

BEFORE THE POWER SITING BOARD OF THE STATE OF OHIO

In the Matter of the Letter of Notification Application)
of AEP Ohio Transmission Company, Inc. for the)
Philo-Howard 138 kV Transmission Line Rebuild)
Project) **Case No. 22-0774-EL-BLN**

Members of the Board:

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

To the Honorable Power Siting Board:

Please review the attached Staff Report of Investigation, which has been filed in accordance with Ohio Power Siting Board (Board) rules. The accelerated certificate application in this case is subject to an automatic approval process as required by Ohio Revised Code (R.C.) 4906.03 and Ohio Administrative Code (Ohio Adm.Code) 4906-6.

Staff recommends the application for automatic approval November 16, 2022, unless suspended by the Board, an administrative law judge, the chairperson, or executive director of the Board for good cause shown. If suspended, the Board must render a decision on the application within 90 days from the date of suspension.

Please present any objections you or your designee may have with this case to my office at least four business days prior to November 16, 2022, which is the recommended automatic approval date.

Sincerely,



Theresa White
Executive Director
Ohio Power Siting Board

OPSB STAFF REPORT OF INVESTIGATION

Case Number: 22-0774-EL-BLN
Project Name: Philo-Howard 138 kV Transmission Line Rebuild Project
Project Location: Coshocton, Knox, and Muskingum Counties
Applicant: AEP Ohio Transmission Company, Inc.
Application Filing Date: August 17, 2022
Filing Type: Letter of Notification
Inspection Date: October 12, 2022
Report Date: November 9, 2022
Recommended Automatic Approval Date: November 16, 2022
Applicant's Waiver Requests: None
Staff Assigned: T. Crawford, A. Delong, M. Bellamy, A. Renick

Summary of Staff Recommendations (see discussion below):

Application: ☐ Approval ☐ Disapproval ☒ Approval with Conditions

Waiver: ☐ Approval ☐ Disapproval ☒ Not Applicable

Project Description and Need

AEP Ohio Transmission Company, Inc. (Applicant) proposes to rebuild a section of approximately 27.3 miles of the existing double circuit Philo-Howard 138 kilovolt (kV) transmission line.¹ The section to be rebuilt under this application would be between the existing Millwood and Ohio Central stations. The Applicant would also replace approximately 135 steel lattice towers with steel monopoles as part of the rebuild.

The Applicant claims the need for the rebuild is based on the age of the circuit and structures, originally built in 1929. In relation to the transmission structures, the assets are approaching or have exceeded their anticipated useful life.² Additionally, asset renewal concerns were cited in the application in relation to the claim that pre-1930s lattice structure design does not meet present-day standards for ice and wind loadings, and that the lightning protection was inadequate. In its response to a data request, the Applicant notes that National Electrical Safety Code (NESC)

1. This rebuild is part of the larger 81-mile rebuild of the double circuit Philo-Howard transmission line, the remainder of which is not presently before the Ohio Power Siting Board (Board) for review and approval. The Applicant also proposes to replace approximately 400 double circuit steel lattice towers with double circuit steel monopoles during the larger rebuild.

2. In Case No. 21-0900-EL-BLN, the Applicant cited the Centre for Energy Advancement through Technological Innovation (CEATI) for estimating the expected life of transmission assets. According to the CEATI, the estimated expected life of steel towers for transmission lines is between 35 and 100 years and steel poles for transmission lines is 50 to 80 years. See CEATI Report No. T144700-3257: Statistical Data and Methodology for Estimating the Expected Life of Transmission Line Components.

and the American Society of Civil Engineers Manual of Practice 74, “Guidelines for Electrical Transmission Line Structural Loading,” have added loading criteria for extreme wind and combined ice with wind, that were not present in the 1930s.³

In relation to the conductor replacement, the Applicant again stated asset renewal concerns as the basis of need. Specifically, the Applicant states that the conductor steel core strength has decreased, although it could not quantify the exact loss of strength with time. However, the cumulative effects of age-related deterioration and degradation coupled with the potential (yet not readily visible) for internal corrosion offer support for the reconductoring of the line. The Applicant further provided a spreadsheet showing 33 open conditions, most of these (91 percent) were burnt insulators and suspension devices and related hardware. Finally, the Applicant states the line does not meet current grounding and shielding requirements, due to the condition of the obsolete shield wire size (159 ACSR), and the line shielding angle being inadequate; therefore, the line requires replacement rather than repair.⁴

Upgrades to the transmission system are part of PJM Interconnection, LLC’s (PJM) Regional Transmission Expansion Planning (RTEP) process.⁵ The need and solution for this project were presented and reviewed with stakeholders at the PJM Subregional RTEP Western meetings of June 19, 2020 and May 21, 2021, respectively. The project was assigned the supplemental project ID s2524.⁶ Supplemental projects or upgrades refer to transmission expansions or enhancements not needed to comply with PJM reliability, operational performance, FERC Form No. 715 criteria, economic planning, and public policy planning (State Agreement Approach).⁷

