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 Lima-Fort Wayne 138 kV Transmission Line Rebuild Project	**)** **)** **)** **)**	**Case No. 22-0154-EL-BLN**

Members of the Board:

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

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 June 7, 2022, unless suspended by the Board, an administrative law judge, or 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 June 7, 2022, which is the recommended automatic approval date.

Sincerely,

Theresa White
Executive Director
Ohio Power Siting Board

OPSB STAFF REPORT OF INVESTIGATION

Case Number:	22-0154-EL-BLN
Project Name:	Lima-Fort Wayne 138 kV Transmission Line Rebuild Project
Project Location:	Allen County and Putnam County
Applicant:	AEP Ohio Transmission Company, Inc.
Application Filing Date:	March 8, 2022
Filing Type:	Letter of Notification
Inspection Date:	April 6, 2022
Report Date:	May 31, 2022
Recommended Automatic Approval Date:	June 7, 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 and upgrade approximately 15.9 miles of the existing 138 kilovolt (kV) transmission line between the North Delphos Station and the Rockhill Station. The project would also replace the existing steel lattice towers with steel monopole structures. The existing conductor is defined as 397.5-30/7 ACSR and the replacement conductor will be the lower resistance, higher capacity 1033.5-54/7 ACSR.

The Applicant states that the project would address reliability or baseline issues as well as asset renewal or supplemental needs. The contingencies contributing to the baseline needs include overloading of the East Lima-Haviland 138 kV line, due to various scenarios and outages on neighboring circuits.[1] The supplemental needs of the project relate to the lattice structures and aged conductor which were originally constructed in 1925. The Applicant provided a list of open conditions, which Staff reviewed and inspected near the Rockhill and North Delphos stations. The open conditions provided minimal evidence for the need for new pole structures, and the inspection of structures showed no critical structural issues. However, the cumulative effects of age-related deterioration and degradation coupled with the potential for (yet not readily visible) subsurface corrosion offer support for the replacement of the existing structures. The Applicant also states

1. These circuits include the East Lima-Maddox Creek 345 kV, the Maddox Creek-RP Mone 345 kV, the RP Mone-Allen 345 kV, the Marysville-Sorenson 765 kV, and the Hanging Rock-Jefferson 765 kV.

the pre-1930's vintage lattice transmission towers are not designed for modern wind and ice loading requirements and lack adequate lightning protection, and the nearly 100-year-old towers have well exceeded the 70-year typical lifespan for this type of structure.[2]

Upgrades to the transmission system are part of PJM Interconnection, LLC's (PJM) Regional Transmission Expansion Planning (RTEP) process.[3] The RTEP contains three types of transmission projects: baseline projects, network projects, and supplemental projects.[4] PJM reviewed the need and solution for this project through its baseline project review process as well as its supplemental project review process. Baseline upgrades include projects planned for reliability, operational performance, FERC Form No. 715 criteria, economic planning, and public policy planning (State Agreement Approach).[5] 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).[6] The need and solution for this project were presented and reviewed with stakeholders at the PJM Subregional RTEP Western meetings of February 24, 2018 and August 31, 2018, respectively. The project was assigned the supplemental ID s1563.2 and was partially converted from supplemental to baseline on January 15, 2021.[7] Specifically, the 12.5 miles from North Delphos Station to structure 68 was assigned as a baseline project with PJM number b3131, and the remaining 3.4 miles to Rockhill Station would be a supplemental project for PJM review purposes.[8]

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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.

3. 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.

4. PJM described the three types of transmission projects contained within the RTEP as follows:

Baseline projects. These ensure compliance with national and regional reliability standards. These projects are identified to fix issues like overloads, bus voltage drops, excessive short circuit current, generator stability and congestion issues.

Network projects: These projects are identified to help new generation resources connect to the grid reliably.

