Staff Report of Investigation

Lott 138 kV Transmission Line Project Ohio Power Company

Case No. 22-0940-EL-BTX

September 18, 2023



In the Matter of the Application of Ohio Power Company) for a Certificate of Environmental Compatibility and Public) Need for the construction of a 138-kilovolt transmission) line in Delaware County, Ohio

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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 Ohio Power Company) for a Certificate of Environmental Compatibility and Public) Need for the construction of a 138-kilovolt transmission) line in Delaware County, Ohio

Case No. 22-0940-EL-BTX

Director, Department of Natural Resources

Chair, Public Utilities Commission
Director, Department of Agriculture
Director, Department of Development
Director, Environmental Protection Agency

Ohio House of Representatives
Ohio Senate

Public Member

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 or OPSB), 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 (Ohio EPA), the Ohio Department of Health (ODH), the Ohio Department of Development (ODOD), the Ohio Department of Natural Resources (ODNR), and the Ohio Department of Agriculture (ODA). In addition, Staff coordinated with the Ohio Department of Transportation (ODOT), the Ohio Historic Preservation Office (OHPO), the U.S. Fish and Wildlife Service (USFWS), and the U.S. Army Corps of Engineers (USACE).

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.

Sincerely,

Michael Williams Executive Director

Michael Williams

Ohio Power Siting Board

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I. EXECUTIVE SUMMARY

The authority of the OPSB is prescribed by Ohio Revised Code (R.C.) Chapter 4906. R.C. 4906.10 specifies that 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 eight specified criteria. Staff investigated the application presented by Ohio Power Company (Applicant) and recommends that the Board approve the Applicant's request for a certificate of environmental compatibility and public need subject to the proposed conditions contained in this report.

I. POWERS AND DUTIES

OHIO POWER SITING BOARD

The authority of the OPSB is prescribed by Ohio Revised Code (R.C.) Chapter 4906. R.C. 4906.03 and 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, operational 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 Chairperson of the Public Utilities Commission of Ohio (PUCO or Commission) who serves as Chairperson of the Board; the directors of the Ohio EPA, the ODH, the ODOD, the Ohio ODA, and the 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. In addition, the Board shall include four legislative members who may participate fully in all the board's deliberations and activities except that they shall serve as nonvoting members. The speaker of the Ohio house of representatives shall appoint one legislative member, and the president of the Ohio senate and minority leader of each house of the Ohio General Assembly shall each appoint one legislative member. In all cases involving an application for a certificate or a material amendment to an existing certificate for a utility facility, as defined in R.C. 303.57, the Board shall include two voting ad hoc members, as described in R.C. 4906.021

NATURE OF INVESTIGATION

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

Application Procedures

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

Within 60 days of receiving an application, the Chairperson 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 Not later than three days after an application for a certificate, or a material amendment to an existing certificate, for a utility facility, as defined in R.C. 303.57, is found to be in compliance with R.C. 4906.06(A), is accepted by the Board, and the filing fee is paid by the applicant, the board shall provide a copy of the application to each board of trustees and each board of county commissioners of the townships or counties in which the facility is to be located.⁶

Staff Investigation and Report

The Chairperson will also cause each application to be investigated and a report published by the Board's Staff not less than 15 days prior to the public hearing. The report sets forth the nature of the investigation and contains the findings and conditions recommended by Staff. 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 ODOT, the OHPO, and the 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

^{1.} R.C. 4906.04 and 4906.20.

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

^{3.} Ohio Adm.Code 4906-3-06(A).

^{4.} R.C. 4906.07(A) and Ohio Adm.Code 4906-3-08.

^{5.} R.C. 4906.08(C).

^{6.} See R.C. 4906.31(A).

^{7.} R.C. 4906.07.

^{8.} Ohio Adm.Code 4906-3-06(C).

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. A record of the public hearings and all evidence, including the Staff Report, may be examined by the public at any time. Description

Board Decision

The Board may approve or deny an application for a certificate of environmental compatibility and public need as filed, or modify and approve it upon such terms, conditions, or modifications as the board considers appropriate. ¹¹ The certificate shall be subject to R.C. 4906.101, 4906.102, and 4906.103 and is also conditioned upon the facility being in compliance with applicable standards and rules adopted under the Ohio Revised Code. ¹²

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. 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. Any party to the proceeding that believes its issues were not adequately addressed by the Board may submit within 30 days an application for rehearing. 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.

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;

^{9.} R.C. 4906.07(C) and 4906.10.

^{10.} R.C. 4906.09 and 4906.12.

^{11.} R.C. 4906.10(A).

^{12.} R.C. 4906.10.

^{13.} R.C. 4906.11.

^{14.} R.C. 4906.10(C).

^{15.} See R.C. 4903.10 and 4906.12.

^{16.} R.C. 4903.11, 4903.12, and 4906.12.

- (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 multimodal 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.

II. APPLICATION

APPLICANT

Ohio Power Company (AEP Ohio) is an affiliate of American Electric Power (AEP) and AEP Ohio Transmission Company, Inc. AEP is one of the largest electric utilities in the United States, delivering electricity to nearly 5.4 million customers in 11 states. AEP also owns the nation's largest electric transmission system, comprised of more than 40,000 miles. AEP Ohio provides electricity to nearly 1.5 million customers in Ohio.

HISTORY OF THE APPLICATION

On October 28, 2022, and January 17, 2023, the Applicant filed pre-application notification letters regarding the project.

On November 16, 2022, and February 1, 2023, the Applicant held public informational meetings to discuss the project with interested persons and landowners.

On March 8, 2023, the Applicant filed its application for a certificate to construct the project.

On May 5, 2023, the Executive Director of the OPSB issued a letter of compliance regarding the application to the Applicant.

On June 20, 2023, a petition to intervene was filed by Thorpe Family Farms, Inc., and James Thorpe.

On July 10, 2023, Porter Township filed to intervene in the case.

A local public hearing has been scheduled for October 3, 2023.

The evidentiary hearing is scheduled to commence on November 14, 2023.

This summary of the history of the application does not include every filing in case number 22-0940-EL-BTX. 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 proposes to construct, own, operate, and maintain a new 3.5-mile-long Condit Switch-Lott 138 kV electric transmission line in Delaware County, Ohio. ¹⁷ The \$6.7 million project is intended to upgrade the existing medium voltage network in the area to now provide high voltage 138 kV transmission service to its customer's (Consolidated Electric Cooperative, Inc.) existing Lott Substation. This project would improve reliability and address recent outages and interruptions experienced by Consolidated Electric Cooperative, Inc. and surrounding customers.

^{17. &}quot;Application to the Ohio Power Siting Board for a Certificate of Environmental Compatibility and Public Need" (application), Ohio Power Company, Docket No. 22-0940-EL-BTX, filed on March 8, 2023.

The proposed project involves the (1) installation of a new proposed Condit switch along the existing Conesville-Trent 138 kV electric transmission line and (2) construction of a new overhead electric transmission line between that new proposed Condit Switch and the existing Lott Substation. The Applicant has proposed an approximately 80-foot right-of-way for the new transmission line and steel monopoles for support. The Applicant utilized field survey data to further identify route alternatives and to ultimately select its Preferred and Alternate routes.

Preferred Transmission Line Route

The Preferred Route is 3.5 miles long and extends south from the existing Lott Substation to the proposed Condit Switch. The transmission line extends directly south from the Lott Substation along Condit Road for 0.2 mile to Justamere Road, where it travels east for 0.9 mile parallel to Justamere Road. The Preferred Route then travels south for 2.4 miles to connect with the proposed Condit Switch.

Alternate Transmission Line Route

The Applicant's Alternate Route is also approximately 3.5 miles long and extends from the existing Lott Substation to the proposed Condit Switch. The transmission line extends directly south from the Lott Substation along Condit Road for 0.2 mile to Justamere Road, where it then turns east parallel to Justamere Road for 0.3 mile. Then the Alternate Route travels generally south for 2.6 miles. Lastly, the Alternate Route travels east approximately 0.3 mile to connect with the proposed Condit Switch.

Condit Switch

The Applicant plans to construct and install a new switch on the existing Conesville-Trent 138 kV electric transmission line. The switch would allow the Applicant the ability to direct and/or isolate power to the existing Lott Substation. The switch would be the subject of a future separate application to be filed with the Board. That application would entail the installation of a three-way Phase-Over-Phase (POP) medium-voltage air-break (MOAB) switch.

