facility is not expected to conflict with these land use plans, due to the manner in which the Applicant proposes to mitigate impacts as well as the conditions Staff recommends herein. The proposed solar facility would also be expected to aid regional development by increasing local tax revenues.

The project is consistent with agricultural industry support, in that the facility would provide supplemental income to farmers and the land could be returned to agricultural production upon decommissioning. Farming activities would require only minor modifications, aside from temporary disruptions that would occur during construction.

Land Use

The predominant land use within the project area is agriculture. The Applicant states that all impacts from construction and operation of the facility would occur on agricultural land. About 1,164 acres of agricultural land would be converted to solar and ancillary uses. Significant impacts to residential, commercial, industrial, recreational, and institutional land uses are not anticipated, and surrounding agricultural land use would continue with minimal disruption.

Recreation

Construction and operation of the facility would not physically impact any recreational areas. The Applicant identified 13 recreational areas within five miles of the project area. According to the Applicant's visual impact study, for 11 of these recreation areas, visibility of the facility is not anticipated. The project area is anticipated to be visible from some edges of the Thompson Nature Preserve and Floyd Finrock City Park. Staff's review of the Applicant's viewshed analysis determined that significant adverse aesthetic impacts are not likely.

Aesthetics

Aesthetic impacts and considerations are always measured against the surrounding land use features and potential viewers' subjective opinions. The rural nature of the project vicinity limits the number of potential viewers. Transportation corridors typically are smaller and much more lightly traveled, which reduces the number of viewing impacts. Existing woodlots are also able to offer additional natural screening. The project area predominantly consists of agricultural land. Traffic volume on roads throughout the project area is typically light, thus abating the potential number of viewers.

The solar panels would be installed approximately 15 feet above ground level. Based on the results of the Applicant's five-mile visual resources report, the solar panels would not likely be visible at most locations beyond 1.5 miles of the perimeter of the project. Existing landscape features limit likely concentration of viewshed impacts to a half-mile.

Staff reviewed the Applicant's visual impact analysis, which includes proposed mitigation in the form of vegetative screening at selected areas around the project site. The Applicant's landscape mitigation plan proposes the installation of various planting modules along the facility fence line to soften viewshed impacts and to blend the facility into the existing vegetation. The Applicant's landscape mitigation plan would provide for the installation of numerous plant species that would vary in height and variety, as determined by the current location of sensitive receptors (such as non-participating residential structures) that are adjacent to the proposed facility. In addition to vegetative screening mitigation measures, Staff is concerned about aesthetic impacts related to the project's perimeter fencing. Given the rural setting of the project, it is Staff's opinion that fencing options such as *deer fences* and wooden fences would best fit in the project area. With implementation of Staff's landscape and lighting and fencing conditions, and the details provided in the programmatic agreement executed by the Applicant and OHPO on March 18, 2021 (and discussed below) the overall expected aesthetic impact would be minimal.

Cultural Resources

The Applicant enlisted a consultant to gather background information and complete a cultural resources literature review for a two-mile radius around the project. This review initially was based on data provided by the OHPO's online geographic information system mapping, Ohio Historic Inventory, the Ohio Archaeological Inventory, and National Register of Historic Places (NRHP) files. The Applicant also obtained information on historic cemeteries from the Ohio Genealogical Society.

The Applicant's historical survey initially identified 47 potential historic resources. The Applicant worked with OPHO to develop a survey plan for historical resources. Of the 47 potential historic resources, 41 were previously recorded in the Ohio Historical Inventory, four were Ohio Genealogical Society cemeteries, and two were newly discovered resources. On December 8, 2020, concurrence of the results of the historical survey were received from OHPO, which states that the planned work, if completed as proposed, would have no adverse effects on historic properties.

The Applicant worked with OPHO to develop a survey plan for archaeological resources. On October 23, 2020, concurrence of the results of the archaeological survey were received from OHPO. Of the archaeological resources survey that has been completed, at least one site will be recommended for avoidance based on potential eligibility for the NRHP.

On March 19, 2021, the Applicant entered into a programmatic agreement with OHPO, in which the Applicant agreed to avoid adverse effects on cultural resources. However, the Applicant's May 3, 2021 response to data requests indicates that 150 acres of potential archaeological resources remain to be surveyed. Of the archaeological resources survey that has been completed at least one site will be recommended for avoidance based on potential eligibility for the NRHP. The Applicant states the 150 acres of potential archaeological resources left to be surveyed was delayed because the owners of the land to be surveyed use "no-till" cultivation methods on these acres that precluded a pedestrian survey in the spring of 2021." Staff notes there are several methods to

survey no-till land and recommends the Applicant pursue alternative methods to complete the archaeological survey.¹⁸

In accordance with the ability to review applications effectively, it is necessary for Staff to evaluate the results of all cultural resource field work in a timely manner, prior to application completeness. As noted in the February 16, 2021 Staff completeness letter, in the absence of this information, Staff cannot opine on the potential impacts proposed to a given area of the project. Therefore, Staff recommends that the Board exclude these 150 acres from the certificated project area. Additionally, prior to filing an amendment or other filing for the Board's consideration on this 150 acre area, Staff recommends the Applicant: (1) complete all steps in the programmatic agreement to survey the 150 acre area; (2) receive OHPO concurrence on the results of the survey; and (3) comply with avoidance measures for any identified archaeological resources.¹⁹

In consideration of the terms of the programmatic agreement and Staff's condition, Staff has determined that minimal adverse environmental impacts to cultural resources would be achieved.

Economic Impact

The Applicant states that it would own all the assets that comprise the project but will contract the construction and operation of the solar facility to third parties. The Applicant currently possesses over 90 percent of the landowner agreements within the proposed project area. These agreements will not alter the ownership status of the properties within the proposed project area; however, the Applicant has the option to purchase specific properties as detailed in the application.

Total cost comparisons between the proposed facility and other comparable facilities are to be provided in the application. The Applicant referenced Lazard's Levelized Cost of Energy Analysis (2020) which states that the average capital costs for thin-film and crystalline utility scale solar PV projects range between \$825 to \$975 per kilowatt (kW) and that Applicant's costs would be within this range. Also, recent solar PV projects of comparable scale undertaken by the Partner's report average capital costs of \$925/kW. Staff verified the Applicant's assertion that the reported average cost of similar facilities is not substantially different from Applicant's estimated costs for the proposed facility and that the reported average cost of the Partner's similar facilities is not substantially different from Applicant's estimated costs for the proposed facility.

Operations and Maintenance (O&M) expense comparisons between the proposed facility and other comparable facilities are to be provided in the application. The Applicant referenced a 2016 report written by the Department of Energy's National Renewable Energy Laboratory (NREL) that predicted O&M costs for utility scale solar in 2020 to be approximately \$8/kW-year. It is written in the application that projects undertaken by the Partner's in other states in the mid-Atlantic region report O&M costs of \$10-13/kW. The Applicant states that the O&M costs for the proposed project are expected to be \$9/kW in the first year of operations and increase at a rate of approximately two percent annually.

18. Such alternate methods to survey no-till land include vertical tillage, geophysical survey, shovel testing and/or any mitigation of conventional survey.

19. If significant archaeological resources are identified and avoidance is not feasible, the Applicant will work with OHPO to develop a minimization/mitigation plan to be memorialized in a Memorandum of Understanding (MOU). The MOU may include archaeological data recovery, development of an unanticipated discovery plan, and/or archaeological monitoring during construction, to be determined in consultation with OHPO.

The Applicant provided its estimates of the cost of delays in permitting and construction of the proposed facility. The Applicant characterized permitting stage delay costs as being associated with the time value of delayed revenue payments and that these delays could cost the Applicant one million dollars 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.

The Partners retained the services of the Economics Center of the University of Cincinnati to report on the economic impact of the Clearview Solar project.²⁰ The Economics Center used the NREL Jobs and Economic Development Impact (JEDI) model, multipliers from Bureau of Economic Analysis' (BEA) Regional Industrial Multiplier System (RIMS II), as well as data from the Ohio Department of Taxation, to estimate the economic impact of the construction and operation of the solar facility. Staff verified that the methodology of the JEDI model and RIMS II multipliers were appropriate for this study. Staff believes that the estimated impacts reported by the Applicant are reasonable.

In this model, "jobs" are comprised of direct (on-site), indirect (supply-chain labor) employment, and induced (through spending by persons in first two categories). "Earnings" are comprised of direct wages, indirect wages, and induced. "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 the Economics Center, the Clearview Solar project is expected to have the following impacts:

Jobs

- Between 737 and 3,312 construction related jobs for the state of Ohio
- Between nine and 13 long-term operational jobs for the state of Ohio

Earnings

- Between \$46 million and \$170.7 million in local earnings during construction for the state of Ohio
- Between \$348,000 and \$399,000 in annual earnings during facility operations for the state of Ohio

Output

- Between \$50.2 million and \$277.4 million in local output during construction for the state of Ohio
- Between \$402,000 million and \$2.6 million in local annual output during facility operation for the state of Ohio.