The proposed project was included in the Applicant’s 2022 Long-term Forecast Report to the Public Utilities Commission of Ohio.⁸

The Applicant expects construction of the project to begin November 2022 with an in-service date planned for April 2024. The capital cost of the rebuild project is estimated to be approximately \$54,300,000.⁹

Nature of Impacts

Land Use

This project would span three counties and eight townships and would not cross any municipalities. This project would extend through Butler, Howard, Jackson, and Union townships in Knox

3. NESC Rule 250B of 1908 considered specific combinations of ice and wind loadings, based on location. Following a number of serious failure in the 1990s, Rule 250D, which addressed extreme ice with concurrent wind loading, was adopted in 2002.

4. Application, part 2 of 14 (pdf page 5), “AEP Transmission Zone M-3 Process, Philo-Howard 138 kV Line Rebuild.”

5. 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.

6. <https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/postings/2021/aep-local-plan-submission-of-the-supplemental-projects-for-2021-rtep.ashx> (Accessed August 19, 2022).

7. PJM Manual 14B: PJM Region Transmission Planning Process, Revision 51, Effective Date: December 15, 2021.

8. AEP Ohio Power Company, Inc. “Long-Term Electric Forecast Report”, Public Utilities Commission of Ohio Case No. 22-1501-EL-FOR, Filed April 12, 2022, Form FE-T9, page 69, 70.

9. The Applicant indicates that the cost of the rebuild project is a Class 4 estimate, and will be projected to be transmission plant, and pursuant to the PJM Open Access Transmission Tariff, the cost will be recovered in the Applicant’s FERC formula rate (Attachment H-20) and would be allocated to the AEP Zone.

County; Perry, Pike, and Washington townships in Coshocton County; and Cass Township in Muskingum County. The transmission line would be rebuilt within the right-of-way along the existing route, and replace steel lattice structures with steel monopole structures, which occupy a smaller footprint than the lattice structures. There would be no need for additional easements or land agreements. The land uses in the area around the transmission line are forested, residential, and agricultural, with lesser commercial and industrial land uses clustered around larger transportation corridors. A portion of the project crosses the U.S. Army Corps of Engineers Mohawk Reservoir along the Kokosing River. There are no other protected areas within 1,000 feet of the project.

Agricultural Land

Of the 333 total acres the project covers, 136 acres are agricultural land use. The Applicant reached out to the auditor's offices of the three counties spanned by this project for information on Agricultural District Land (ADL) parcels along the project footprint. Three ADL parcels are crossed in Coshocton County, 51 parcels are crossed in Knox County, and one parcel is crossed in Muskingum County. Staff asserts that by rebuilding the transmission line within the existing right-of-way and utilizing steel monopole structures which have smaller foundations than the current lattice towers, impacts to land use would be minimized.

Cultural Resources

The Applicant's cultural resources consultant performed a literature review and Phase I cultural resource management investigation (archaeology and history/architecture) for the project. From the literature review, the consultant identified six previously identified archaeological sites within the project area. During the Phase I survey, the consultant identified two new archaeological sites within the project area. The consultant recommended that the new archaeological sites are not eligible for listing in the National Register of Historic Places (NRHP). One potential cemetery was identified by a landowner, but it could not be confirmed by the Applicant's cultural resources consultant. The location of the cemetery will be avoided by the project. Thirty-three historic resources were identified within the area of potential effect. The consultant recommended that one resource is eligible for listing in the NRHP, but that the project would not affect the resource's eligibility. The findings were submitted to the Ohio Historic Preservation Office (OHPO). The OHPO responded to the consultant in concurrence that this project would not affect archaeological or historic properties, and that no additional cultural resources studies are needed. Staff agrees with these findings.

*Surface Waters*¹⁰

The Applicant's consultant conducted a wetland and stream delineation in March and April of 2022.¹¹ The consultant identified 100 streams, 74 wetlands, and three ponds. Of the 100 streams identified, 34 were perennial, 51 were intermittent, and 15 were ephemeral. Of the wetlands identified, 11 were Category 1, and 63 were Category 2. Two existing structures are located within one Category 2 wetland. The replacement structures would remain within this wetland. The Applicant would obtain applicable permits from the U.S. Army Corps of Engineers and/or the Ohio Environmental Protection Agency (Ohio EPA) for the replacement of these structures.

The Applicant would file a Notice of Intent with the Ohio EPA for authorization of construction storm water discharge under NPDES General Permit for Discharges of Storm Water Associated with Construction Activity OHC000005. The Applicant would implement and maintain best management practices as outlined in the project-specific Storm Water Pollution Prevention Plan to minimize erosion and sediment to project surface waters during storm events.

Six proposed structures are located in Federal Emergency Management Agency 100-year floodplains. The Applicant would obtain local floodplain permits for these structures from Coshocton, Knox, and Muskingum counties prior to the start of construction.