Both the Preferred and Alternate routes are shown on the maps in this report.

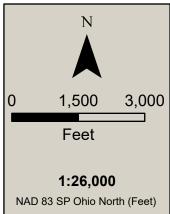
Project Schedule

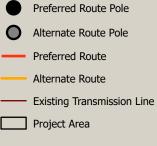
The Applicant anticipates construction to begin January 2026 and be completed around November 2026. The project would then be placed in service in November 2026.

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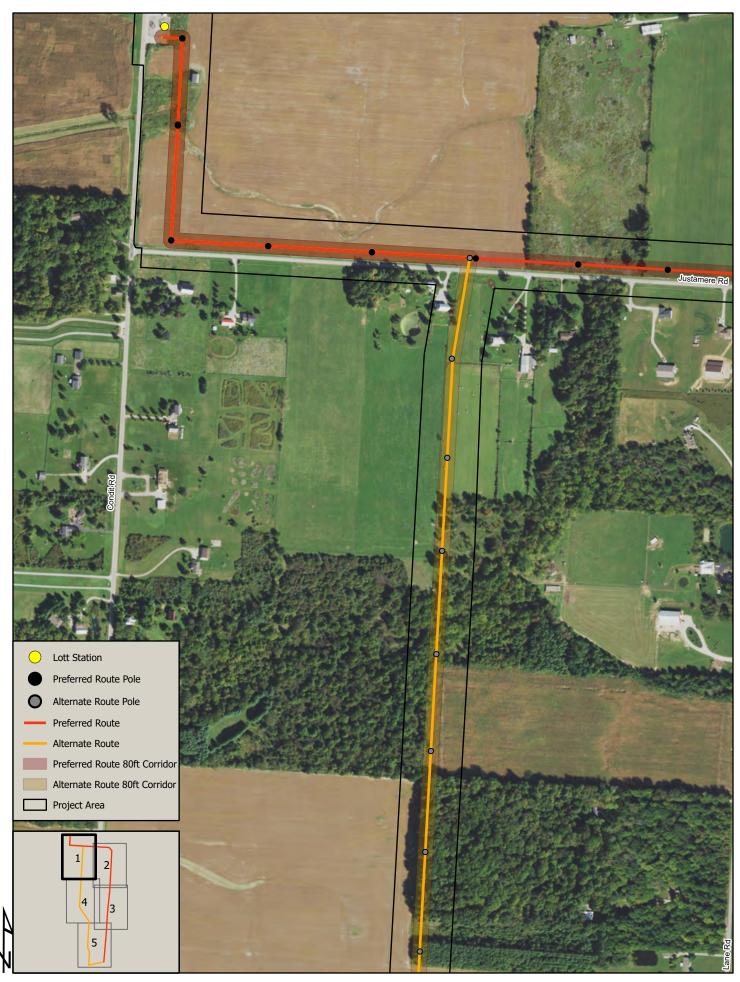


Proposed Condit Switch

Lott Station

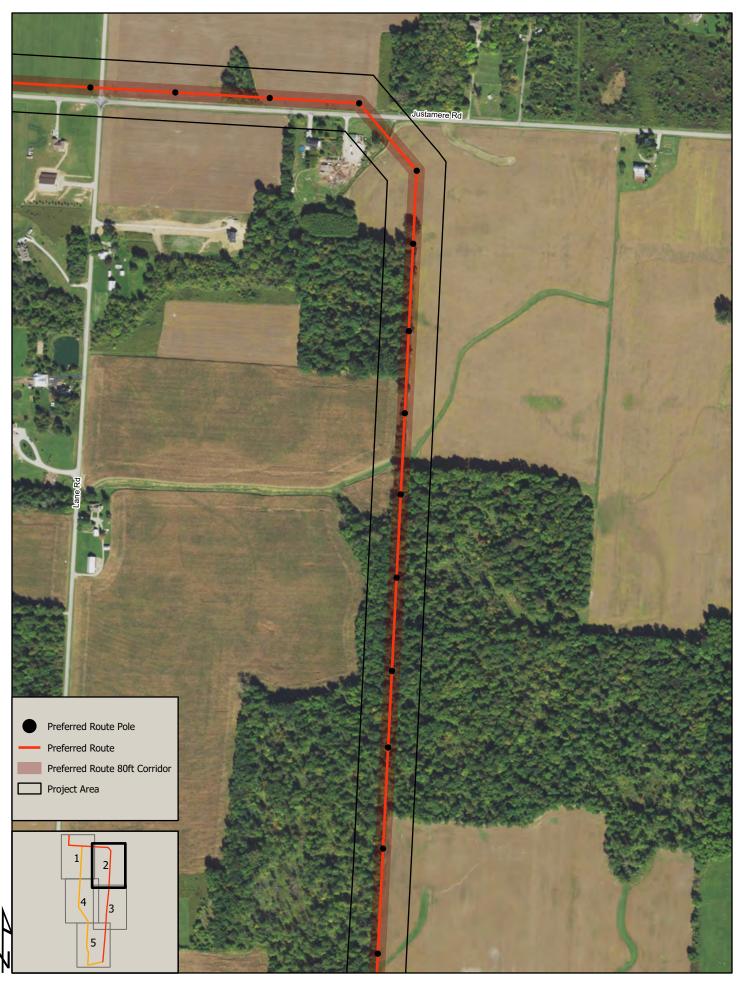
Overview Map 22-0940-EL-BTX Lott 138kV Transmission Line

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.