The Clearview Solar project would generate an estimated \$1.3 million annually for the Champaign County taxing districts. This estimate is based on a potential Payment in Lieu of Taxes (PILOT) plan in which the Partners would pay \$7000/MW annually for a 144 MW facility plus an additional

²⁰The Economics Center has been a part of the University of Cincinnati since 1977 and provides economic impact analysis for non-profit organizations, government agencies, and corporate stakeholders.

\$288,000 to the Champaign County General Fund. At this time, the Applicant has not come to terms on a potential PILOT agreement with Champaign County.

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(s) could be a brief reduction in visibility, afterimage, a safety risk to pilots, or a perceived nuisance to neighbors.

Solar panels are designed to absorb as much sunlight as possible with minimal reflectivity. The Applicant's consultant conducted a glint and glare analysis to identify any potential impacts along local roads and nearby residents.²¹ To perform the analysis of glare, the Applicant's consultant uses the ForgeSolar PV Planning and Glare Analysis model, formerly known as the Solar Glare Hazard Analysis Tool (SGHAT) which was developed by Sandia National Laboratories to analyze potential glare at sensitive receptor locations. This software is commonly used by solar facility developers to determine the effect of solar glare. The Applicant found that glare from the project is not predicted to impact drivers along the local roads and nearby residences. Staff agrees with the study results. Staff notes that aesthetic impact mitigation measures that include vegetative plantings may also further reduce potential impacts as part of a landscape and lighting plan, which Staff has recommended for this project.

Blasting Activities

Based on its preliminary geotechnical investigations, the Applicant believes that bedrock is well below any proposed/anticipated construction activity. The Applicant anticipates that any rock-breaking activities are expected to be minimal and limited. The ODNR has analyzed the project area as well and indicates that the entire project area is covered by high concentration of surface boulders which can impede shallow trenches and excavations within the project area. To the extent possible, the Applicant would avoid encounters with rocks. The Applicant also stated that it can avoid those areas with significant rock, because the project has some excess acreage available. In the unlikely situation where the Applicant encounters rock that cannot be avoided by altering the equipment location (i.e. micro-siting). The Applicant would use the following construction methods to break the rock: a hoe ram, stand-alone rock breaker equipment, or rock breaker attachments for an excavator. However, if the Applicant has exhausted these techniques construction may require blasting activities. In order for Staff to determine the impact from this potential blasting activity, Staff requested a map indicating where the most likely locations for blasting activities would occur and its draft or example blasting plan. The Applicant did not provide these. Without those items at this time, Staff is unable to determine that the nature of the environmental impact from blasting is minimal, pursuant to R.C. 4906.10(A)(3). Staff recommends that the Applicant shall not utilize blasting to construct the solar facility.

Existing Petroleum or Non-Highly Volatile Liquids (HVL) Pipelines

There are two existing pipelines in the northeast section of the solar facility's project area. The parallel pipelines share a common easement which is shown in the map of this report and Figure 1 of the application. The Applicant has begun discussions with the pipeline owners/operators to determine their guidelines and requirements for construction on and near the pipeline easement.

21. Clearview Solar I, LLC's First Supplemental Response to First Data Request from Staff.

The pipeline easement is jointly owned by Sunoco Pipeline and Energy Transfer Partners with a right-of-way of 50 feet. The pipelines are categorized as non-HVL high pressure petroleum products pipelines. The Applicant indicated that after issuance of a certificate, the precise location of the right-of-way pipeline easement would be determined and confirmed by the Applicant through survey and title work research in conjunction with its engineering, procurement, and construction contractor.

The Applicant stated that for construction and operation of the solar facility, when work is to be done in the pipeline right-of-way, the Applicant will adhere to Energy Transfer Partner's "General Guidelines for Third Party Construction or Maintenance Activities" (Guidelines) and applicable construction and safety standards.²² Staff has reviewed the Guidelines. Staff notes that the Guidelines require: an encroachment agreement; insurance coverage; that crossing of pipelines with equipment may require an engineering study; that crossing of pipelines with equipment may require timber mats, bridges, or other protective material; that any HDD under the pipeline requires a minimum 60 inches of clearance from the pipeline; maintenance and non-interference with the pipeline's cathodic protection system; proper shielding of the underground electric cable; setbacks for blasting near the pipeline; and a prior blast plan impact analysis. Staff notes that the PV foundation supports proposed, i.e. metal driven piles, cannot be placed within the pipeline easement. Also, Staff notes that heavy equipment cannot cross the pipeline easement without proper authorization from the pipeline owner as outlined in the Guidelines. Staff does note however that the underground electric collection system may cross underneath the pipeline easement with adherence to the Guidelines and proper authorization from the pipeline owners.

Staff recommends that at least 60 days prior to the preconstruction conference, the Applicant submit a refined solar facility layout that shows the pipeline easement and right-of-way, the Applicant's setback of solar panels and inverters to that pipeline easement and right-of-way, the access roads to avoid crossing the pipeline easement, the location of the underground electric collection system within the pipeline easement, and the method for installing the underground electric collection system within the pipeline easement. Staff also recommends that at least 60 days prior to the preconstruction conference, the Applicant submit a document indicating that it has met or addressed notable points from the Guidelines, specifically: obtained an encroachment agreement; insurance coverage; conducted an engineering study for crossing of pipelines with equipment; will use timber mats, bridges, or other protective material to cross the pipeline during construction; will meet or exceeded minimum HDD pipeline clearance of 60 inches from the pipeline; established non-interference with the pipeline's cathodic protection system; will utilize proper shielding of the underground electric cable; will comply with setbacks for blasting near the pipeline, due to its compliance with Staff's recommended condition that it not utilize blasting for the project; and conducted a prior blast plan impact analysis. Lastly, Staff recommends that the Applicant denote pipeline easements on the final engineering drawings and install construction fence along the pipeline easement so that the pipeline easement is avoided during construction.

Decommissioning

The Applicant holds land rights to and estimates that the solar facility can operate for 30 years or more. The Applicant has prepared a decommissioning plan and total decommissioning cost

22. Clearview Solar I, LLC's Supplemental Responses to the Second and Fourth Data Requests from Staff of the OPSB, Attachment 2.

estimate of \$12,340,325.²³ Staff has reviewed that decommissioning plan. According to the Applicant's plan, at the end of the useful life of the facility, the solar facility will be decommissioned, and the land be returned to its current use as agricultural land use or the specific agricultural use desired by the landowner. Prior to the start of any decommissioning activities, the Applicant would obtain applicable federal, state, and local permits. The Applicant will remove all solar components constructed above ground with few exceptions. The Applicant may leave in place any electrical lines that will not impact the restored use and are greater than 36 inches below-grade. Access roads, at landowner request, will be left in place. The Applicant will restore the land significantly to its original topography to allow for resumption of the pre-construction agricultural land use. The Applicant stated that it anticipates decommissioning activities and restoration, which is often weather dependent, to occur over a 6.5-month period. Based on the weather dependent nature of site restoration, Staff recommends that the updated decommissioning plan include a requirement to monitor the site to ensure successful revegetation and rehabilitation.

The Applicant states it will repurpose, salvage, recycle or haul offsite to a licensed solid waste disposal facility all solar components. Some of those solar components are anticipated to have a resale or salvage value and would be sold to offset the decommissioning cost. Those salvageable items typically are solar modules, tracking system, steel piles, inverters, and transformers. The Applicant is considering panels that have been certified to comply with the US EPA's toxicity characteristics leachate procedure (TCLP) test and meet US EPA definition of non-hazardous waste. The Applicant stated it will ensure that panels, if required to be landfilled, meet all disposal requirements. Also, Staff has found and the Applicant noted that many solar panel manufacturers have programs or are developing programs to accept panels back to their manufacturing facility to recycle and reuse most of the components.

The Applicant will obtain all required approvals and necessary permits prior to the start of decommissioning. The decommissioning sequence consists of but is not limited to removal of panels; package the panels for resale/recycling/disposal; dismantling and removal of electrical equipment, inverters, racking, and fencing; demolition of substation; and removal of access roads.

The Applicant will also provide for financial security to ensure that funds are available for decommissioning/land-restoration. The Applicant states that, prior to the commencement of construction of the project, it would provide an updated decommissioning plan and recalculate the decommissioning costs and consider the salvage value of the solar components. The Applicant would calculate the net decommissioning costs (total decommissioning cost less salvage/resale value of solar components) to decommission the solar facility. If the total decommissioning costs exceeds the salvage value of solar equipment, then the net decommissioning cost would be a positive value. The Applicant's updated decommissioning plan would be prepared by a registered professional engineer licensed to practice engineering in the state of Ohio and will include a provision that the decommissioning financial assurance mechanism include a performance bond where the company is the principal, the insurance company is the surety, and the Ohio Power Siting Board is the obligee.²⁴ The decommissioning costs would be reviewed by a professional engineer again every five years thereafter to assess the value of the financial assurance per the current net decommissioning cost estimate.