*Threatened and Endangered Species*¹²

The Applicant submitted coordination letters to the Ohio Department of Natural Resources (ODNR) and the U.S. Fish and Wildlife Service (USFWS) on May 13, 2022. This project is within

10. The Ohio EPA website states: "The Division of Surface Water ensures compliance with the federal Clean Water Act, and works to increase the number of water bodies that can be safely used for swimming and fishing. The division issues permits to regulate wastewater treatment plants, factories and storm water runoff; develops comprehensive watershed plans aimed at improving polluted streams, lakes and wetlands — including fish, aquatic insects and plants — to determine the health of Ohio's water bodies." (Ohio EPA, *About Us: Surface Water*, <https://www.epa.ohio.gov/About#127147228-surface-water>); The U.S. Army Corps of Engineers website states: "The U.S. Army Corps of Engineers (USACE) Regulatory Program involves the regulating of discharges of dredged or fill material into waters of the United States and structures or work in navigable waters of the United States, under section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act of 1899." (USACE, *Obtain a Permit*, <https://www.usaec.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Obtain-a-Permit/>); The Ohio Department of Natural Resources (ODNR) website states: "The Division of Water Resources manages statewide oversight of dams & levees, floodplains, and the collection and management of data related to the state's water resources." (ODNR, *Division of Water Resources*, <https://ohiodnr.gov/wps/portal/gov/odnr/discover-and-learn/safety-conservation/about-odnr/water-resources/water-resources>).

11. 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.

12. Based on agency coordination with the USFWS and ODNR, identified species of concern are, in general, defined as those species that are protected under the federal Endangered Species Act of 1973, as amended (16 U.S.C. §§ 1531-1544) and/or according to the Conservation of Natural Resources within R.C. 1518.01-1518.99; 1531.25; and 1531.99. *See also e.g.*, R.C. 1531.08 states, in part: "In conformity with Section 36 of Article II, Ohio Constitution, providing for the passage of laws for the conservation of the natural resources of the state, including streams, lakes, submerged lands, and swamplands, and in conformity with this chapter and Chapter 1533 of the Revised Code, the chief of the division of wildlife has authority and control in all matters pertaining to the protection, preservation, propagation, possession, and management of wild animals and may adopt rules under section 1531.10 of the Revised Code for the management of wild animals."

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. (ODNR, *State Listed Species*, <https://ohiodnr.gov/wps/portal/odnr/discover-and-learn/safety-conservation/about-ODNR/wildlife/stste-listed-species>).

range of the state and federally endangered Indiana bat (*Myotis sodalis*), state endangered and federally threatened northern long-eared bat (*Myotis septentrionalis*), state endangered little brown bat (*Myotis lucifugus*), and the state endangered tricolored bat (*Perimyotis subflavus*). The Applicant has committed to clearing trees between October 1 and March 31 to prevent impacts to roosting bats, as recommended by the ODNR and the USFWS. No potential winter hibernacula were identified within or near the project area.

This project is within range of the state endangered small-flowered scorpion-weed (*Phacelia dubia*). Additionally, potentially suitable hunting and nesting habitat for the state threatened barn owl (*Tyta alba*) was observed in this corridor. The ODNR did not give construction restriction dates for this species. The Applicant has committed to coordinating further with the ODNR throughout the construction process to mitigate potential impacts to both of these species.

Potentially suitable breeding habitat for the state endangered northern harrier (*Circus hudsonis*) was observed in the project corridor. The ODNR recommends restricting construction activities in this area between April 15 and July 31 to prevent impacts to this species. The Applicant has committed to adhering to this restriction as well as coordinating further with the ODNR should construction in this habitat during this time become necessary.

This project is also within range of several other state listed species. Due to lack of proposed in--water work and lack of suitable habitat, impacts to these species are not anticipated.

Conclusion

Staff's review of the application included consideration of the requirements listed in R.C. 4906.10. Based on Staff's review, the application meets the necessary criteria for granting a certificate. Staff recommends approval of this application on November 16, 2022 subject to the following conditions. Staff notes that its recommendation for approval of this application should not be construed as a recommendation for approval of cost recovery in any ratemaking proceeding.

Conditions

- (1) 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.
- (2) 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, on the case docket prior to commencement of construction. Any permit violation received by the Applicant from the permitting agency shall be provided on the case docket within seven days of receipt
- (3) 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.

- (4) The Applicant shall coordinate with the ODNR throughout the construction process to ensure potential impacts to the barn owl are properly mitigated. The Applicant shall file this coordination on the case docket.
- (5) The Applicant shall coordinate with the ODNR throughout the construction process to ensure potential impacts to the small-flowered scorpion-weed are properly mitigated. The Applicant shall file this coordination on the case docket.

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Case No(s). 22-0774-EL-BLN

Summary: Staff Report of Investigation electronically filed by Mr. Thomas J.
Crawford on behalf of Staff of OPSB and Mr. Thomas James Crawford