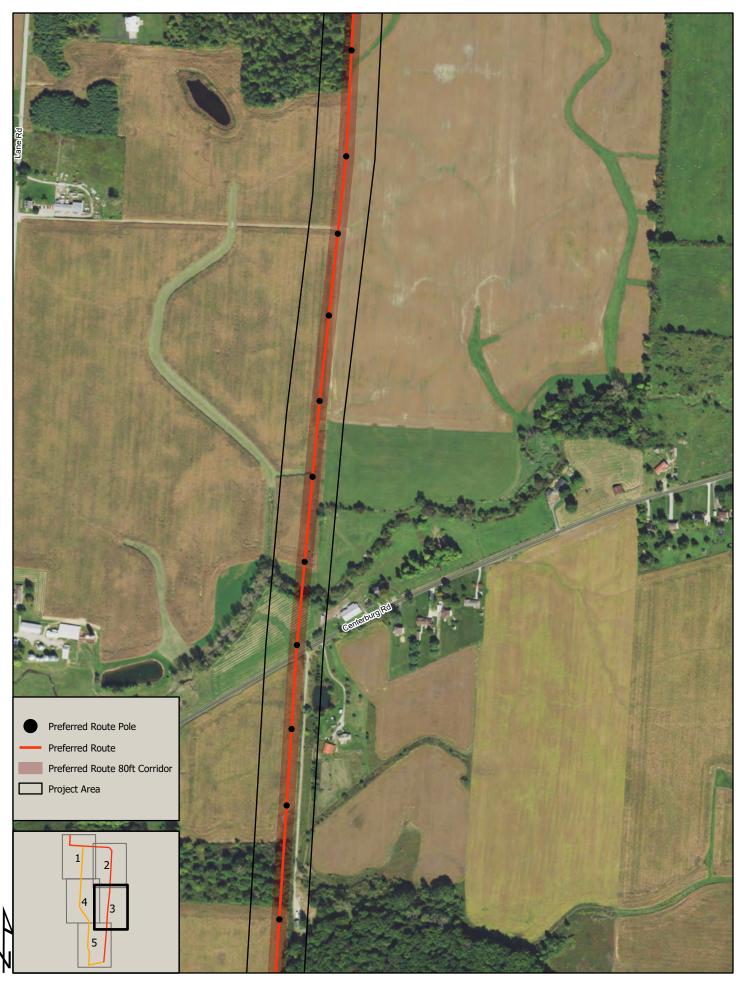
Detail Map Page 1

1 inch = 500 feet



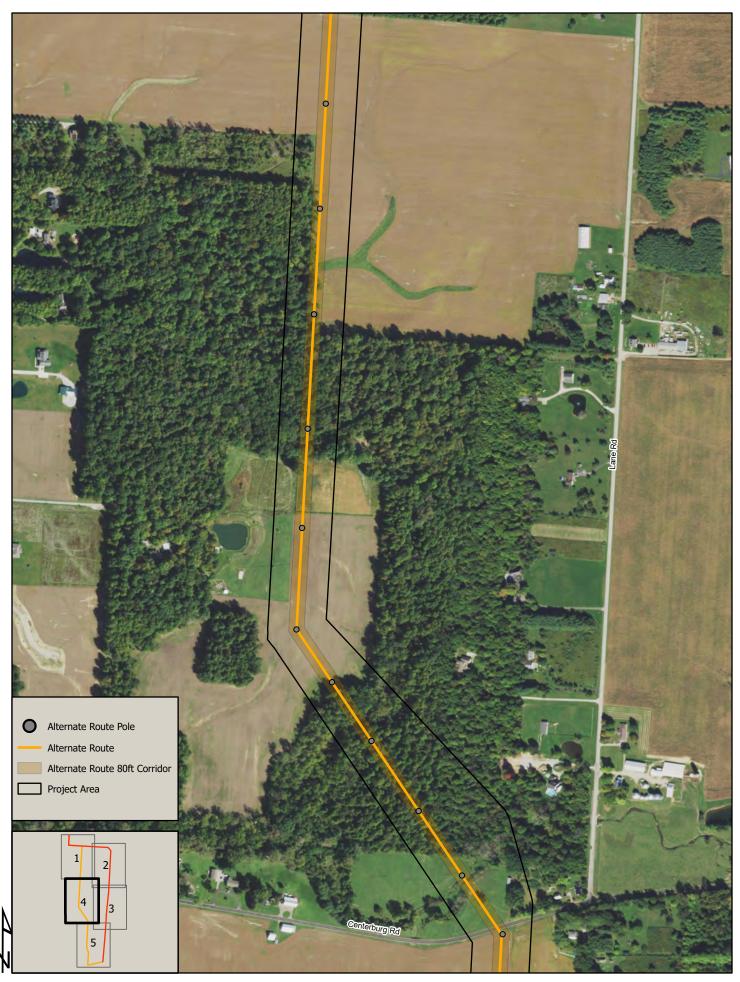
Detail Map Page 2

1 inch = 500 feet



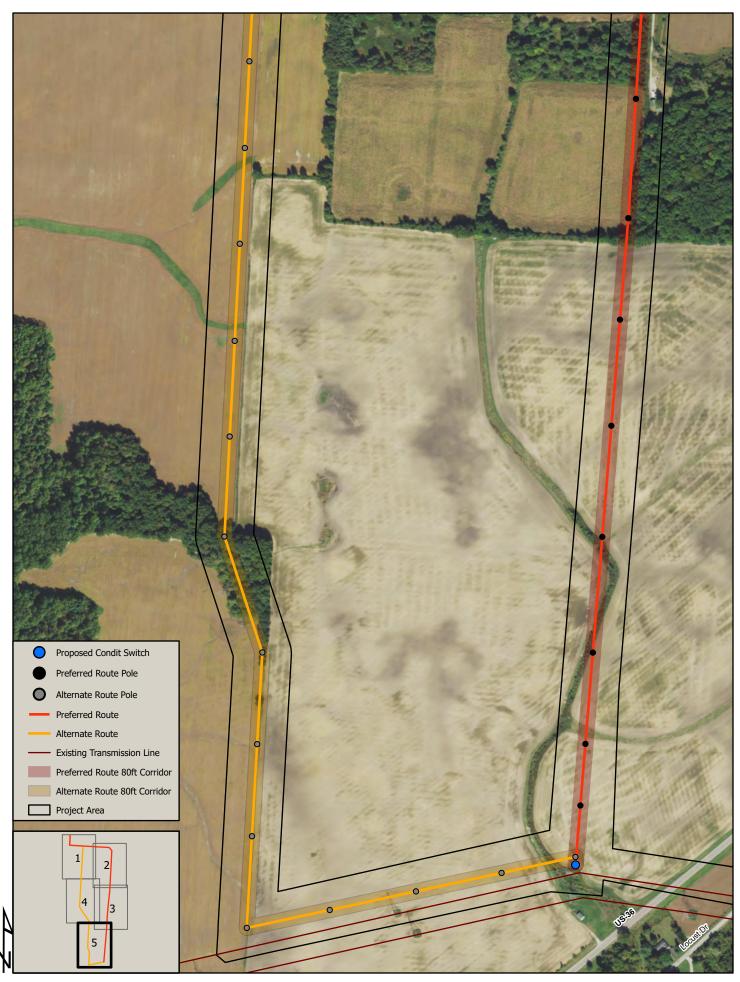
Detail Map Page 3

1 inch = 500 feet



Detail Map Page 4

1 inch = 500 feet



Detail Map Page 5

1 inch = 500 feet

III. CONSIDERATIONS AND RECOMMENDED FINDINGS

In the Matter of the Application of the Ohio Power Company, Inc 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

Purpose of Proposed Facility

The proposed project would replace the existing 34.5 kV distribution service out of AEP's Trent Substation with a 3.5-mile single circuit 138 kV transmission line to serve AEP's customer, Consolidated Electric Cooperative's Lott Substation.

Consolidated Electric Cooperative states that the current distribution circuit is consistently recognized as having poor reliability, with 4.95 million customer minutes interrupted between the years 2013 and 2022.

The proposed facility upgrade from distribution service to transmission service would improve reliability, reduce outages, and allow for future growth.

Long Term Forecast

The project was included in the Applicant's 2023 Long-Term Forecast Report to the Public Utilities Commission of Ohio, filed in Case No. 23-0501-EL-FOR. 18

System Economy and Reliability

The proposed project is not expected to adversely impact the existing transmission grid. Without this project, the Applicant states that Consolidated Electric Cooperative will continue to experience outages on their system. The bulk power system (BPS) is discussed in more detail in the Electric Grid section of this report.

Recommended Findings

Staff recommends that the Board find that the basis of need for the project has been demonstrated and therefore complies with the requirements specified in R.C. 4906.10(A)(1), 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 <u>Recommended Conditions of Certificate</u>.

^{18.} AEP Ohio, "Long-Term Forecast Report to the Public Utilities Commission of Ohio," Public Utilities Commission of Ohio Case No. 23-0501-EL-FOR, April 17, 2023.

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.

Community Impacts¹⁹

Land Use

This project would be in Porter and Trenton Townships in Delaware County. Land use in the area surrounding the proposed transmission line is agricultural, residential, commercial, and forest uses. The Preferred and Alternate routes would cross agricultural land for 82 and 63 percent of its length, respectively. The Preferred Route would cross 17 properties, and the Alternate Route would cross 23 properties. There are 2 residences and three other structures within 200 feet of both the Preferred and Alternate routes. The disturbance area would be contained to the 80-foot wide right-of-way. The Applicant states that it is unlikely that construction would require the removal of any residential or commercial structures.

Impacts to land use from construction would be contained to the right-of-way, which would be restored after construction is complete, through road paving, soil grading, seeding, and mulching. The Applicant states the only permanent impacts to the right-of-way would be from tree and other vegetation clearing. Any activities such as lawn care or agricultural practices that do not interfere with "the safe and reliable operation of the transmission line" would be able to continue within the right-of-way. Staff asserts the project would not have a significant effect upon surrounding land uses, as those uses would continue without significant restrictions.

Regional Planning

The proposed electric transmission line would support increased regional growth by providing increased reliability and availability of electric power in the area. The Applicant states in the application that it consulted Delaware County regarding whether the project would conflict with any regional land use plans and no conflicts with this project were identified. The project would not impact or hinder adjacent development on public and private properties. The transmission

^{19. &}quot;It is the mission of the Ohio Department of Development to help create jobs and build strong communities in Ohio, while ensuring accountability and transparency of taxpayer money exceptional customer service." (Ohio.gov, *Department of Development*, https://www.development.ohio.gov/feat/whatisdsa.htm). RC 122.011(A)(6) states, in part, that the department of development shall develop and promote plans and programs designed to assure that state resources are efficiently used, economic growth is properly balanced, community growth is developed in an orderly manner, and local governments are coordinated with each other and the state, and for such purposes may, among other things, cooperate with and provide technical assistance to state departments, regional and local planning commissions, and other appropriate organizations for the solution of community problems. According to R.C. 122.01(B)(1), "community problems' includes, but is not limited to, taxation, fiscal administration, governmental structure and organization, intergovernmental cooperation, education and training, employment needs, community planning and development, air and water pollution, public safety and the administration of justice, housing, mass transportation, community facilities and services, health, welfare, recreation, open space, and the development of human resources."

line upgrade would foster increased reliability and availability of electric power to residential, commercial, institutional, and industrial users in the region.