Supplemental projects: Supplemental projects are identified and developed by transmission owners to address local reliability needs, including customer service and load growth, equipment material condition, operational performance and risk, and infrastructure resilience. PJM reviews them to evaluate their impact on the regional transmission system.

See: https://www.pjm.com/-/media/library/reports-notices/2019-rtep/regional-transmission-expansion-planning-planning-the-future-of-grid-today.ashx

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

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

7. https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/2020/20200221/20200221-reliability-analysis-update.ashx (Accessed March 14, 2022)

8. https://www.pjm.com/-/media/committees-groups/committees/teac/2021/20210309/20210309-appendix-april-2021-board-e\teac-review.ashx (Accessed March 14, 2022)

The proposed project was included in form FE-T9 in the supplement to the Applicant's 2021 Long–Term Forecast Report to the Public Utilities Commission of Ohio, filed in Case No. 21-1501-EL-FOR.[9]

The Applicant expects construction of the project to begin July 2022 with an in-service date planned for December 2024. The capital cost of the rebuild project is estimated to be approximately $56,000,000.[10]

Nature of Impacts

Land Use

This project would be located in America, Bath, and Sugar Creek Townships, in Allen County, and Jennings and Sugar Creek Townships in Putnam County. The surrounding land uses include primarily active agricultural fields, with wood lots, old fields, scattered residences, and commercial development. In a response to a data request, the Applicant states there would be minimal tree clearing of not more than 0.5 acres in these areas. Within 1,000 feet of the project there are four churches, one cemetery, one park, and the Allen County Sanitary Plant. The Applicant does not anticipate any significant impacts to any of these areas.

The Applicant received data in January 2022 from the Allen and Putnam Counties Auditor's offices regarding Agricultural District Land. The North Delphos-Rockhill transmission line would cross through two Agricultural District Land parcels within existing right-of-way, at 2.8 miles total. There would be need for approximately 1.2 miles of adjustments to the line outside the existing right-of-way, due to residential and commercial buildings within the existing right-of-way. The proposed line adjustment would cross 442 feet of Agricultural District Land. The Applicant states these will be minor impacts due to the smaller footprint of the pole locations, and that agricultural use would be able to continue in the right-of-way upon completion of construction.

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 in July 2017 and December 2021. In the 2017 survey, the consultant identified no previously identified archaeological sites and one newly identified site within the project area. The consultant recommended that the newly identified site is not eligible for listing in the National Register of Historic Places. The cultural resources consultant identified 146 potential historic resources and conducted additional study on eight of the 146 resources. Of these eight, three were recommended as eligible for listing in the National Register of Historic Places. However, the consultant concluded the project should not adversely impact or effect the eligibility of the historic resources. In the 2021 survey, no previously identified and no newly identified archaeological resources were discovered. No historic resources not already identified were discovered. The findings were submitted to the Ohio Historic Preservation Office (OHPO). The OHPO responded to the

9. AEP Ohio Transmission Company, Inc., Supplement to the "Long-Term Electric Forecast Report," Public Utilities Commission of Ohio Case No. 21-1501-EL-FOR, July 13, 2021, page 8 of 13.

10. 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.

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[11]

The Applicant's consultant performed a wetland and stream delineation in the project area between June and December of 2021.[12] The consultant identified 62 wetlands totaling 10.71 acres, 27 stream segments, and two ponds. Of the wetlands identified, two were determined to be Category 2, two were Modified Category 2, and the remaining were Category 1. Of the streams identified, 16 were identified as perennial, six were ephemeral, and five were intermittent. The Applicant currently proposes 1.259 acres of temporary impacts to wetlands, including 0.003 acres of impact to one Category 2 wetland and 1.256 acres of impact across 22 Category 1 wetlands.

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.

This project does not overlap with any FEMA 100-year floodplains.

Threatened and Endangered Species[13]

The Applicant requested environmental review of the project from the Ohio Department of Natural Resources (ODNR) and the U.S. Fish and Wildlife Service (USFWS) on July 26, 2021. This

11. 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 the 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).

