

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
Tidd-Sunnyside 138 kV Transmission Line Rebuild
Project**

)
) **Case No. 21-0900-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 October 7, 2021, 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 concerns you or your designee may have with this case to my office at least four business days prior to October 7, 2021, which is the recommended automatic approval date.

Please present any concerns you or your designee may have with this case to my office.

Sincerely,



Theresa White
Executive Director
Ohio Power Siting Board

OPSB STAFF REPORT OF INVESTIGATION

Case Number: 21-0900-EL-BLN
Project Name: Tidd-Sunnyside 138 kV Transmission Line Rebuild Project
Project Location: Carroll, Harrison, and Jefferson counties
Applicant: AEP Ohio Transmission Company, Inc.
Application Filing Date: September 1, 2021
Filing Type: Letter of Notification
Inspection Dates: September 8 and 28, 2021
Report Date: September 30, 2021
Recommended Automatic Approval Date: October 7, 2021
Applicant's Waiver Requests: None
Staff Assigned: T. Crawford, A. Delong, M. Bellamy, R. Holderbaum

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. (AEP Ohio Transco or Applicant) proposes to rebuild and upgrade a portion of the 138 kilovolt (kV) double-circuit transmission line known as the Windsor-Canton Line, which was originally constructed in 1916.¹ The rebuild will involve the entire transmission line of approximately 29 miles running between the existing Gable Station and Carrollton Station. The project also would replace the existing steel lattice towers with steel monopoles. The line will be renamed as the Tidd-Sunnyside 138 kV Transmission Line after the rebuild. The existing conductor is a six-wired 200,000 circular mils (200 kcm) copper conductor and the replacement conductor will be the lower resistance, higher capacity 1233.6-38/19 ACSR.

The Applicant states the determination that the line needs to be rebuilt is entirely based on the overall condition, performance, and risk of the asset as outlined in the Transmission Owners

1. The Applicant cites 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.

Guideline for Identified Needs; and the line not being up to current standards.² The Applicant presented an overview of its asset management strategy to the PJM Interconnection, LLC's (PJM) Subregional Regional Transmission Expansion Planning (RTEP) Committee-Western on December 18, 2019, wherein it overviewed its process for generally reviewing pre-1930's transmission assets.³

Specific to the proposed line, the copper conductor has become brittle through age and exposure yet replacement of this sized conductor is not possible due to lack of commercial availability.⁴ The Applicant also states that "[a]fter a century in the field, the lattice towers have degraded significantly, with heavy corrosion and damaged tower legs."⁵ Furthermore, the Applicant claims that neglecting to rebuild the line would increase occurrences of outages with continued deterioration.⁶ The Applicant also claims that neglecting to rebuild the line would reduce further inquiries and opportunities for future load growth in the shale gas regions of Carroll and Harrison counties.

Upgrades to the transmission system are part of PJM RTEP process.⁷ The need and solution for this project were presented and reviewed with stakeholders at the PJM Subregional RTEP Western meetings of October 26, 2018 and January 11, 2019, respectively. The project was assigned the supplemental ID s1859.⁸ Supplemental projects or upgrades refer to transmission expansions or

2. These standards include but are not limited to: the National Electrical Safety Code (NESC), as required by Ohio Adm.Code: 4901:1-10-06; NERC Reliability Standard TPL-001; ASCE Manual of Practice No. 74; and FERC 715 Part 4, The American Electric Power System Transmission Planning Criteria.

3. See PJM SRRTEP- Western Committee Meeting, Dec. 18, 2019, AEP Eastern System Pre-1930s Era Lattice Tower and Transmission Line System presentation, <https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/20191218/20191218-aep-system-pre-1930s-tower-lines.ashx> (accessed Sept. 29, 2021).

4. As evidence of conductor failure, the Applicant attributes, for instance, a 50-hour outage to broken conductors.

5. In the Application, the Applicant states that it has identified a number of open conditions (39 originally, but corrected to 28 upon receipt of the tabulated open conditions for the correct line), on the circuit and identifies the majority of them as structural. Structural deterioration includes heavy rusting, damaged tower legs, broken insulators and related hardware. The Applicant further stated, "[i]n addition, deterioration of the structure below the ground is a significant concern. The Company has identified, through the replacement of similar towers, that towers of this age and design have corrosion below the ground which is not visible during inspections and that this corrosion leads to loss of structural strength and performance."