Recreation

Neither the Preferred nor Alternate route is within 1,000 feet of recreational land.

Aesthetics

The project would slightly alter the visual landscape of the surrounding area due to the structures being made of a different material and standing taller than the existing infrastructure. Visual impacts have been reduced by the site selection of both proposed routes.

Cultural Resources²⁰

The Applicant's consultant conducted a literature review and Phase I cultural resource survey to determine potential impacts to historical properties and archaeological sites. The survey included a review of the National Register of Historic Places (NRHP) and analysis of sites that may be eligible for inclusion in the NRHP, OHPO files, Ohio Archeological Inventory and Ohio Historic Inventory files, and other sources of data. Six previously identified archeological sites and three cemeteries were identified during the literature review. One cemetery, Robinson Cemetery, exists, according to maps, adjacent to the Alternate Route although surface evidence of the cemetery was not discovered. If the Alternate Route is certified by the Board, Staff recommends a condition that the Applicant notify and consult with OHPO and Staff if evidence of the cemetery is discovered during construction of the project. There were 10 new archeological sites identified during field survey along the Preferred Route. All 10 sites were recommended not eligible for NRHP listing by the Applicant's consultant. 27 historic resources were identified within the area of potential effect and the consultant recommended that all the historic resources are ineligible for listing on the National Register of Historic Places. These results were submitted to the OHPO. The OHPO concurred that no further archaeological work is necessary for the project and recommends a finding of no adverse effect to historical properties. Staff agrees with these findings.

Tax Revenues

The Applicant stated that the annual property taxes during the first year following the completion of the project would be \$150,800 for the Preferred Route and \$161,600 for the Alternate Route and has provided a table itemizing the tax revenues that would be received by the county, the two townships, the preservation park, career centers, and the schools and libraries.

^{20.} According to RC 149.53, "[a]|Il departments, agencies, units, instrumentalities, and political subdivisions of the state shall cooperate with the Ohio history connection and the Ohio historic site preservation advisory board in the preservation of archaeological and historic sites and in recovery of scientific information from such sites, and for such purposes shall, whenever practical, by contract or otherwise provide for archaeological and historic survey and salvage work during the planning phases, before work on a public improvement begins or at other appropriate times." In Ohio, the Ohio Historic Preservation Office (OHPO) is part of the Ohio History Connection. (See, Ohio History Connection, About Section 106 Review, ">https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpreviews/about-section-106-review>">https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpreviews/about-section-106-review>">https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpreviews/about-section-106-review>">https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpreviews/about-section-106-review>">https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpreviews/about-section-106-review>">https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpreviews/about-section-106-review>">https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpreviews/about-section-106-review>">https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpreviews/about-section-106-review>">https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpreviews/about-section-106-review>">https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpreviews/about-section-106-review>">https://www.ohiohistory.org/preserve/state-historic-preservation-office/hpreviews/about-section-106-r

Liability Insurance

The Applicant has outlined its program for construction and operation of the facility, including insurance limits and compliance with present Ohio laws. Specifically, the Applicant states it would maintain bodily injury and property damage of at least one million dollars per occurrence. The Applicant also states that it is a qualified self-insuring employer under the Worker's Compensation law of the State of Ohio and maintains necessary insurance that is required by the statutes and regulations of the Industrial Commission of Ohio.

Public Services, Facilities, and Safety

Safety

The Applicant stated that it would comply with all applicable safety standards set by the Occupational Safety and Health Administration (OSHA), safety standards of the PUCO, the North American Electric Reliability Corporation (NERC) Reliability Standards, and industry best practices for construction. The Applicant also intends to utilize and maintain an approximately 80 feet wide right-of-way for the proposed project. The Applicant's design would meet the requirements of the NESC.

Communications

Because the Applicant has designed the facility to minimize interference with communications systems, the Applicant does not expect AM radio, FM radio, amateur radio operations, or television interference to occur.

Staff received a comment from the public about the potential of the facility to interfere with amateur radio operations. Staff inquired with the Applicant who indicated that the project has been designed to minimize negative corona effects, which could cause potential radio interference, from being emitted from loose or defective transmission hardware. The Applicant would maintain the transmission line in good repair. Therefore, the project is not expected to affect amateur radio operations.

Any likely source of radio or television interference would be localized, and due to defective hardware, which could be easily detected and replaced. The Applicant indicates that it will maintain the transmission line in good condition, which should avoid impacts to radio and television reception. Also, once detected, the Applicant would repair or replace the defective hardware to eliminate the interference.

Roads and Bridges²¹

The Applicant plans to utilize public road right of way and private easements to access and construct either the Preferred or Alternate routes. Access roads would require affected property owners' input and would be finalized and negotiated after the final Preferred or Alternate route is approved.

^{21.} The entity responsible for maintaining roads and bridges within Ohio depends on many factors. See, e.g., ODOT, Roadway Infrastructure Maintenance Responsibility Manual,

The Applicant states that an increase in truck traffic is anticipated during construction for the purpose of equipment access and equipment and material deliveries. The Applicant does not anticipate any additional traffic during operation of the facility beyond routine maintenance, i.e., periodic mowing and tree removal. Also, the Applicant doesn't anticipate any road lane closures, bridge closings, or use of traffic flaggers for the construction of the project. The Applicant, through its construction contractor, will develop a traffic maintenance plan prior to construction. Staff recommends the Applicant obtain and comply with appropriate road closure permitting agencies such as the County Engineer or ODOT. The Applicant anticipates that a few temporary construction entrance permits would be required from ODOT and the county. The Applicant also anticipates that a road use maintenance agreement would be required from Delaware County.

Noise

Construction noise would include the use of a digger derrick and a crane. The Applicant does not anticipate using pile-driving or rock hammering/breaking. The total duration of construction of the line is expected to be 10 months. Construction activities would be limited primarily to daytime hours. The Applicant would notify property owners or tenants of the upcoming construction activities for the project in the same manner as required for the public information program, as stated in Ohio Adm.Code 4906-3-03(B)(2), including the potential for after-hours activities.

Most noise impacts associated with this project would occur during construction. The Applicant would mitigate noise impacts by using standard construction techniques and limiting construction activities to daylight hours, to the extent feasible. Occasional, short term, noise impacts associated with maintenance and repair activities would occur throughout the life of the facility. Although the Applicant states that construction activity would generally be limited to daylight hours, Staff recommends a condition that limits general construction activities to daylight hours unless the noise impact from the construction activities do not rise above ambient levels at sensitive receptors. If extraordinary circumstances require nighttime construction activities that include noise impacts above ambient levels at sensitive receptors, the Applicant shall notify Staff and affected property owners or tenants before the construction occurs.

Through incorporation of the Applicant's proposed practices and Staff's recommendations, noise impacts would be minimized.

Geology²²

The project area topography is flat to gently rolling. In accordance with the NRCS Web Soil Survey, most soils within the study area are very poorly drained to moderately well drained. ²³ 0.20 acres of the Preferred Route and 1.30 acres of the Alternate Route crosses soils that are considered highly erodible. .003 acres of the Preferred Route crosses slopes exceeding twelve percent. No parts of the Alternate Route cross slopes exceeding twelve percent. Bedrock is unlikely to be encountered during any portions of the proposed construction due to the thickness of overlying glacial drift material compared to the proposed direct embedment and pier foundation depths. The Applicant indicates "No major constructability geotechnical issues are expected based on a high-level review of soils and topography; however, soil-boring investigations will be conducted before final designs are completed." ²⁴

The Applicant conducted a geotechnical investigation of the project area which included the evaluation of six borings ranging in depth from 36 to 44 feet. ²⁵ A rock core sample was extracted from boring B–01. Coring was attempted at B-02, but the highly weathered shale disintegrated, prohibiting a core sample. However, rock samples were extracted using "split-spoon" methodology. The geotechnical evaluation did not identify any geologic features or soil conditions that would be prohibitive to construction or would otherwise necessitate engineering considerations outside of standard protocol for electric transmission projects.