23. Application at Exhibit J, Attachment A.

24. Clearview Solar I, LLC's Response to the First Data Request from the Staff of the OPSB, DR # 2.

The Applicant has considered several scenarios where the decommissioning plan may be activated prior to the end of the useful life of the solar facility. In the event the owner of the solar facility goes bankrupt, the Applicant surmised that a new owner would take over. The Applicant posits that there are strong financial incentives to continue a solar facility operation, because solar facilities are expensive to build, but reliable and inexpensive to operate.²⁵ The Applicant has also stated to assure the public that the owner will carry out the decommissioning, a financial security is required to ensure that funds are always available for decommissioning and restoration of the land.²⁶ The Applicant has also considered the extremely unlikely event that the solar facility is impacted by a natural disaster, in which case the Applicant stated it would follow industry best practices and expects to be in a position to remediate the site, repair, or replace any damaged components, and bring the solar facility back to operation.²⁷ The Applicant also stated that in the extremely unlikely event that a natural disaster impacts the solar facility to such a degree that the Applicant decides to decommission the project, the Applicant will fulfill its obligations under the current final and approved decommissioning plan to restore the project area to substantially its preconstruction condition.²⁸ To further address these concerns, Staff recommends that at least 30 days prior to the preconstruction conference, when the Applicant submits an updated decommissioning plan that the updated plan includes a provision where the performance bond is posted prior to the commencement of construction.

Geology

Surficial/Glacial

The project area lies within the glaciated margin of the state and includes several Wisconsinan-age glacial features. The Teays Buried Valley feature runs east to west through the center of the project area. Much of the project area consists of relatively flat to gently undulating glacially derived ground moraine. The project area has a dense concentration of surface boulders.²⁹ Glacial drift within the project area ranges from approximately 70 feet to over 600 feet in thickness.

Bedrock

Four different uppermost bedrock unit are present within the project area. The Salina Group is the youngest bedrock unit which occurs in the far northeast corner of the project area. The Lockport Dolomite and the Sub-Lockport Undifferentiated occur as the uppermost bedrock in portions of both the northeast and southwest project area. The oldest and most prevalent uppermost bedrock unit in the project area is the Ordovician Undivided. Due to the glacial drift thickness cited above, no evidence of Karst geology features such as sinkholes or caves are documented within several miles of the project boundary.

Oil/Gas and Mining

ODNR records indicate that no oil and gas activity are located within the project footprint. Two historic wells are located within one mile of the project area.³⁰ These wells have been plugged and

25. Application at Exhibit G (Appendix C).

26. *Ibid.*

27. Clearview Solar I, LLC's Response to the Fourth Data Request from the Staff of the OPSB, DR #2.

28. *Ibid.*

29. ODNR February 5, 2021 Geology section review per the request of Staff.

30. ODNR Oil and Gas Viewer Interactive Map <https://gis.ohiodnr.gov/MapView/?config=OilGasWells>.

abandoned over forty years ago. No Class II injection well activity occurs within several miles of the project area.

No active mining occurs near the project area.³¹ No known abandoned underground mines are located within several miles of the project area.

Seismic Activity

ODNR documents three historic (more than 80 years ago) seismic events occurring within three miles of the project boundary. The largest event was recorded approximately three miles due south of the project boundary. A Richter Scale magnitude of 4.7 was assigned to this 1875 event. Several geologic structures associated with seismic activity are documented near the project area. Pre-Cambrian faults and/or folds exist and appear to exist in both Shelby and Logan Counties to the north of the project area.³² Several earthquakes have been recorded in the adjacent Shelby County where the Anna Seismic Zone occurs.³³

ODNR's Division of Geological Survey operates the Ohio Seismic Monitoring Network (OhioSeis) which involves coordination of 21 seismograph stations throughout the state. "OhioSeis is an advanced and modern seismic network that will give Ohio the ability to monitor and detect earthquakes all over the state well into the future."³⁴ OhioSeis lists one active station within four miles of the project boundary. This station is located nearly due south at Kiser Lake State Park.

The Applicant's evaluation of the seismicity concluded that moderately damaging earthquakes occur in the Anna Seismic Zone every two to three decades, and smaller earthquakes are experienced a few times per decade.³⁵ The design of the facility will follow the Ohio Build Code (OBC) which contains provisions for earthquake design data.

Soils

According to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Web Soil Survey, the project area consists primarily of soils derived from glacial till, loess, and glaciofluvial deposits.³⁶ Crosby and Brookston are the most common soil series found within the boundaries of the project area. Together these soils make up over 87 percent of the soils within the project area. Slope is variable throughout the project area, rarely exceeding 12 percent. These areas occur mostly along stream valleys in the eastern portion of the project boundary. There is a low to moderate risk of shrink-swell potential in these soils. Other limiting factors include poor drainage.

Geotechnical Report

A Preliminary Geotechnical Exploration Report prepared by Hull and Associates, LLC discusses the geotechnical work performed to date. To further evaluate soil and bedrock properties, 12 total borings were advanced to a range of 15 to 50 feet below ground level (BGL). The preliminary

31. ODNr Mines Viewer Interactive Map <https://gis.ohiodnr.gov/MapView/?config=OhioMines>.

32. <https://gis.ohiodnr.gov/website/dgs/geologyviewer/#>.

33. <https://gis.ohiodnr.gov/MapView/?config=Earthquakes>.

34. ODNr Ohio Seismic Network Home Page <https://ohiodnr.gov/wps/portal/gov/odnr/discover-and-learn/safety-conservation/geologic-hazards/ohio-seis>.

35. Application at Page 4 of Exhibit M (Geology and Hydrogeology Report by Hull & Associates, LLC).

36. USDA NRCS Web Soil Survey <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.

report findings indicate the soils and bedrock encountered at the site are considered suitable for the foundations proposed. Additional geotechnical exploration work in addition to pile load testing will be performed to support the final design for the project.³⁷

Conclusion

Staff recommends that the final detailed engineering drawings of the final project design shall account for geological features and include the identity of the registered professional engineer(s), structural engineer(s), or engineering firm(s), licensed to practice engineering in the state of Ohio who reviewed and approved the designs. Staff also recommends that the Applicant provide a final geotechnical engineering report to Staff at least 30 days prior to the preconstruction conference.

Based on the data and considerations provided within the application submittal to date, and based on Staff assessment (with consideration and input from ODNR), and implementation of the recommended conditions, there appears to be no particular geological features within the project area that are incompatible with construction and operation of the proposed solar facility. However, as cited above, the project area lies within a relatively close proximity to one of the most seismically active areas of Ohio. Therefore, Staff recommends that the final geotechnical engineering report specifically address seismicity and its possible impacts on soil/foundation stability.

In addition, the widespread presence of large glacial boulder deposits may present challenges for all sub-grade work such as pile installation, collection trenches, and foundation work. The application indicates no blasting activities are anticipated and that excavation will not be extensive. Furthermore, Staff recommends a condition prohibiting blasting for the construction of this facility. Staff review of the twelve borings conducted to date indicates no boulders were encountered. However, several thousand piles will be installed at depths ranging from five to 10 feet BGL.

Ecological Impacts

Public and Private Water Supply

There are no water wells within the project area as indicated by the Applicant.³⁸ Staff consulted the ODNR and learned that there are approximately 107 water wells within one mile of the project area. The Applicant stated that construction of the project will avoid water wells. Typically, water wells may be located near a residence, so the Applicant would implement setbacks of 150 feet to a non-participating home to avoid water wells. The Applicant indicates that neither the construction nor operation of the project is expected to have any impact on private water supplies.

The Village of Quincy's drinking water source protection area (SWPA) overlaps a portion of the project area. The Applicant found that the project area overlaps with the southernmost portion of the SWPA. The Village of Quincy is located about 1.5 miles northwest of the project area. The village's community water system draws water from an unconsolidated sand and gravel aquifer. Depth of water ranges from 25 to 30 feet below the ground surface. The portion of the SWPA that underlies the northern part of the project area is in the "Source Water Protection Area" of the SWPA, which means that travel time of water to the well is estimated to be five years. The inner

37. Application at Page 1 of Exhibit N (Preliminary Geotechnical Exploration Report by Hull & Associates, LLC).

38. Application at page 50 and Exhibit M (Figure 7).

area closer to the wells, with an estimated one-year travel time and where a contaminant or spill would be of heightened concern, is referred to as the “Inner Management Zone.” The Inner Management Zone of the SWPA is approximately 1.5 miles from the project area. The Applicant does not anticipate that construction or operation of the solar facility poses a risk to the Village’s SWPA, because the water supply has a moderate susceptibility, the solar facility construction will be at shallow, below-ground depths, and the solar components do not contain any liquids or materials that could threaten the supply.