6. See also, PJM TRANSMISSION OWNERS ATTACHMENT M-3 PROCESS GUIDELINES, Version 0.1, p. 6, available at <https://www.pjm.com/-/media/planning/rtep-dev/pjm-to-attachment-m3-process-guidelines.ashx> stating: "each Transmission Owner develops and applies its own factors and considerations for addressing facilities at or near the end of its useful life."

7. 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.

8. <https://www.pjm.com/-/media/library/reports-notices/state-specific-reports/2019/2019-ohio-state-infrastructure-report.ashx> (Accessed June 3, 2021)

enhancements not needed to comply with PJM reliability, operational performance, FERC Form No. 715 criteria, economic planning, and public policy planning (State Agreement Approach).⁹

The proposed project was included in form FE-T9 in the Applicant's 2021 Long-Term Forecast Report to the Public Utilities Commission of Ohio, filed in Case No. 21-1501-EL-FOR.¹⁰

The Applicant expects construction of the project to begin in October 2021 with an in-service date planned for June 2024. The capital cost of the rebuild project is estimated to be approximately \$80,000,000.¹¹

Nature of Impacts

Land Use

The project would be in Carroll, Harrison, and Jefferson Counties. The land use in the project area is comprised of agricultural, forest area, residential, denser development in the villages of Carrollton and Smithfield. The project would primarily be sited within existing Ohio Power Company right-of-way, but a few locations will require new right-of-way to avoid and increase distance from residences.

The project would cross 72 Agricultural District Land parcels, totaling approximately 147 acres within the right-of-way. The Applicant does not expect significant portions of land to be converted from agricultural use for the project.

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. One previously identified archaeological site, a historical farmstead was found to be in the project area. However, only a small portion of farmstead is in the project area. Four newly identified archaeological sites were discovered in the project area. These sites are small prehistoric scatters or isolated finds. The consultant recommended that the previously identified archaeological site and the four newly discovered archaeological sites are not eligible for listing in the National Register of Historic places, and that no further cultural resource management work was necessary. The historical survey identified 213 resources 50 years and older of which seven are extant Ohio Historic Inventory properties. The consultant recommended that the identified properties are not eligible for listing in the National Register of Historic places, and that no further cultural resource management work was necessary. 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 historic properties, and that no additional cultural resources studies are needed for the project. Staff agrees that no further cultural resource management work is necessary.

9. PJM Manual 14B: PJM Region Transmission Planning Process, Revision 49, Effective Date: June 23, 2020.

10. AEP Ohio Power Company, Inc. "Long-Term Electric Forecast Report", Public Utilities Commission of Ohio Case No. 21-1501-EL-FOR, April 14, 2021, page 48.

11. 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.

Surface Waters

The Applicant identified 148 streams within the route's survey corridor: 26 perennial streams, 69 intermittent streams, and 51 ephemeral streams. No in-water work is planned for this project. No permanent impacts to streams are anticipated. Minimal temporary impacts from timber matting are anticipated where necessary from access roads.

Twelve ponds were identified within the project area. No in-water work is planned for this project.

The Applicant delineated 118 wetlands within the proposed route's survey corridor totaling 24.46 acres. All delineated wetlands were Category 1 and Category 2 wetlands.¹² Seventy Category 1 wetlands were delineated, and 48 Category 2 wetlands were delineated. No permanent impacts are anticipated to wetlands, three existing structures are within wetlands, all three structures will be removed from wetlands. Minimal temporary impacts from timber matting are anticipated where necessary from access roads and work pads. If at any time permanent impacts to wetlands are anticipated, Staff recommends that the applicant submit for coverage through the U.S. Army Corps of Engineers Nationwide Permit 12 under Section 404 of the Clean Water Act.