The preliminary design indicates approximately 39 steel monopole poles would be used. Most poles would be installed via direct embedment, and some structures may require pier foundations. These locations may require a full-length anchor bolt cage. The excavation for each concrete foundation would be approximately 4.5 to 7 feet in diameter and 15 to 30 feet deep.

^{22.} According, in part, to R.C. 1505.01, the ODNR's division of geological survey "[s]hall advise, consult, or collaborate with representatives of agencies of the state...on problems or issues of a geological nature when requested by such an agency...." One of the missions of the ODNR Division Geological Survey is "to provide geologic information and services needed for responsible management of Ohio's natural resources." (ODNR, Division of Geological Survey, *About the Division*, <a href="https://ohiodnr.gov/wps/portal/gov/odnr/discover-and-learn/safety-conservation/about-ODNR/geologic-survey/division-of-geologic-survey/division-of-geologic-survey/division-of-geologic-survey/). This includes studying and investigating, among other things, glacial and surficial geology, bedrock geology, and geological hazards. According to ODNR a "geologic hazard or 'geohazard' is a geologic condition, either manmade or natural, that poses a potential danger to life and property. Ohio is home to a number of potential geohazards, including karst, mine subsidence, earthquakes, landslides, and shore erosion." (ODNR, *Geologic Hazards*,).

^{23.} Web Soil Survey (WSS) provides soil data and information produced by the National Cooperative Soil Survey. It is operated by the USDA Natural Resources Conservation Service (NRCS) and provides access to the largest natural resource information system in the world, https://websoilsurvey.nrcs.usda.gov/app/.

^{24.} Application at page 31.

^{25.} Applicant's August 30, 2023 response to Staff data request providing the August 17, 2021 Geotechnical Exploration Report conducted by Professional Service Industries, Inc.

Conclusion

Staff recommends that the final detailed engineering drawings of the final project design shall account for geological features and soil conditions identified within the final geotechnical report.

Based on the data and considerations provided within the application, including information request submittals to date, and implementation of the recommended conditions, there appears to be no geological features or soil conditions within the project area that are incompatible with construction of the proposed Preferred or Alternative Routes.

Ecological Impacts

Surface Waters²⁸

The Applicant's consultant conducted ecological surveys of the project area in the fall of 2021, the summer of 2022, and the winter of 2023. The consultant identified 29 wetlands totaling 12.44 acres, including eleven Category 1 and eighteen Category 2.²⁹ No high-quality Category 3 wetlands were identified. The consultant also identified 18 stream segments within the study area, including seven perennial, eight intermittent, and three ephemeral. Additionally, two ponds totaling 0.15 acres within the project area was delineated.

The Preferred Route would cross two Category 1 wetlands, five Category 2 wetlands, three perennial streams, and three intermittent streams. The extent of temporary impacts to wetlands is unknown at this time as site design has not been finalized. Permanent impacts are not anticipated as there are no current plans to place structures within any wetlands. No permanent or temporary impacts to streams have been proposed.

The Alternate Route would cross two Category 1 wetlands, five Category 2 wetlands, three perennial streams, two intermittent streams, and one ephemeral stream. The extent of temporary impacts to wetlands is unknown at this time as site design has not been finalized. Permanent impacts are not anticipated as there are no current plans to place structures within any wetlands. No permanent or temporary impacts to streams have been proposed.

While there are currently no plans to place poles in wetlands, the Applicant has outlined the best management practices to be followed should site plans change. The Applicant would utilize timber matting to access the proposed pole location if conditions are wet. No excavation other than the boring or excavation of a hole for pole installation would be performed within wetland areas. No additional fill would be placed in the wetlands beyond the placement of the pole and the borehole backfill.

Similarly, while no temporary impacts to streams are being proposed, the Applicant has outline best management practices to be implemented should new stream crossings become necessary. The Applicant states that streams would be crossed via stream ford, culvert stream crossings, or temporary access bridge. Stream crossing technique would depend on the quality of the stream. Staff recommends the Applicant only utilize temporary stream fording to cross dry ephemeral or intermittent streams. No mechanized clearing would be conducted within 25 feet of a stream;

sediment-laden runoff would be directed towards stormwater management locations; and stream banks would be stabilized and revegetated as appropriate.

If temporary impacts to surface waters meet the threshold set forth by the Huntington District of the U.S. Army Corp of Engineers, the Applicant would seek coverage under Nationwide Permit 58 for Utility Line Activities or under the Ohio EPA Isolated Wetlands Permit, as applicable. Additionally, the Applicant would submit a Notice of Intent for coverage under the Ohio EPA National Pollutant Discharge Elimination System (NPDES) Construction General Permit OHC00006 for stormwater related surface water impacts. As required by this permit, the Applicant would develop a Stormwater Pollution Prevention Plan (SWPPP), which would identify additional controls and best management practices (BMP) to be followed during construction and operation to further avoid potential impacts. The Applicant would also clearly stake or flag the boundaries of delineated surface waters and any other environmentally sensitive areas prior to construction.

Portions of the Preferred and Alternate route rights-of-ways cross Federal Emergency Management Agency-designated 100-year floodplains. Staff recommends the Applicant correspond with the local floodplain administrator in order to show that no permit is required for this project. The Applicant shall obtain any applicable floodplain development permit prior to construction in floodplains if required.

Threatened and Endangered Species³¹

The Applicant received environmental review of the project from the USFWS and the ODNR on August 29, 2022, and September 1, 2022, respectively. The following tables provide the results of the information requests and document review.

MAMMALS

Common Name	Scientific Name	Federal Status	State Status	Presence in Project Area
Indiana bat	Myotis sodalis	Endanger ed	Endangered	No suitable winter hibernacula were observed in the project area. Suitable summer foraging and roosting habitat was observed in the project area.
Northern Long- Eared bat	Myotis septentrionalis	Endanger ed	Endangered	No suitable winter hibernacula were observed in the project area. Suitable summer foraging and roosting habitat was observed in the project area.
Little Brown bat	Myotis lucifugus	N/A	Endangered	No suitable winter hibernacula were observed in the project area. Suitable summer foraging and roosting habitat was observed in the project area.

Tri-	Perimyotis	N/A	Endangered	No suitable winter hibernacula		
colored	subflavus		Lindangered	were observed in the project area.		
bat	Sabjiavas			Suitable summer foraging and		
bat				roosting habitat was observed in		
				the project area.		
INVERTEBRATES						
Common	Scientific	Federal	State Status	Presence in Project Area		
Name	Name	Status		,		
Rabbitsfoot	Quadrula	Endanger	Endangered	No suitable habitat observed		
	cylindrica	ed		within project area. No in-water		
	cylindrica			work in perennial streams		
				proposed.		
Pondhorn	Uniomerus	Endanger	Threatened	No suitable habitat observed		
	tetralasmus	ed		within project area. No in-water		
				work in perennial streams		
				proposed.		
Rayed	Villosa fabalis	Endanger	Endangered	No suitable habitat observed		
bean		ed		within project area. No in-water		
				work in perennial streams		
				proposed.		
Snuffbox	Epioblasma	Endanger	Endangered	No suitable habitat observed		
	triquetra	ed		within project area. No in-water		
				work in perennial streams		
				proposed.		
Black	Ligumia recta	N/A	Species of	No suitable habitat observed		
sandshell			Concern	within project area. No in-water		
				work in perennial streams		
				proposed.		

This project is within range of the Indiana bat, northern long-eared bat, little brown bat, and the tricolored bat. The ODNR and the USFWS have recommended that no clearing of trees greater than three inches diameter at breast height be conducted from April 1 through September 30 to prevent impacts to these species. The Preferred and Alternate routes would require approximately 7.20 and 8.20 acres of tree clearing, respectively. The Applicant has committed to the seasonal tree clearing restriction recommended by the ODNR and the USFWS. The Applicant's consultant, Condit, conducted a summer bat survey in the summer of 2022. The survey did not detect any listed bat species. The Applicant coordinated the survey results with the ODNR. The ODNR stated in their response letter that due to the survey results, the risk to listed bat species is low in the project area and tree cutting during the summer maternity season is not likely to result in mortality of these species. No winter hibernacula were observed within 0.25 mile of the project area.