In a letter from the Ohio EPA to Staff dated January 15, 2021, the Ohio EPA relayed concerns about potential release of lead, cadmium, and other toxic chemicals which could be released if the solar panels would be destroyed in natural disaster. The Ohio EPA indicated that it was assisting the Village of Quincy to revise its drinking water source protection plan. The Ohio EPA indicated that it would encourage the village to work with Clearview on response actions the public water system or Clearview could take in the event of damage to the solar panels in a natural disaster.

In order to address the concerns raised in the letter, the Applicant stated that solar panels contain no liquids that can spill, are not toxic and even in the highly unlikely event of a natural disaster would not pose a threat to the Village of Quincy's water supply.³⁹ Specifically, the Applicant has indicated that solar panel racking can withstand wind speeds up to 145 mph and that the racking will likely have a stow feature. The Applicant also states that if the project is impacted by a natural disaster, the Applicant will follow industry best practices and expects to be in a position to remediate the site, repair, or replace any damaged components, and bring the solar facility back to operation or decommission the project in accordance with the final decommissioning plan. The Applicant also indicates that it would maintain comprehensive liability insurance.

The Applicant has conferred with the Ohio EPA about the subject and reached out to the Village of Quincy to discuss the matter. The Applicant plans to coordinate with both the Ohio EPA and the Village of Quincy regarding the Applicant’s emergency response plan. Staff encourages further consultation with the Ohio EPA and the Village of Quincy. Staff recommends that at least 30 days prior to the preconstruction conference, that the Applicant submit its final emergency response plan and that plan include provision(s) to keep the Village of Quincy informed of the status of any spills, significant panel damage, and repair/clean-up schedule.

Additionally, the Applicant would implement a Stormwater Pollution Prevention Plan (SWPPP), a spill prevention plan, and a preliminary HDD inadvertent return plan, an example of which was provided in the application at Exhibit R, during construction to minimize and prevent potential discharges to surface waters in the project area and surrounding area.

Surface Waters

The Applicant delineated one perennial stream segment within the project area (i.e. Indian Creek). The Applicant provided detailed mapping that shows one underground collection line crossing the stream. The Applicant states approximately 0.1 acres of the perennial stream will be temporarily impacted. If necessary, the Applicant states the project will utilize HDD techniques to install collection lines underneath the stream in order to avoid impacts to the stream. HDD is typically preferred to open-cut trenching when crossing surface water resources as impacts can be avoided in most cases. However, the HDD process includes the risk of a frac-out. A frac-out occurs when

39. Clearview Solar I, LLC’s Response to the Fourth Data Request from the Staff of the OPSB, DR #2.

the drilling lubricant, typically water or a non-toxic, fine clay bentonite slurry, is forced through cracks in bedrock and/or surface soils. The Applicant included a frac-out contingency plan as part of the application.

In its April 23, 2020 letter, the ODNR Division of Wildlife (DOW) recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible. Staff agrees with this recommendation as it would assure that impacts to listed fish species, as well as impacts to the perennial stream itself, be avoided completely. Staff recommends the Applicant have an environmental specialist on site during construction activities where HDD activities may impact surface waters. The environmental specialist would have authority to stop HDD activities to ensure that any impacts related to a frac-out are addressed.

The Applicant delineated two Category 2 wetlands.⁴⁰ No impacts to wetlands will occur.

The Applicant states that the boundaries of streams and wetlands within and immediately adjacent to the construction limits of disturbance would be flagged, staked, or fenced prior to construction. These sensitive areas would also be depicted on construction drawings. All contractors and subcontractors would be provided with training to understand the significance of the types of flagging used and the importance of staying within defined limits of work areas, especially in and adjacent to marked sensitive resource areas such as 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. The Applicant would obtain an Ohio National Pollutant Discharge Elimination System (NPDES) construction stormwater general permit through the Ohio EPA prior to the start of construction. The Applicant would implement Ohio EPA published Guidance on Post-Construction Storm Water Control for Solar Panel Arrays to project construction and operation. The project would not cross a 100-year floodplain.

Threatened and Endangered Species

One of the missions of the ODNR is to “conserve and improve the fish and wildlife resources and their habitats and promote their use and appreciation by the public so that these resources continue to enhance the quality of life for all Ohioans.” In carrying out this mission, the ODNR considers the “status of native wildlife species [to be] very important” and therefore lists wildlife species needing protection.⁴¹ 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.

40. Wetlands falling within the purview of the Clean Water Act are regulated within Ohio by R.C. 6111, et seq. and Ohio Adm.Code 3745-1-50, et seq. Ohio Adm.Code 3745-1-54 establishes wetland categories.

41. Ohio Department of Natural Resources, Division of Wildlife, “Ohio’s Listed Species,” Publication 5356 (R0520), <https://ohiodnr.gov/static/documents/wildlife/state-listed-species/Ohio's%20Listed%20Species%20pub356.pdf>, accessed May 10, 2021.

MAMMALS				
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area
Indiana bat	<i>Myotis sodalis</i>	Endangered	Endangered	Historical range includes the project area.
northern long-eared bat	<i>Myotis septentrionalis</i>	Threatened	Endangered	Historical range includes the project area.
MUSSELS				
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area
rayed bean	<i>Villosa fabalis</i>	Endangered	Endangered	Lack of suitable habitat. No in-water work proposed in perennial stream of sufficient size
Clubshell	<i>Pleurobema clava</i>	Endangered	Endangered	Lack of suitable habitat. No in-water work proposed in perennial stream of sufficient size
FISH				
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area
Lake chubsucker	<i>Erimyzon sucetta</i>	N/A	Threatened	Historical range includes the project area. No in-water work proposed if HDD Indian Creek crossing
Tonguetied minnow	<i>Exoglossum laurae</i>	N/A	Threatened	Historical range includes the project area. No in-water work proposed if HDD Indian Creek crossing
BIRDS				
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area
Upland sandpiper	<i>Bartramia longicauda</i>	N/A	Endangered	Historical range includes the project area. Project area lacks suitable habitat.

REPTILES/AMPHIBIANS				
Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area
Eastern massasauga	<i>Sistrurus catenatus</i>	Threatened	Endangered	Historical range includes the project area. Due to the location, and the type of habitat present at the project site and within the vicinity of the project area, this project is not likely to impact this species.
Spotted turtle	<i>Clemmys guttata</i>	N/A	Threatened	Historical range includes the project area. Due to the location, and the type of habitat present at the project site and within the vicinity of the project area, this project is not likely to impact this species.
Kirtland's snake	<i>Clonophis kirtlandii</i>	N/A	Threatened	Historical range includes the project area. Due to the location, and the type of habitat present at the project site and within the vicinity of the project area, this project is not likely to impact this species.

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. 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 mapping based on final engineering drawings 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*). 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 reflects a different course of action. The Applicant states less than one acre of tree clearing will be required for this project. The Applicant has committed to limiting tree-clearing activities to the seasonal tree clearing window in order to avoid impacts to these species.

During the winter months, bats hibernate in caves and abandoned mines, also known as hibernacula. The project would not impact any hibernacula.

The project is within the range of the state threatened lake chubsucker (*Erimyzon sucetta*) and the state threatened tonguetied minnow (*Exoglossum laurae*). The ODNR DOW recommends no in-water work in perennial streams from April 15 through June 30 in order to avoid impacts to these species. Staff recommends the Applicant utilize HDD to install the underground collection line crossing of Indian Creek in order to avoid impacts to these species.

Impacts to other listed species would be avoided due to a lack of proposed impacts to suitable habitats.

Vegetation

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

VEGETATIVE COMMUNITIES WITHIN PROJECT AREA	
Vegetation Community Type	Total (Acres)
Forestland	2.19
Grassland	0.06
Wetlands	0.66
Agricultural Lands	1,170.63

Permanent vegetative impacts would occur primarily within agricultural lands. Forestland impact is estimated to be approximately less than one acre and would be limited to narrow tree-lines between fields.

The Applicant has developed a vegetation management plan in which it would incorporate pollinator-friendly habitat in accordance with the recommendations of the Ohio Pollinator Habitat Initiative. This habitat would enhance the visual appeal of the project, enrich local wildlife habitat, benefit the local farming community, increase plant diversity, and discourage invasive species. This vegetation would be incorporated under and between the panels and in the open areas of the project. This project would be expected to represent a reduced environmental impact when compared to the current land use of agricultural plant production. This is due to the reduction of frequent tilling leading to erosion and sedimentation, and reduced fertilizer and pesticide application. To further assure that these benefits would be realized, the Applicant has committed to take steps to prevent establishment and/or further propagation of noxious weeds identified in Ohio Adm.Code 901:5-37 et seq. during implementation of any pollinator-friendly plantings.