The Applicant would submit a Notice of Intent for coverage under the Ohio Environmental Protection Agency, National Pollutant Discharge Elimination System, General Permit. Staff does not anticipate issues with the Applicant's procurement of this permit. As part of this permit, erosion control measures including silt fencing and other best management practices would be used where appropriate to minimize runoff impacts to nearby streams. The project would overlap with four 100-year floodplain areas within Jefferson, Carroll, and Harrison counties. The Applicant states they will coordinate with each county to determine if a floodplain permit is required for constructing in the floodplain areas within each county.

Threatened and Endangered Species

One of the missions of the Ohio Department of Natural Resources (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.¹³ In addition to endangered species, those species classified as "threatened" are considered during OPSB project planning and approval because these species are those "whose survival in Ohio is not in immediate jeopardy, but to which a threat exists. Continued or increased stress will result in its becoming endangered."¹⁴

Tree clearing would be required for this project. The project area is within the range of state and federally endangered Indiana bat (*Myotis sodalis*), the federally threatened northern long-eared bat (*Myotis septentrionalis*), the state endangered little brown bat (*Myotis lucifugus*), and the state

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. Ohio Department of Natural Resources, Division of Wildlife, "Ohio's Listed Species," Publication 5356 (R0520), <https://ohiodnr.gov/static/documents/wildlife/state-listed-species/Ohio's%20Listed%20Species%20pub356.pdf>, accessed June 3, 2021.

14. Id.

endangered tricolored bat (*Perimyotis subflavus*). As tree roosting species in the summer months, the habitat of these species would be impacted by the project. In order to avoid impacts to these listed bat species, the ODNR and the U.S. Fish and Wildlife Service (USFWS) recommend seasonal tree cutting dates of October 1 through March 31 for all trees that are three inches or greater in diameter. The Applicant has committed to following these seasonal tree clearing guidelines. During the winter months, bats hibernate in caves and abandoned mines, also known as hibernacula. The proposed project is not expected to impact any bat hibernacula.

The project area is within the range of state endangered upland sandpiper (*Bartramia longicauda*). Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program. The ODNR Division of Wildlife recommends construction in upland sandpiper preferred nesting habitat types be avoided during the species' nesting period of April 15 through July 31. The Applicant's consultant, West, identified and mapped suitable habitat for this species in the project area. The Applicant has committed to mowing and conducting site preparation in pasture and grasslands outside of the species' nesting period.

Potential impacts to suitable habitat exist within the project area for the least bittern (*Ixobrychus exilis*), a state threatened bird. Least bitterns prefer to nest in wetlands interspersed with woody vegetation and open water. Staff recommends that construction be avoided in these species' potential habitat during the species' nesting period of May 1 through July 31, unless coordination with the ODNR allows a different course of action.

The project is within the range of several state and federal listed mussel and fish species, as well as the eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), a state endangered and federal species of concern amphibian species. Due to no in-water work being proposed for this project, 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 October 7, 2021 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 adhere to seasonal cutting dates of October 1 through March 31 for removal of any trees greater than three inches in diameter, unless coordination with the ODNR and the USFWS 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 prior to clearing trees.
- (4) Construction in upland sandpiper preferred nesting habitat types shall be avoided during the species' nesting period of April 15 through July 31, unless coordination with the ODNR allows a different course of action. If present, mapping of these habitat areas shall be provided to the construction contractor along with instructions to avoid these areas during the restricted dates. If coordination with ODNR allows construction in upland sandpiper preferred nesting habitat types between April 15 and July 31, the Applicant shall docket proof of completed coordination prior to construction in these areas.
- (5) Construction in least bittern preferred nesting habitat types shall be avoided during the species' nesting period of May 1 through July 31. Mapping of these habitat areas shall be provided to the construction contractor along with instructions to avoid these areas during the restricted dates, unless coordination with the ODNR allows a different course of action. If coordination with ODNR allows construction in least bittern preferred nesting habitat types between May 1 and July 31, the Applicant shall docket proof of completed coordination prior to construction in these areas.
- (6) The Applicant shall obtain all required floodplain permits from the Jefferson, Harrison, and Carroll counties prior to the start of construction in floodplain areas if required by the counties, and shall docket proof of any required floodplain permitting on the case docket prior to commencement of construction.

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Case No(s). 21-0900-EL-BLN

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