This project is within range of several listed mussel species. Due to lack of in-water work in a perennial stream and impact to suitable habitat, impacts to these species are not anticipated.

Vegetation

The following table reflects the different vegetative communities present in the project area for both the Preferred and Alternate routes.

VEGETATIVE COMMUNITIES WITHIN PROJECT AREA*

Vegetation Community Type	Survey Area (Acres)
Agricultural Field	43.52
Old Field	3.72
New Field	0.65
Forested	11.74
Industrial Land/Roadway	0.48
Pasture	3.99
Palustrine Forested Wetland	2.73
Total	66.83

^{*}The Survey Area encompasses both the Preferred and Alternate routes.

The Applicant proposes to clear an 80-foot-wide right-of-way for the transmission line. Construction impacts on vegetation along either route would be limited to the initial clearing of vegetation along the right-of-way and access roads. The Preferred and Alternate routes would require approximately 7.20 and 8.20 acres of tree clearing, respectively. The Applicant may also selectively clear trees adjacent to the right-of-way if they are dead, dying, diseased, leaning, significantly encroaching, or prone to failure. Vegetative wastes generated during the construction phase would be windrowed or chipped and disposed of appropriately depending on individual landowner requests.

Selective clearing in wetlands would be required where vegetation may impede construction or interfere with operation of the transmission line. Where wooded or forested wetlands occur within the right-of-way, the trees would be removed. This vegetation would be hand-cut by chain saws or other non-mechanized techniques. Stream bank vegetation would be preserved to the maximum extent practical. Any necessary clearing along stream banks would be done by hand-cutting techniques rather than grubbing. Roots and stumps would be left in place to aid stabilization and to accelerate revegetation.

Areas where soil has been disturbed would be seeded and mulched to prevent soil erosion and sedimentation. The Applicant has stated that in lightly disturbed wetland areas, exiting seed banks are often capable of quickly reestablishing vegetation that is compatible with the surrounding wetland. Thus, the Applicant would not reseed lightly disturbed wetland areas unless the existing seed bank does not repopulate the areas.

The right-of-way would require periodic cutting or mowing to ensure safe and reliable operation of the transmission line. Maintenance cutting of woody vegetation in wetland areas would be hand-cut by chain saws or other non-mechanized techniques. The Applicant does not anticipate the use of herbicides during the construction or operation of the project.

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.

Route Selection

The boundaries of the Study Area were determined by the area surrounding the Lott Substation and possible tap locations along the Conesville-Trent 138 kV Transmission Line. The Applicant identified a study area of approximately 5.8 square miles. The study area boundaries are Olive Green Road and Lott Substation to the north, Moody Road to the east, the Conesville-Trent 138 kV transmission line to the south, and Porter Central Road to the west.

The Applicant identified and quantified sensitive land uses. The analysis evaluated ecological factors such as wetlands, protected species and plant habitats, streams and preservation of existing woodlots. A geological study evaluated soil suitability and specific test borings were performed to determine proposed structure locations. Visual impact assessments and proximity to residences and road crossings were also quantified. Cultural resources were evaluated in consultation with the OHPO. Finally, engineering and maintenance costs were weighed. As part of its analysis, the Applicant solicited landowner feedback in finalizing potential routes. Staff finds the Applicant's process to determine a Preferred and Alternate Route to be reasonable.

Minimizing Impacts

Geologic conditions are similar for both routes and no portion of either route appear to be precluded from construction due to geological features or soil condition concerns. The Applicant has sited the facility to avoid permanent impacts to wetlands and avoid both temporary and permanent impacts to streams. While the extent of temporary impacts to wetlands is not known at this time, the Applicant has demonstrated that it would avoid such impacts to the greatest extent possible. Permanent impacts are not anticipated as there are no current plans to place structures within any wetlands. No permanent or temporary impacts to streams have been proposed. The Preferred and Alternate routes would require approximately 7.20 and 8.20 acres of tree clearing, respectively.

The Applicant would mitigate noise impacts by limiting construction activities to daylight hours whenever feasible. Impacts to cultural and recreational resources are not anticipated. Visual impacts are limited due to low population density, nearby agricultural land use and limited transportation corridors. To minimize individual land use conflicts, the Applicant sought feedback from the transmission line landowners to reduce footprint impacts to their properties, and to utilize existing transmission line corridors to the greatest extent possible to limit new additional impacts.

Conclusion

While both routes are buildable, Staff concludes that the Preferred Route is a more efficient land use and best minimizes overall potential impacts.

Recommended Findings

Staff recommends that the Board find that the proposed facility 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 <u>Recommended Conditions of Certificate</u>

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 Applicant proposes to replace the existing 34.5 kV distribution service out of AEP's Trent Substation with a 3.5-mile single circuit 138 kV transmission line to serve AEP's customer, Consolidated Electric Cooperative's Lott Substation. The proposed transmission line would be constructed between the existing Lott Substation and the proposed Condit Switch, which would be filed in a separate application. The proposed transmission line is expected to serve approximately 5.5 megawatts of load.

The proposed facility upgrade from distribution service to transmission service would improve reliability, reduce outages, and allow for future growth.

NERC Planning Criteria

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, including but not limited to those related to transmission planning for contingency events.

PJM Interconnection, LLC

This project's need and solution was presented and reviewed with PJM Interconnection, LLC (PJM) stakeholders at the 'Subregional RTEP Committee – Western' on June 17, 2019, and June 19, 2020. 26,27 Transmission owners plan supplemental projects in accordance with PJM's Open Access Transmission Tariff, Attachment M-3 process. The project was issued supplemental PJM upgrade ID s2283, whereby the project status can be tracked on PJM's website. 28

^{26.} PJM Interconnection, "Subregional RTEP Committee - Western," June 17, 2019, SRRTEP Committee: Western AEP Supplemental Projects, Need No. (AEP 2019 OH039), https://pjm.com/committees-and-groups/committees/srrtep-w (Accessed August 11, 2023).

^{27.} PJM Interconnection, "Subregional RTEP Committee - Western," June 19, 2020, SRRTEP Committee: Western AEP Supplemental Projects, Need No. (AEP 2019 OH039), available at: https://pjm.com/committees-and-groups/committees/srrtep-w (Accessed August 11, 2023).

^{28.} PJM Interconnection, "Transmission Construction Status," https://pjm.com/planning/project-construction.aspx (Accessed August 11, 2023). A Supplemental Project is defined in the PJM Operating Agreement as a transmission expansion or enhancement that is not required for compliance with the following PJM criteria: system reliability, operational performance or economic criteria, pursuant to a determination by the Office of the Interconnection and is not a state public policy project pursuant to Operating Agreement, Schedule 6, section 1.5.9(a)(ii). See also, PJM Manual 14B: PJM Region Transmission Planning Process, Revision 53, effective July 26, 2023, available at: https://www.pjm.com/-/media/documents/manuals/m14b.ashx.

AEP Ohio Transco Planning Criteria

The Applicant follows internal transmission planning reliability criteria to plan its system. These criteria are required by the Federal Regulatory Energy Commission (FERC) and are filed as part of the annual FERC Form No. 715 filing. The criteria must comply with NERC Reliability Standards and PJM ²⁹ planning and operating manuals for the Bulk Electric System (BES). AEP defines the BES as transmission lines rated above 100 kV, and transformers with secondary voltages above 100 kV. The proposed project is designed to meet AEP planning criteria. ^{30,31}

Load Flow Studies and Contingency Analyses

The driver behind the proposed project was a customer request for 138 kV service, therefore PJM completed a do-no-harm analysis as required by the M-3 process. The do-no-harm analysis did not identify any reliability concerns.³²

Recommended Findings

Staff recommends that the Board find that the proposed facility is consistent with regional plans for expansion of the electrical 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 <u>Recommended Conditions of Certificate</u>.

32. *Id*.

^{29.} PJM is the regional transmission organization charged with planning for upgrades to the regional transmission system in Ohio. Significant alterations to the transmission system located in the PJM control area are required to submit planned projects for review of system impacts.

^{30. &}quot;Form No. 715 - Annual Transmission Planning and Evaluation Report," Federal Regulatory Energy Commission, https://www.ferc.gov/industries-data/electric/electric-industry-forms/form-no-715-annual-transmission-planning-and-evaluation-report-instructions (Accessed August 11, 2023).