Public Services, Facilities, and Safety

Wind Velocity

The Applicant has indicated that the facility would be designed and installed to withstand and minimize potential damage from high-wind occurrences. The support piles for the racking will be made of galvanized steel and will be installed, based on the site-specific soil sampling and after further geotechnical pull testing, at sufficient depths to prevent the movement of the associated equipment from wind. During the final engineering design, the Applicant would also select racking and solar panels with specific wind ratings from the manufacturers to ensure performance during high wind speeds. The tracking systems currently under consideration by the Applicant can

withstand wind speeds up to 145 miles per hour.⁴² The racking system would also include a stowing feature. Stow features also can tilt panels to a certain angle to reduce wind loading on the solar panels during high wind speeds events. The Applicant and Staff have found that components of the proposed facility are generally not susceptible to damage from high winds except for tornado-force winds, because generally panels and racking systems proposed have wind speed design load ratings inherent in their design.

Roads and Bridges

The Applicant has yet to finalize its delivery route, although it is expected that deliveries to the project site would be by way of State Route 235. The main transportation routes to access the project site would be State Route 235, Logan Champaign Road, Champaign Logan Shelby Road, Snaptown Road, and N. Elm Tree Road.

The Applicant conducted a route evaluation study to identify viable means of accessing the project area. Traffic patterns, bridge conditions, culvert conditions, road surface conditions, and potential obstructions were identified and analyzed. According to the Applicant's Transportation Assessment, all bridges are in good condition along the proposed transportation routes.⁴³ Road surface quality ranges from good to fair as does culvert conditions. One culvert on N. Elm Tree Road was in fair condition and had inadequate cover, the remedy for which would be outlined in the Applicant's Road Use Maintenance Agreement (RUMA) with Champaign County. No overhead obstructions were identified along the proposed delivery routes.

Conventional heavy equipment which does not require special permitting would make up the majority of construction traffic. The electrical transformer is likely to be overweight and would require special permitting and route coordination for delivery. The Applicant stated that an increase in truck traffic would be anticipated during construction for the purpose of project area equipment access and equipment and material deliveries but does not anticipate significant changes to traffic patterns. Post construction and operation of the solar facility, the Applicant does not anticipate any additional traffic for the project beyond routine maintenance. No road closures are expected. The Applicant expects to enter into a RUMA with Champaign County and Staff recommends the execution of such agreement occur prior to construction.

Once the transportation permitting process has been completed, Staff recommends that the Applicant develop a final transportation management plan which would include any county-required RUMAs. Any damaged public roads and bridges would be repaired promptly to their previous or better condition by the Applicant under the guidance of the appropriate regulatory authority. Any temporary improvements would be removed unless the appropriate regulatory authority requests that they remain in place.

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

42. Application at Exhibit B.

43. Application at Exhibit I.

would use mitigation practices such as limiting construction activities to daylight hours, keeping equipment in good working condition 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 and tracking motors. The step-up transformer at the new substation and the inverters may operate at night but the noise impact would also be relatively minor.

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 using the proposed inverter and transformer models. The model showed that operational noise impacts would be less than ambient nighttime noise levels. No non-participating receptors were modeled to receive noise impacts greater than the daytime ambient noise level plus five dBA. Therefore, the project would be expected to have minimal adverse noise impacts on the adjacent community. If an inverter or transformer model different than the proposed inverter or transformer model is chosen, the Applicant would submit a noise report confirming that no non-participating receptors were modeled to receive noise impacts greater than the daytime ambient noise level plus five dBA.

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

The Applicant selected southwestern Ohio for development of the solar facility considering several factors. First, the Applicant focused on the fact that there is a strong electricity demand from the Dayton and Columbus metropolitan areas. Next, the Applicant considered areas where the transmission system had sufficient capacity to accommodate the solar facility with minimal electric system upgrade requirements. Finally, the Applicant considered the solar resources within southwest Ohio to be best in Ohio. After that, the Applicant determined a suitable transmission line in that area upon which to connect the proposed solar facility. Once a suitable transmission line was identified by the Applicant, it considered a two-mile proximity for location of the project to minimize electrical losses.

After the Applicant selected the transmission line POI, the Applicant's siting selection process focused on the following four siting criteria. First, the land would need to be relatively level, previously disturbed, and dry. Second, the Applicant desired land that was contiguous to other similarly suitable parcels. Third, the Applicant wanted minimal impacts to ecologically sensitive areas and features. Lastly, the Applicant desired individual landowner interest to host the solar facility.

Minimizing Impacts

The Applicant has received a concurrence letter from the OHPO stating that the project as proposed would not create adverse effects on any historical resources. Regarding archaeological resources, implementation of the programmatic agreement and with implementation of Staff's condition, based and the details provided in the programmatic agreement executed by the Applicant and the OHPO on March 18, 2021, the overall expected impact to cultural resources would be minimal.

The proposed facility would have an overall positive impact on the state and local economy due to the increase in construction spending, wages, purchasing of goods and services, annual lease payments to the local landowners, increased tax revenues and potential PILOT revenue.

The geology of the project site in Champaign County does not present conditions that would limit or negatively impact the construction and future operation of the proposed facility. Staff recommends that the Applicant submit the final geotechnical engineering report. Staff also recommends that the final detailed engineering drawings of the final project design shall account for geological features.

No impacts are proposed to wetlands and significant impacts to surface waters are not anticipated, with the implementation of Staff's conditions. Impacts to any state or federal listed species can be avoided by following seasonal restrictions for construction in certain habitat types, as detailed by the USFWS and the ODNR. The Applicant did not identify any listed plant or animal species during field surveys. While the project is within the range of several endangered species, impacts would be avoided on suitable habitats.

Noise impacts are expected to be limited to construction activities. The adverse impact of construction noise would be temporary and intermittent and would occur away from most residential structures. Staff recommends that the Applicant limit the hours of construction to address potential construction and operational related concerns from any nearby residents. No non-participating receptors were modeled to receive noise impacts greater than the daytime ambient noise level. If the Applicant chooses an inverter model with a sound power level greater than the inverter used in the operational sound model, Staff recommends that the Applicant submit an updated noise study, using noise data from the inverter chosen for the project. The updated noise study would confirm that sound levels would not exceed the daytime ambient level plus five dBA at any non-participating sensitive receptor to assure that operation noise impacts are minimal. Further, the Applicant has developed a complaint resolution plan which would be implemented throughout construction and operation.

During the construction period, local, state, and county roads would experience a temporary increase in truck traffic due to deliveries of equipment and materials. Due to the location of the project, the Applicant anticipates that most components for the entire project would be delivered by using flatbed or tractor-trailer vehicles and multi-axle dump trucks.⁴⁴ The transportation management plan would be finalized once the engineering layout is determined. A final delivery route plan would be developed through discussions with local officials. The Applicant is prepared to post a road bond or similar surety to ensure the repair of any roads damaged by construction of the project. The Applicant also intends to work with local authorities to understand the nature of the road impacts and possibly enter into a RUMA with local authorities, such as the Champaign county engineer. Staff recommends the execution of such agreement occur prior to construction.

Due to the low profile of the project, combined with existing vegetation in the area, the visual impacts would be most prominent to landowners in the immediate vicinity of the infrastructure itself. In order to reduce impacts in areas where an adjacent, non-participating parcel contains a residence with a direct line of sight to the project, Staff has recommended a condition requiring a final landscape and lighting plan that addresses the potential impacts of the facility.

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. The Applicant has consulted landowners and county records, and used engineering, such as geographic information system (GIS) data, to determine the locations of drain tile mains. In order to avoid impacts to drain tiles, the Applicant stated that it would locate drain tiles as accurately as possible prior to construction. The Applicant has committed to promptly repair any drain tile found to be damaged by the project during the operational life of the project. Following decommissioning of the facility, land can be restored for agricultural use.

The Applicant has developed and created its “Home Solar Program” to provide interested neighbors in the arear of the solar facility the financial means to purchase a cost-effective solar energy system for their property. The payment, ranging from \$12,500 to \$15,625, is based on the current costs of a 5.28 kW to 6.6 kW residential solar array system. The Applicant has indicated that several neighbors have expressed an interest in the program.

44. Application at Exhibit I, page 2.

Staff has removed uncertainty from the Applicant's solar facility's construction method, by prohibiting the use of blasting until more information is known.

The Applicant has prepared a draft plan to decommission the solar facility. The Applicant would provide for financial security to ensure that funds are available for decommissioning/land-restoration. The Applicant would restore the land significantly to its original topography to allow for resumption of agricultural use. Staff has recommended a condition requiring that the draft decommissioning plan be updated to address proper timing of when the performance bond will be posted.

Conclusion

Staff concludes that the proposed project would result in both temporary and permanent impacts to the project and surrounding areas. The project is unlikely to pose a significant adverse environmental impact to existing land use, cultural resources, recreational resources or wildlife. With Staff's recommended conditions to further mitigate potential impacts, Staff concludes that the project represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternative, and other pertinent considerations.