12. 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.

13. 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

project is within range of the state and federal endangered Indiana bat (*Myotis sodalis*), state endangered and federal threatened northern long-eared bat (*Myotis septentrionalis*), state endangered little brown bat (*Myotis lucifugus*), and the state endangered tricolored bat (*Perimyotis subflavus*). Both agencies recommended that proposed tree clearing occur only between October 1 and March 31 to avoid potential impacts to roosting bats. The Applicant has committed to this seasonal tree clearing restriction. Additionally, the Applicant conducted a desktop review for potential bat hibernacula within or near the project area. No potential hibernacula were identified.

This project is also within range of the upland sandpiper (*Bartramia longicauda*). The Applicant's consultant conducted a habitat assessment for this species, which utilizes dry grasslands for nesting habitat, and found no potential habitat in the project area. The ODNR concurred on the results of this assessment. Impacts to this species are not anticipated.

The project is also within range of several listed aquatic species. Impacts to these species are not anticipate due to lack of in-water work in perennial streams.

Aviation

The Federal Aviation Administration (FAA) and the Ohio Department of Transportation (ODOT) Office of Aviation administer regulatory programs to provide airport airspace analysis. These programs also evaluate and authorize certain obstructions near airports and heliports. As a precautionary measure, the Applicant submitted FAA's Form 7460-1 to request review by the FAA of several of the electric transmission support structures proposed to be located near ODOT District 1's existing heliport located in Lima. This heliport is for private use and an aircraft would need to obtain permission prior to landing at it. According to the Applicant, the typical height of its electric transmission support structures ranges from 82 to 167 feet tall. The FAA performed an aeronautical study (ASN numbers 2022-AGL-3819-OE through 2022-AGL-3833-OE) for those several proposed transmission line structures near the private-use heliport. The FAA concluded that the structures do not exceed FAA's obstruction standards and would not be a hazard to air navigation if conditions in the FAA determination letters are met.

The Applicant also indicated that it would utilize cranes during the construction of the proposed facility. The Applicant has not yet selected the construction contractor, but the Applicant currently anticipates that the cranes its contractor would use may be up to 20 feet taller than the proposed transmission line pole. The analysis and letters from the FAA authorize temporary construction equipment such as cranes to be used during actual construction of the transmission support structures. However, those FAA determination of no hazard letters have a caveat that if the crane height exceeds the overall heights that were evaluated in the aeronautical study, a separate authorization or notice may need to be obtained from the FAA. Staff recommends that the Applicant file in this docket a copy of the FAA determination of no hazard letters, if applicable, for the electric transmission towers and any construction cranes or equipment to be used.

The Allen County Airport (AOH) is the closest public use airport and is located approximately 4.6 miles southeast of the proposed transmission line. The Applicant's evaluation using FAA software

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).

(i.e., the FAA notice criteria tool) indicated there would be no concerns or issues with the Allen County Airport from the proposed project.

The Applicant also stated that the proposed transmission line and its support structures would not be installed via helicopter.

Staff contacted the ODOT Office of Aviation during the review of this application, in accordance with R.C. 4906.10(A)(5) and 4561.341, to consult and determine potential impacts of the proposed transmission line on local airports. On May 19, 2022, the ODOT Office of Aviation sent Staff a determination email pursuant to R.C. 4561.341 indicating that the pole locations and their heights do not exceed ODOT jurisdictional "imaginary surfaces" for any public use airports.

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 June 7, 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 or state laws and regulations, the Applicant shall obtain and comply with such permits or authorizations. The Applicant shall provide copies of permits and authorizations, including all supporting documentation, on the case docket prior to commencement of construction.

(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) At least seven days prior to commencement to construct the electric transmission line, the Applicant shall file in this docket a copy of FAA Determination of No Hazard letters for the transmission structures for the final route. The Applicant shall also file in this docket a copy of FAA Determination of No Hazard letters relative to cranes used during construction.

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