^{31. &}quot;Transmission Planning Reliability Criteria - AEP PJM," American Electric Power, https://www.aep.com/requiredpostings/AEPTransmissionStudies (Accessed August 11, 2023).

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.

Air³³

Air quality permits are not required for construction of the proposed facility. However, fugitive dust rules adopted under R.C. Chapter 3704 may be applicable to the construction of the proposed facility. The Applicant would control fugitive dust through dust suppression techniques such as irrigation, mulching, or application of tackifier resins. These methods of dust control are sufficient to comply with fugitive dust rules.

Water³⁴

The Applicant would seek coverage, if needed, under the USACE Nationwide Permit 57 for Utility Line Activities for surface water impacts associated with the proposed transmission line. Additionally, proposed structures for both the Preferred and Alternate routes are within the FEMA 100-year floodplain. If necessary, the Applicant will seek a floodplain permit from Delaware County for the final selected route prior to construction.

The Applicant intends to submit a Notice of Intent for coverage under the Ohio EPA's NPDES general permit (OHC00006) for stormwater discharges associated with construction activities, also known as a construction stormwater general permit.

The Applicant is currently developing and would implement a SWPPP as required by the Ohio EPA as part of the NPDES general permit. This SWPPP would include crossing methods for each stream and indicate BMP for construction activities that minimize erosion-related impacts to

^{33.} The Revised Code provides for the Ohio EPA to administer and enforce the provisions of R.C. Ch. 3704 with regards to air pollution control. See e.g., RC 3704.03, 3704.161. The Ohio EPA Division of Air Pollution Control ensures compliance with the federal Clean Air Act and the Emergency Planning and Community Right-to Know Act as part of its mission to attain and maintain air quality at a level that protects the environment and public health. (Ohio EPA, Division of Air Pollution Control, https://www.epa.ohio.gov/dapc/#188913097-featuredtopics>). The Division of Air Pollution Control develops and enforces rules in the Ohio Administrative Code, which assist the state of Ohio to: attain and maintain the National Ambient Air Quality Standards (NAAQS) contained in the Clean Air Act; fulfill the requirements set forth by the Ohio General Assembly in R.C. 3704; and protect and maintain healthy air quality for the citizens of the state of Ohio. (See, Ohio EPA, Division of Air Pollution Control Rules and Laws,).

^{34.} The Revised Code provides for the Ohio EPA to be the lead agency in administering the provisions of Ch. 6111 with regards to water quality. See e.g., RC 6111.041. For example, the Ohio EPA, among other things, "ensures compliance with the federal Clean Water Act and works to restore and enhance the integrity of Ohio's waters." (Ohio EPA Website, Division of Surface Water,

https://www.epa.ohio.gov/dsw/SurfaceWater/LiveTabId/113292#:~:text=Ensures%20compliance%20with%20the %20federal,the%20integrity%20of%20Ohio's%20waters.&text=We%20issue%20permits%20to%20regulate,aimed %20at%20improving%20polluted%20streams). The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. (US EPA, Summary of Clean Water Act, https://www.epa.gov/laws-regulations/summary-clean-water-act.

streams and wetlands. The Applicant has committed to clearly stake or flag the boundaries of delineated surface waters and any other environmentally sensitive areas prior to construction. The Applicant has also stated that no construction or access would be permitted in these areas unless clearly specified in the SWPPP. With these provisions, construction of this facility would comply with the requirements set forth under R.C. Chapter 6111.

Solid Waste 35

Debris generated during construction would consist of items such as conductor scrap, construction material packaging including cartons, insulator crates, conductor reels and wrapping, and used stormwater erosion control materials. Clearance poles, conductor reels and other materials with salvage value would be removed from the construction area for reuse or salvage. All construction-related debris would be disposed of in accordance with state and federal requirements in an Ohio EPA approved landfill or other appropriately licensed and operated facility.

The Applicant intends to have a Spill Prevention Plan in place and would follow the Spill Prevention Plan for any spill cleanup. The Applicant's solid waste disposal plans comply with solid waste disposal requirements set forth in R.C. Chapter 3734.

Aviation³⁶

The anticipated height of the electric transmission support structures is expected to be approximately 65 to 95 feet tall. The Applicant also indicated that it would utilize vehicle-mounted cranes or equivalent equipment during the construction of the proposed facility; the anticipated height of cranes and installation equipment is 100 feet tall. Those heights are under the height requirement from the Federal Aviation Administration (FAA), pursuant to 14 CFR Part 77.9(a), for filing a Form 7460-1. Staff has recommended as a condition that 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, including any permits necessary for aviation clearance. 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.

According to the Applicant, the nearest public-use airport is the Chapman Memorial Field (6CM) airport which is approximately two miles east of the proposed transmission line. The Applicant

^{35.} The Revised Code generally provides for Ohio EPA to administer and enforce the provisions of Chapters 3714. and 3734., in particular with regard to solid waste facilities, infectious waste treatment facilities and construction and demolition debris facilities.

^{36.} The FAA is the authority in the U.S. government responsible for regulating all aspects of civil aviation, including issuing determinations on petitions for objects that penetrate the nation's airspace. The FAA conducts aeronautical studies for new structures that will exceed 200 feet in height under the provisions of 49 U.S.C. 44718, and applicable 14 CFR Part 77. Pursuant to R.C. 4561.32, ODOT regulates the height and location of structures and objects within any airport's clear zone surface, horizontal surface, conical surface, primary surface, approach surface, or transitional surface.

has also found that there is a private-use airport, White Oak Field, approximately 1.9 miles north of the proposed transmission line.

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.

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.

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 its effects on human health. There have been concerns, however, that EMF may have impacts on human health.³⁷ 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 per Ohio Adm.Code 4906-5-07(A)(2).³⁸ The Applicant states that the equipment including transmission facilities would be designed and installed according to best utility practices and standards of NESC.

Public Interaction and Participation

Public Interaction

The Applicant hosted two public informational meetings for the project. and maintains a website at https://www.aeptransmission.com/ohio/lott with information about the project, including contact information. The Applicant commits to notify affected property owners and tenants at least seven days prior to the start of construction.

The Administrative Law Judge scheduled a public hearing and an evidentiary hearing for this proceeding. The public hearing will be held on October 3, 2023, at 6:00 p.m., at Centerburg High School, 3782 Columbus Road, Centerburg, Ohio 43011. The evidentiary hearing is scheduled for November 14, 2023, at 10 a.m., in Hearing Room 11-C, at the offices of the Public Utilities Commission of Ohio, 180 East Broad Street, Columbus, Ohio 43215.

Public Comments

As of the filing of this report, the OPSB has received one public comment in this case. The commenter requested that the transmission line route not cross their property. Public comments are available to view online in the case record at http://dis.puc.state.oh.us.

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

^{37.} Information on Staff's consideration of potential health impacts of EMF can be found in the ODH fact sheet entitled Electromagnetic Fields (EMF) Summary and Assessments available on the ODH website at https://odh.ohio.gov/know-our-programs/health-assessment-section/media/summary-emf

^{38.} Application at page 7-1.

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 existing agricultural district land within the Preferred and Alternate routes of the proposed major utility facility. The agricultural district program was established under R.C. Chapter 929. Agricultural district land is exempt from sewer, water, and 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 auditor's 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 or produce a minimum average gross annual income of \$2,500.

The Applicant describes that agricultural field operations would be temporarily interrupted during construction. However, farmers would be compensated for crop damage and during project operation would be able to farm the right-of-way areas except for pole locations. No agricultural structures would be impacted by the project. The Applicant plans to use public records and the knowledge of landowners to identify and avoid drain tiles to the extent practical. The Applicant also pledges to immediately resolve any damage that may happen to any field drainage tile affected by the project.

The Preferred Route right-of-way is expected to cross over 28.4 acres of agricultural land and over three Ohio Department of Agriculture (ODA) Agricultural Easement parcels. The Alternate Route right-of-way is expected to cross over 21.4 acres of agricultural land and over four Ohio Department of Agriculture Agricultural Easement parcels. Neither route would cross over agricultural district land. To further the goal of agricultural land preservation, the ODA has recommended that the facility not be permitted to traverse any parcels containing Agricultural Easements. In addition to ODA's recommendation, Staff notes that Thorpe Family Farms and James Thorpe (Thorpes) have moved to intervene in the case based on their opposition to constructing the project over land that is subject to the Agricultural Easements. According to the Thorpes, the Agricultural Easements are a prior public use and a benefit to the State of Ohio such that construction over the easements is prohibited by their terms and by operation of law.