Recommended Findings

Staff recommends that the Board find that the proposed facility represents the minimum adverse environmental impact considering the state of available technology and the nature and economics of the various alternative, and other pertinent considerations. Therefore it 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 Applicant proposed to construct a solar-powered electric generation facility, capable of producing 144 MW. The proposed facility would interconnect from the collection substation to a prominent DP&L transmission line known as the East Sidney-Quincy 138 kV transmission line. DP&L is expected to construct, own, and operate a new Utility Substation to provide the connection from the project to the electric grid. A short 138 kV line will connect the project substation to the Utility Substation.

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. The NERC reliability standards are included as part of the system evaluations conducted by PJM.⁴⁵

PJM Interconnection

The Applicant submitted two generation interconnection requests for the proposed facility to PJM. For the initial request of June 2019, PJM has assigned the queue ID AE2-206 under the name "East Sidney-Quincy 138 kV", which requested an injection of 99 MW. The second request of August 2019 was assigned queue ID AF1-078 also under the name of "East Sidney-Quincy 138 kV" and requested an increase of 45 MW. PJM has completed and issued the feasibility study reports for AE2-206 and AF1-078 in July 2019 and January 2020, respectively.⁴⁶ PJM has completed and issued the system impact study reports for AE2-206 and AF1-078 in February 2020 and August 2020, respectively.⁴⁷

45. PJM Interconnection, LLC is the regional transmission organization charged with planning for upgrades and administering 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 standards with the addition of generation in its footprint.

46. PJM Interconnection, "New Services Queue", Feasibility Study for Queue IDs: AE2-206 and AF1-078, (Accessed December 29, 2020, <https://www.pjm.com/planning/services-requests/interconnection-queues.aspx>).

47. PJM Interconnection, "New Services Queue", System Impact Study for Queue IDs: AE2-206 and AF1-078, <https://www.pjm.com/planning/services-requests/interconnection-queues.aspx> (Accessed December 29, 2020).

The table below shows the queue positions assigned to the Applicant by PJM.

PJM QUEUES: CLEARVIEW SOLAR FARM PROJECT			
Queue ID	Queue Date	Power Output (MW)	Capacity (MW)
AE2-206	3/19/2019	99	41.58
AF1-078	8/26/2019	45	18.9
Totals		144	60.48

PJM studied the interconnection as an injection into the BPS via the DP&L East Sidney-Quincy 138 kV transmission line. The Applicant requested a total injection of 144 MW, of which 60.48 MW could be available in the PJM capacity market. The capacity market ensures that there is an adequate availability of generation resources that can meet current and future demand.

PJM Network Impacts

PJM analyzed the proposed facility interconnected to the BPS. The 2022 summer peak power flow model was used by PJM to evaluate regional reliability impacts for AE2-206, and the results were verified by DP&L. Additionally, queue AF1-078 was studied using a 2023 summer peak flow model and the results were verified by DP&L. The studies did not reveal any reliability criteria violations. The chart below displays the results of the PJM System Impact Study (SIS) for the regional footprint.⁴⁸

PJM REGIONAL SYSTEM IMPACTS (2022 Summer Peak)	
Generation Deliverability – System Normal & Single Contingency Outage	
Plant Output: Capacity Level – 60.48 MW	No Problems Identified.
Category C and D – Multiple Contingency Outages	
Plant Output: Power Level 144 MW	One Breaker may Overload. ⁴⁹

System Reinforcements

PJM requires mitigation of contingencies that may cause reliability violations with the proposed construction of the Applicant’s project. One potential contingency is the loss of DC power at a substation or the solar facility. To address this potential contingency, PJM would need to further evaluate remote-end relay signal equipment at the Shelby and Logan substations to determine whether equipment would need setting adjustments or replacement to accommodate the proposed solar facility. This would be settled within the Interconnection Service Agreement and the Interconnection Construction Service Agreement executed for this project.

Contribution to Previously Identified Overloads - Network Impacts

PJM studied the project for possible overloading of neighboring transmission lines or other system components, such as circuit breakers and switches, where the proposed facility may affect earlier generation service requests or transmission projects in the PJM queue. None were identified for the AE2-206 or AF1-078 positions.

48. PJM Interconnection, “New Services Queue”, System Impact Study for queue IDs: AE2-206 and AF1-078, <https://www.pjm.com/planning/services-requests/interconnection-queues.aspx> (Accessed December 29, 2020).

49. Breaker AEP_B4_#3196_05Beatty 345_302E, under Summer Peak Load Flow, page 15/46 of the PJM System Impact Study Report for Queue position AF1-078.

Potential Congestion due to Local Energy Deliverability- Energy Delivery Impacts

PJM also studied the delivery of the energy portion of this interconnection request. Problems identified here would likely result in operational restrictions for the project. Network upgrades under this section would allow for the delivery of energy with operational restrictions. The results identified no congestion issues.

Short Circuit Analysis

The short circuit analysis, which is part of the SIS, evaluates the interrupting capabilities of circuit breakers that would be impacted by the proposed generation addition. PJM performed a short circuit analysis and the results were verified by DP&L. The results identified no circuit breaker problems.

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, because the project will not use fuel and will not emit any air pollution.⁵⁰ However, fugitive dust rules adopted under R.C. Chapter 3704 may be applicable to the construction of the proposed facility. The Applicant also indicated that it expects the amount of dust to be low, because little topsoil will be moved and there will be minimal grading and earth work activities. The Applicant would control temporary and localized fugitive dust by using best management practices (BMP) such as using water to wet soil and/or dust suppressants on unpaved roads as needed to minimize dust. This method of dust control is 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

The Applicant anticipates obtaining environmental permits if and where necessary. The Applicant would mitigate potential water quality impacts associated with aquatic discharges by obtaining an NPDES construction storm water general permit (OHC00005) from the Ohio EPA with submittal of a notice of intent for coverage under that permit. The construction storm water general permit also requires development of an SWPPP to direct the implementation of construction related storm water BMPs for soil erosion control. Staff notes that the Ohio EPA has developed guidance on post-construction storm water controls for solar panel arrays. Staff recommends that the Applicant construct the facility in a manner that incorporates post construction stormwater management under OHC00005 (Part III.G.2.e, pp. 19-27) in accordance with the Ohio Environmental Protection Agency's Guidance on Post-Construction Storm Water Controls for Solar Panel Arrays.

The Applicant would obtain, if required, the following permits:

- The U.S. Army Corps of Engineers Section 404 or nationwide permit for stream crossings and wetland impacts;
- Ohio EPA Water Quality Certification under Section 401 of the Clean Water Act; and
- Ohio Isolated Wetland Permit in accordance with R.C. 6111.03(J) and R.C. 6111.021.

The Applicant would develop a spill control plan, if applicable, to manage the storage and mitigate the unlikely release of hazardous substances.⁵¹

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.

50. Application at page 11.

51. Clearview Solar, LLC's Response to the Fourth Data Request from Staff, DR # 2

Solid Waste

Debris generated from construction activities would include items such as damaged/unusable parts or materials, crates, nails, boxes, containers, and packing/packaging materials, construction scrap, and general refuse. The Applicant stated that all construction-related debris that was not reused or recycled would be disposed of at an authorized solid waste disposal facility.

The Applicant has indicated that there are approximately four farm-related structures in the northeastern part of the project that are to be removed prior to the start of construction and any remaining debris will be disposed at a licensed solid waste disposal facility.⁵² The Applicant further indicated that the current property owner is currently demolishing and relocating the structures.⁵³

During operation of the project, the Applicant anticipates only very small amounts of solid waste, which would be reused, recycled, or properly disposed in accordance with applicable solid waste regulations at a local landfill. The nature of the solid waste would be comparable to that during the construction phase.

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 structures would be the lightning masts at the substation which would be approximately 70 feet tall. That height is under the height requirement from the Federal Aviation Administration (FAA), pursuant to 14 CFR Part 77.9(a), for filing a Form 7460-1. The Applicant also used the FAA's notice criteria tool and confirmed that the project did not need to file with the FAA.

According to the Applicant, there are no public use airports, public use helicopter pads, or public use landing strips within five miles of the project area.⁵⁴ Also, the Applicant notes that there are no private use landing strips or property used for aviation within or adjacent to the project area. Staff confirmed through the FAA, that the closest public-use airports are the Sidney Municipal Airport (SCA) and Bellefontaine Regional Airport (EDJ) which are between seven and ten miles from the proposed solar facility project collection substation.

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.

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.