Staff recommends that the project not be certificated over lands that are subject to the ODA Agricultural Easements. While the Applicant describes its plan to generally mitigate the impact of the project on agricultural lands, Staff recommends that the project's approval be conditioned upon the Applicant removing or modifying the ODA Agricultural Easements from any parcels that the project would cross over. As the legal interpretation and enforcement of agricultural easements is beyond the scope of Staff's statutory authority as provided in R.C. Chapter 4906, Staff makes no recommendation regarding whether the Applicant can obtain legal approval to construct over the parcels at issue. Further, should the Applicant obtain such approval, Staff recommends a finding that the project is otherwise consistent with agricultural land considerations as specified in R.C. 4906.10(A)(7).

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. Further, as described, Staff maintains that the facility complies with the requirements specified in R.C. 4906.10(A)(7) provided that the Applicant obtains legal authority to cross over parcels that are the subject of the preexisting Agricultural Easements. Should the Board issue a Certificate for the proposed facility, Staff recommends adoption of the recommended 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.

During construction, the facility may require the use of minimal amounts of water for HDD and dust control. Dust suppression measures, such as irrigation, mulching, or the application of tackifier resins, would be implemented where necessary.

However, the transmission line would not require the use of any water during operation. Therefore, the facility would comply with and incorporate maximum feasible water conservation practices as specified under R.C. 4906.10(A)(8).

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 the Ohio Power Company, 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:

General Conditions

Staff has generally listed the below conditions in chronological order for ease of reference and review. The inclusion of a condition within a specified section is not intended to waive its potential application to other stages of a project and the specific language of each condition controls its application within the project.

- (1) The Applicant shall install the Preferred Route, 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 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.
- (3) As the information becomes known, the Applicant shall file in the public docket the date on which construction will begin, the date on which construction was completed, and the date on which the facility begins commercial operation.
- (4) 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.

Preconstruction

(5) The Applicant shall conduct a preconstruction conference prior to the commencement of any construction activities. The Applicant may conduct separate preconstruction conferences for each stage of construction. Notice of the date and location of the preconstruction conference shall be provided to Staff at least 30 days in advance. 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 planned phase of construction and the conditions of the certificate, the measures to be taken by the Applicant and contractors to ensure compliance with all conditions of the certificate, discussion of the procedures for on-site investigations by Staff during construction, summary of additional studies and surveys not specified by conditions, and a summary of work done for previous phases of construction. At least 30 days prior to the conference, the Applicant shall provide Staff with a summary of the status of deliverables required within the conditions, and if the conference is for a phase of construction, the Applicant shall provide Staff with a list of the conditions which would apply to that applicable phase. Fourteen days prior to the conference, the Applicant shall provide a proposed conference agenda for Staff review and shall file a copy of the agenda on the case docket.

- (6) Prior to the commencement of construction activities in areas that require permits or authorizations by federal, state, or local 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 and shall file such permits or authorizations on the public docket. The Applicant shall provide a schedule of construction activities and acquisition of corresponding permits for each activity at the preconstruction conference(s). Any permit violation received by the Applicant from the permitting agency shall be provided on the case docket within seven days of receipt.
- (7) At least 30 days prior to the initial preconstruction conference, the Applicant shall provide Staff, for review and acceptance, the final geotechnical engineering report. This report shall include the results and analyses of any additional geotechnical investigation studies not provided to OPSB Staff as of the date of issuance of this Staff Report. This report shall include a final summary statement addressing the geologic and soil suitability in addition to addressing any inadequacies found and proposed remedies if applicable.
- (8) At least 30 days prior to the start of construction, the Applicant shall file a copy of the final complaint resolution plan for construction and operation of the project 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; all residents, airports, schools, and libraries located within one mile of the project area; parties to this case; county commissioners, township trustees, and emergency responders; and any other person who requests updates regarding the project. These notices shall provide information about the project, including contact information and a copy of the complaint resolution program. The start of construction notice shall include written confirmation that the Applicant has complied with all pre-construction 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.
- (9) The project shall not be permitted to traverse any lands that are subject to ODA Agricultural Easements unless the Applicant provides the Board with legal authority

supporting its right to construct over any parcels that are subject to such ODA Agricultural Easements. The Board retains the right to review any authority provided by the Applicant to ensure agreement with any Applicant claims as to legal rights of construction. Further, the Applicant shall not commence construction of any portion of the project, including areas that are outside of ODA Agricultural Easements, prior to Staff's review and approval of the Applicant's submission of information supporting the basis for commencing construction in spite of this condition relating to the ODA Agricultural Easements.

- (10) The Applicant shall coordinate with the appropriate authorities regarding traffic and transportation requirements necessary for construction and operation of the proposed facility. To assure compliance with this condition, prior to the preconstruction conference, the Applicant shall file a final transportation management plan, this plan shall include (but not be limited to) the following:
 - a. A summary of coordination with appropriate authorities regarding traffic and transportation requirements, including 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.
 - b. Documentation of this coordination, with copies of applicable permits or authorizations, or schedule for obtaining permits or authorizations not yet applicable.
 - c. A description of best management practices that would be implemented to maintain clean roads free of construction debris and excess mud.
 - d. Details summarizing signage and other best management practices that would ensure construction vehicles only use designated transportation routes.
 - e. Mapping of roads to be used for construction that includes identifying any anticipated permitting/authorization requirements in their respective locations.
- (11) Prior to commencement of construction within floodplain areas, the Applicant shall obtain any floodplain permits required for construction of this project. The Applicant shall provide a copy of such permits and supporting documentation, or a copy of correspondence with the floodplain administrator showing that no permit is required, on the case docket prior to commencement of construction.
- (12) At least 30 days prior to the preconstruction conference, the Applicant shall file a document in this case docket which lists the OPSB case number and estimated project construction schedule for the Condit Switch.

Construction

- (13) The Applicant shall file on the public docket a complaint summary report by the fifteenth day of April, July, October, and January of each year during construction and through the first five years of operation. The report shall include a list of all complaints received through the Applicant's complaint resolution program, a description of the actions taken toward the resolution of each complaint, and a status update if the complaint has yet to be resolved.
- (14) 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, if required, shall be limited to the hours between 10:00 a.m. to 5:00 p.m., Monday through Friday. Construction activities that do not involve noise increases above ambient levels or light pollution at sensitive receptors are permitted outside of daylight hours when necessary. The Applicant shall notify Staff and affected property owners or tenants of upcoming construction activities including potential for nighttime construction activities.
- (15) The Applicant shall remove all construction staging area and access road materials after completion of construction activities, as weather permits, unless otherwise directed by the landowner. Impacted areas shall be restored to preconstruction conditions in compliance with the Ohio EPA General NPDES permit(s) obtained for the project and the approved Stormwater Pollution Prevention Plan created for this project. All construction debris and any contaminated soil shall promptly be removed and properly disposed of in accordance with Ohio EPA regulations.
- (16) The Applicant shall only utilize temporary stream fording to cross streams which are classified as intermittent or ephemeral and only when the stream segment being crossed is dry, unless coordination efforts with Staff allow a different course of action.
- (17) 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 listed bat species, unless coordination with the Ohio Department of Natural Resources and the U.S. Fish and Wildlife Service allows a different course of action. If coordination with these agencies allows clearing between April 1 and September 30, the Applicant shall docket proof of completed coordination on the case docket prior to clearing trees.
- (18) Should construction be delayed beyond five years of the date of the certificate, certain wildlife surveys may be required to be updated as determined by Staff and the ODNR.
- (19) 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.
- (20) If evidence of Robinson cemetery is discovered during construction, the Applicant shall coordinate with OHPO and Staff to determine further avoidance measures.

Post Construction/Operation

(21) 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 in both hard copy and as geographically referenced electronic data. 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.



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Summary: Staff Report of Investigation electronically filed by Mr. Andrew S. Conway on behalf of Staff of the OPSB.