52. Application at page 64.

53. Clearview Solar, LLC's Response to the Third Data Request from Staff, DR #2

54. Application at page 44 and Figure 1.

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 use reliable and certified equipment compliant with applicable Underwriters Laboratories, Institute of Electrical and Electronics Engineers, National Electrical Code, National Electrical Safety Code (NESC), and American National Standards Institute standards.⁵⁵ The Applicant intends to select leading suppliers, particularly a Tier 1 solar panel manufacturer and that all of the primary components of the solar facility will have standard industry warranties. The Applicant has also planned for the expenses of O&M for the solar facility. Specifically, the Applicant identified the O&M would consist of monitoring and supervision, grid regulation, corrective maintenance, preventative maintenance, and site maintenance.⁵⁶

The Applicant intends to use warning signs, fencing, and gates to restrict access to the potential hazards within the solar project area. Additionally, the Applicant intends to design its facility with setbacks to non-participating sensitive receptors, non-participating properties, and public roads. Specifically, the Applicant would implement the following setbacks: 25 feet to the public road right-of-way, 25 feet from the property line of any non-participating parcel, 25 feet to any waterbody or wetland, 150 feet to a non-participating home, and 500 feet between an inverter and a non-participating home. The Applicant has indicated that these are minimum setbacks, and that the actual setbacks would be much greater. The Applicant would also incorporate any manufacturer recommended setbacks into its final site plan.

The Applicant stated that it intends to restrict public access to the facility by enclosing the project area with fencing that complies with NESC requirements. The fencing will be a six-foot tall chain link fence topped with a one-foot tall barbed wire strand.⁵⁷ Staff has recommended that, except for the substation fencing, the solar panel perimeter fence type be both wildlife permeable and aesthetically fitting for a rural location. Prior to construction, the Applicant also intends to develop and implement an emergency response plan and further consultation with potentially affected emergency response personnel. The Applicant has provided an example emergency response plan, which Staff has reviewed.⁵⁸

Electromagnetic Fields

Electric transmission lines, when energized, generate electromagnetic fields (EMF). Laboratory studies have failed to establish a strong correlation between exposure to EMF and effects on human health. There have been concerns, however, that EMF may have impacts on human health. The gen-tie transmission line is not within 100 feet of an occupied structure, therefore calculation of the production of EMF during operation of the proposed gen-tie transmission line is not warranted

55. Clearview Solar I, LLC's Response to the First Data Request from Staff, DR #9

56. Application at page 25.

57. Application at Exhibit A, Sheet C.600.

58. Clearview Solar I, LLC's Response to the Second Data Request from Staff, DR #9

per Ohio Adm.Code 4906-5-07(A)(2).⁵⁹ The Applicant states that the transmission facilities would be designed and installed according to the requirements of the NESC.

Public Interaction and Participation

The Applicant hosted web and telephone-based public informational meetings for this project. Attendees were provided the opportunity to listen to a presentation about the project, ask questions, and provide comments. The Applicant also maintains a project website.

The Applicant has drafted a complaint resolution plan to handle complaints during the construction and operation of the facility. Staff recommends that a final version of this plan be filed on the docket no later than 30 days prior to the start of construction. The Applicant has committed to notify, by mail, affected property owners and tenants, no later than seven days prior to the start of construction. Staff recommends that a similar notice be mailed to these same individuals at least seven days prior to the start of facility operation. Staff also recommends that the Applicant submit to Staff a quarterly complaint summary report during construction and the first five years of operation of the facility.

As of May 5, 2021, the OPSB has received one public comment in this case. The commenter did not have concerns specific to this project, but rather with the cost of renewable energy in general. A notice of intervention has been filed by the Board of Commissioners of Champaign County, and a petition for leave to intervene has been filed by the Ohio Farm Bureau Federation. Public comments are available for Board members and the public to view online in the case record at <http://dis.puc.state.oh.us>.

The Administrative Law Judge scheduled a public hearing and an evidentiary hearing for this proceeding. The hearings will be held using remote access technology that facilitates participation by telephone and/or live video on the internet. The public hearing will be held on June 8, 2021, beginning at 6 p.m. The evidentiary hearing is scheduled for July 1, 2021, at 10:00 a.m.

Public Comment and Area Sentiment

Staff has received one public comment to date concerning the proposed project that is paraphrased below and will address it below:

- (1) Will the project support itself, cover the cost of taxpayer subsidies, override the carbon footprint, save money, or even be green?

The Applicant hopes that the solar facility would be designated as a “qualified energy project” and is able to secure a PILOT arrangement with Champaign County pursuant to R. C. 5727.75. Also, the solar facility is expected to have a number of positive economic impacts on commercial activities in the local area. Specifically, the Exhibit F (Socioeconomic Report) estimates that the solar facility would generate new economic output of over \$105 million during construction and more than \$1.8 million annually from operation. The solar facility would produce no air pollution or wastewater discharges and would not generate any significant amount of waste.

59. Clearview Solar, LLC’s Response to the First Data Request from Staff of the OPSB, DR #5.

Staff observed on its field visit to the project area that some residences along Snapptown Road had yard signs expressing “No Solar Panels.”

To garner favor with the local community, the Applicant has developed and created its “Home Solar Program” to provide interested neighbors in the area of the solar facility the financial means to purchase a cost-effective solar energy system for their property. The payment, ranging from \$12,500 to \$15,625, is based on the current costs of a 5.28 kW to 6.6 kW residential solar array system. The Applicant has indicated that several neighbors have expressed an interest in this program.

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 preceding three calendar years. Furthermore, eligible land must be at least 10 acres in size or produce a minimum average gross annual income of \$2,500.

Approximately 1,168 acres of agricultural land would be disturbed by the proposed project. Of that 1,168 acres, 1,164 acres of agricultural land are planned to be permanently impacted. No parcels within the project area are currently enrolled in the Agricultural District program. The Applicant states the repurposed land could be restored for agricultural use when the project is decommissioned.

The construction and operation of the proposed facility would disturb the existing soil and could lead to broken drainage tiles. A drain tile system consists of laterals, which are branches off a main, and main lines. Main lines can allow water to flow into or out of one parcel to another. The locating and avoiding of damaging drain tile mains can help prevent the pooling of water on project parcels and adjacent parcels.

When landowners lay down or repair drain tiles, they often keep records of the location of the drain tiles. The Applicant has consulted landowners and performed surveys to create a map of known existing drain tiles within the project area. The Applicant has supplied a Drainage Tile Assessment and Impact Report with its OPSB application (Exhibit Z). This report discusses the use of known drain tile locations in mitigating disturbance to field drainage as much as possible. The Applicant has committed to promptly repairing any damaged drain tile due to the construction and operation of the facility.

No agricultural structures are expected to be impacted by the project. The Applicant has committed to take steps to address potential impacts to farmland, including repairing all drainage tiles damaged during construction and restoring temporarily impacted land to its original use. Excavated topsoil would be separated during construction and returned after construction.

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 suppression and control on open soil surfaces such as construction access roads or unpaved transportation routes as needed.

Operation of the proposed facility would not require the use of significant amounts of water. No sanitary water discharge would occur. The Applicant has stated that no appreciable amounts of water would be utilized in project operations. Water may be trucked in to use for cleaning the panels if necessary.

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. 4906.10(A)(8), 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.

IV. RECOMMENDED CONDITIONS OF CERTIFICATE

Following a review of the application filed by Clearview 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 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) 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.
- (4) 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.
- (5) 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.
- (6) 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.

- (7) The certificate authority provided in this case shall not exempt the facility from any other applicable and lawful local, state, or federal rules or regulations nor be used to affect the exercise of discretion of any other local, state, or federal permitting or licensing authority with regard to areas subject to their supervision or control.
- (8) At least 30 days prior to the preconstruction conference, the Applicant shall submit to Staff, for review and acceptance, one set of detailed engineering drawings of the final project design and mapping in the form of PDF, which the Applicant shall also file on the docket of this case, and geographically referenced data (such as shapefiles or KMZ files) based on final engineering drawings to confirm that the final design is in conformance with the certificate. Mapping shall include the limits of disturbance, permanent and temporary infrastructure locations, areas of vegetation removal and vegetative restoration as applicable, and specifically denote any adjustments made from the siting detailed in the application. All final geotechnical study results shall be included in this submission. The detailed engineering drawings of the final project design shall account for geological features and include the identity of the registered professional engineer(s), structural engineer(s), or engineering firm(s), licensed to practice engineering in the state of Ohio who reviewed and approved the designs.
- (9) Separate preconstruction conferences may be held for the different phases of civil construction and equipment installation. At least 30 days prior to each preconstruction conference, the Applicant shall submit to Staff, for review and acceptance, one set of detailed engineering drawings of the final project design for that phase of construction and mapping in the form of PDF, which the Applicant shall also file on the docket of this case, and geographically referenced data (such as shapefiles or KMZ files) based on final engineering drawings to confirm that the final design is in conformance with the certificate. Mapping shall include the limits of disturbance, permanent and temporary infrastructure locations, areas of vegetation removal and vegetative restoration as applicable, and specifically denote any adjustments made from the siting detailed in the application. The detailed engineering drawings of the final project design for each phase of construction shall account for geological features and include the identity of the registered professional engineer(s), structural engineer(s), or engineering firm(s), licensed to practice engineering in the state of Ohio who reviewed and approved the designs. All applicable geotechnical study results shall be included in the submission of the final project design to Staff.
- (10) A least 30 days prior to the preconstruction conference, the Applicant shall provide Staff, for review and acceptance, the final geotechnical engineering report. This shall include a summary statement addressing the geologic and soil suitability. This shall also include a summary statement explaining what special considerations were given to the seismic activity and fault system within the region and an evaluation of its potential impacts during construction and operation of the proposed solar facility.
- (11) At least 30 days prior to the start of construction, the Applicant shall file a copy of the final complaint resolution plan on the public docket. At least seven days prior to the start of construction and at least seven days prior to the start of facility operations, the Applicant shall notify via mail affected property owners and tenants including those individuals who were provided notice of the public informational meeting, residences

located within one mile of the project area, parties to this case, county commissioners, township trustees, emergency responders, airports, schools, and libraries, as well as anyone who has requested updates regarding the project. These notices shall provide information about the project, including contact information and a copy of the complaint resolution plan. The start of construction notice shall include written confirmation that the Applicant has complied with all preconstruction-related conditions of the certificate, as well as a timeline for construction and restoration activities. The start of facility operations notice shall include written confirmation that the Applicant has complied with all construction-related conditions of the certificate, as well as a timeline for the start of operations. The Applicant shall file a copy of these notices on the public docket. During the construction and operation of the facility, the Applicant shall submit to Staff a complaint summary report by the fifteenth day of April, July, October, and January of each year through the first five years of operation. The report shall include a list of all complaints received through the Applicant's complaint resolution process, a description of the actions taken toward the resolution of each complaint, and a status update if the complaint has yet to be resolved.

- (12) 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.
- (13) The facility shall be operated in such a way as to assure that no more than 144 megawatts would be injected into the Bulk Power System at any time.
- (14) Prior to commencement of construction, the Applicant shall prepare a landscape and lighting plan in consultation with a landscape architect licensed by the Ohio Landscape Architects Board that addresses the aesthetic and lighting impacts of the facility with an emphasis on any locations where an adjacent non-participating parcel contains a residence with a direct line of sight to the project area and also include a plan describing the methods to be used for fence repair. The plan shall include measures such as fencing, vegetative screening or good neighbor agreements. Unless alternative mitigation is agreed upon with the owner of any such adjacent, non-participating parcel containing a residence with a direct line of sight to the fence of the facility, the plan shall provide for the planting of vegetative screening designed by the landscape architect to enhance the view from the residence and be in harmony with the existing vegetation and viewshed in the area. The Applicant shall adjust its landscaping and sighting plan to incorporate a third-tier planting module, or other appropriate planting measures, to address impacts to the traveling public, nearby communities, and recreationalists. The Applicant shall maintain vegetative screening for the life of the facility and the Applicant shall replace any failed plantings so that, after five years, at least 90 percent of the vegetation has survived. The Applicant shall maintain all fencing along the perimeter of the project in good repair for the term of the project and shall promptly repair any damage as needed.

Lights shall be motion-activated and designed to narrowly focus light inward toward the facility, such as being downward-facing and/or fitted with side shields. The Applicant shall provide the plan to Staff for review and confirmation that it complies with this condition.

- (15) Prior to commencement of construction, the Applicant shall submit to Staff for approval a solar panel perimeter fence type that is both wildlife permeable and aesthetically fitting for a rural location. This condition shall not apply to substation fencing.
- (16) General construction activities shall be limited to the hours of 7:00 a.m. to 7:00 p.m., or until dusk when sunset occurs after 7:00 p.m. Impact pile driving shall be limited to the hours between 9:00 a.m. and 7:00 p.m. or until dusk when sunset occurs after 7:00 p.m. Impact pile driving may occur between 7:00 a.m. and 9:00 a.m. if the noise impact at non-participating receptors is not greater than daytime ambient Leq plus 10 dBA. If impact pile driving is required between 7:00 a.m. and 9:00 a.m., the Applicant shall install a noise monitor in a representative location to catalog that this threshold is not being exceeded. Hoe ram operations, if required, shall be limited to the hours between 10:00 a.m. and 4:00 p.m., Monday through Friday. HDD operations if started during general construction activities hours may continue until the completion of the HDD activity. 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.
- (17) If the inverters or substation transformer chosen for the project have a higher sound power output than the models used in the noise model, the Applicant shall show that sound levels will not exceed the daytime ambient level plus five dBA at any non-participating sensitive receptor and will be submitted at least 30 days prior to construction. If noise data is not available from the inverter or transformer manufacturer, an operational noise test may be performed to comply with this condition. The test must be performed during the on a sunny day in the months of May-August, at a distance equal to the minimum distance from an inverter to a non-participating residence. If the test shows the operational noise level is greater than project area ambient Leq level plus five dBA additional noise mitigation will be required. This condition is complied with if the test shows the operational noise level is less than project area ambient Leq level plus five dBA.
- (18) The Applicant shall not construct within the 150-acre area(s) identified within its May 3, 2021 data request response where potential archaeological resources remain to be surveyed.
- (19) 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. However, 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 are unaffected by the non-repair of the landowner's field tile system.

- (20) If the Applicant encounters any new listed plant or animal species or suitable habitat of these species prior to construction, the Applicant shall include the location in the final engineering drawings and associated mapping, as required in condition 8. The Applicant shall avoid impacts to these species and explain how impacts would be avoided during construction.
- (21) 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.
- (22) The Applicant shall have a Staff-approved environmental specialist on site during construction activities that may affect sensitive areas. Sensitive areas may include, but are not limited to, wetlands and streams, and locations of threatened or endangered species. The environmental specialist shall be familiar with water quality protection issues and potential threatened or endangered species of plants and animals that may be encountered during project construction. The environmental specialist shall have authority to stop construction to assure that unforeseen environmental impacts do not progress and recommend procedures to resolve the impact. A map shall be provided to Staff showing sensitive areas which would be impacted during construction with information on when the environmental specialist would be present.
- (23) 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.
- (24) The Applicant shall avoid all impacts to perennial streams through facility design, HDD or other methods.
- (25) At least 60 days prior to the preconstruction conference, the Applicant shall submit a refined solar facility layout that shows the pipeline easement and right-of-way, the Applicant's setback of solar panels and inverters to that pipeline easement and right-of-way, the access roads necessary to avoid crossing the pipeline easement, the location of the underground electric collection system within the pipeline easement, and the method for installing the underground electric collection system within the pipeline easement.
- (26) At least 60 days prior to the preconstruction conference, the Applicant shall submit a document indicating that it has met or addressed notable points from Energy Transfer Partner's "General Guidelines for Third Party Construction or Maintenance Activities." Specific notable points include but are not limited to: obtained an encroachment agreement; insurance coverage; conducted an engineering study for crossing of pipelines with equipment; will use timber mats, bridges, or other protective material to cross the pipeline during construction; will meet or exceeded minimum HDD pipeline clearance

of 60 inches from the pipeline; established non-interference with the pipeline's cathodic protection system; will utilize proper shielding of the underground electric cable; will comply with setbacks for blasting near the pipeline, due to its compliance with Staff's recommended condition that it not utilize blasting for the project; and conducted a prior blast plan impact analysis.

- (27) The Applicant shall not utilize blasting to construct the solar facility.
- (28) The Applicant shall denote the pipeline easement on the final engineering drawings and install construction fence along the pipeline easement so that the pipeline easement is avoided during construction.
- (29) At least 30 days prior to the preconstruction conference, that the Applicant shall submit its emergency response plan to Staff for review and acceptance. That plan shall include a provision(s) to keep the Village of Quincy informed of the status of any spills, significant panel damage, and repair/clean-up/decommission schedule.
- (30) The Applicant shall construct the facility in a manner that incorporates post construction stormwater management under OHC00005 (Part III.G.2.e, pp. 19-27) in accordance with the Ohio Environmental Protection Agency's Guidance on Post-Construction Storm Water Controls for Solar Panel Arrays.
- (31) The Applicant take steps to prevent establishment and/or further propagation of noxious weeds identified in Ohio Adm.Code Chapter 901:5-37 during implementation of any pollinator-friendly plantings.
- (32) 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, road use agreements, driveway permits, 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 transportation management plan which shall a Road Use Maintenance Agreement entered by the Applicant with Champaign County. This plan shall be submitted to Staff prior to the preconstruction conference for review and confirmation by Staff that it complies with this condition.
- (33) At least 30 days prior to the preconstruction conference, the Applicant shall submit an updated decommissioning plan that includes a provision to monitor the site to ensure successful revegetation and rehabilitation of the project area and a provision where the performance bond is posted prior to the commencement of construction.



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