



Legal Department

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September 26, 2016

Chairman Asim Z. Haque
Ohio Power Siting Board
180 East Broad Street
Columbus, Ohio 43215

Hector Garcia
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**Re: Case No. 16-1531-EL-BLN Request for Expedited Treatment:
In the Matter of the Letter of Notification for the
Hedding-Fulton 138kV Transmission Line Rebuild Project**

Dear Chairman Haque,

Attached please find a copy of the Letter of Notification (LON) for the Hedding-Fulton 138kV Transmission Line Rebuild Project by AEP Ohio Transmission Company, Inc. This filing and notice is in accordance with O.A.C. 4906-11-01.

A copy of this filing will also be submitted to the executive director or the executive director's designee. A copy will be provided to the Board Staff via electronic message. The Company will also submit a check in the amount of \$2,000 to the Treasurer, State of Ohio, for Fund 5610 for the expedited fees.

If you have any questions, please do not hesitate to contact me.

Respectfully Submitted,

/s/ Hector Garcia

Hector Garcia
Counsel for AEP Ohio Transmission Company, Inc.

cc. Werner Margard, Counsel OPSB Staff
Jon Pawley, OPSB Staff

Letter of Notification for Hedding Road Switch to Fulton Station 138 kV Transmission Line Rebuild Project



PUCO Case No. 16-1531-EL-BLN

Submitted to:
The Ohio Power Siting Board
Pursuant to OAC 4906-6-05

Submitted by:
AEP Ohio Transmission Company, Inc.

September 26, 2016

LETTER OF NOTIFICATION FOR
HEDDING ROAD SWITCH TO FULTON STATION 138 KV TRANSMISSION LINE REBUILD
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Letter of Notification

**AEP Ohio Transmission Company, Inc. (AEP) Hedding Road Switch to Fulton Station 138
kV Transmission Line Rebuild Project**

4906-6-05

AEP Ohio Transmission Company, Inc. (AEP Ohio Transco) is providing the following information in accordance with the procedures delineated in Ohio Administrative Code Section 4906-6-05: Accelerated Application Requirements of the Rules and Regulations of the Ohio Power Siting Board (OPSB).

4906-6-5(B) General Information

B(1) The applicant shall provide name of the project and applicant's reference number, names and reference number(s) of resulting circuits, a brief description of the project, and why the project meets the requirements for a Letter of Notification or Construction Notice application.

AEP Ohio Transco is proposing the Hedding Road Switch to Fulton Station 138 kV Transmission Line Rebuild Project (Project), located between AEP Ohio Transco's Hedding Road Switch in South Bloomfield Township, Morrow County, Ohio and AEP Ohio Transco's Fulton substation in Lincoln Township, Morrow County, Ohio. The length of the proposed Hedding Road Switch to Fulton Station 138 kV Line Transmission Line Rebuild is approximately 10.3 miles. Eighty-seven (87) existing wood pole structures will be replaced with new steel structures. All of the transmission line rebuild work will occur within existing AEP Ohio Transco's right-of-way (ROW). Figure 1.1 (Appendix A) shows the location of the Project. Figures 1.2 and 1.3 in Appendix A shows the existing AEP Ohio Transco ROW corridors and substations, pole structure locations, and planned access road locations. Technical transmission line and pole structure information are provided in Section B(9). Structural drawings will be provided under separate cover and identified as Appendix B.

The Project meets the requirements for a Letter of Notification (LON) because it is within the types of projects defined by 4906-1-01 Appendix A "Application Requirement Matrix For Electric Power Transmission Lines" (December 11, 2015):

- (1) Adding new circuits on existing structures designed for multiple circuit use, replacing conductors on existing structures with larger or bundled conductors, adding structures to an existing transmission line, or replacing structures with a different type of structure for a distance of:*
 - (b) More than two miles.*

The Project has been assigned PUCO Case No. 16-1531-EL-BLN.

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B(2) If the proposed project is an electric power transmission line or gas or natural gas transmission line, a statement explaining the need for the proposed facility.

This Project is part of a series of improvements planned for AEP Ohio Transco's Mount Vernon to South Kenton 138 kV transmission line to improve the reliability of electric service in Knox, Morrow, and Marion Counties, Ohio. The proposed facility replacement/upgrade is required to alleviate voltage concerns and replace aging wood pole structures. Further study revealed that this circuit is the 4th worst performer in AEPOhio territory. Many of the causes of customer outages were attributed to line defects such as crossarm failures and insect damage to knee braces and poles, prompting further study leading to a complete line rebuild. The Project will improve the reliability of the transmission network in north-central Ohio and provide adequate voltage on the local 138 kV system under N-1 contingency conditions per applicable system planning criteria.

B(3) The applicant shall provide the location of the project in relation to existing or proposed lines and substations shown on an area system map of sufficient scale and size to show existing and proposed transmission facilities in the project area.

Figures 1.1, 1.2, and 1.4 in Appendix A shows the location of the proposed Project in relation to existing AEP Ohio Transco facilities, including Hedding Road Switch, Fulton substation, and other AEP Ohio Transco transmission lines.

B(4) The applicant shall describe the alternatives considered and reasons why the proposed location or route is best suited for the proposed facility. The discussion shall include, but not be limited to, impacts associated with socioeconomic, ecological, construction, or engineering aspects of the project.

All of the proposed transmission line rebuild work will occur within existing AEP Ohio Transco ROW (see Figure 1.2 in Appendix A) on the existing transmission line centerline. Therefore, no alternatives were considered for this Project. See Section B(9) for further discussion of the engineering/construction aspects of the Project and Section B(10) for further discussion of the socioeconomic and ecological impacts of the Project.

B(5) The applicant shall describe its public information program to inform affected property owners and tenants of the nature of the project and the proposed timeframe for project construction and restoration activities.

AEP Ohio Transco did not develop a public information plan with respect to this Project, as all of the proposed transmission line rebuild work will occur within existing AEP Ohio Transco ROW (see Figure 1.2 in Appendix A) and AEP Ohio Transco has reached agreements with adjacent property owners to access AEP Ohio Transco's ROW during construction work.

B(6) The applicant shall provide an anticipated construction schedule and proposed in-service date of the project.

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Construction is planned to begin on or about November 1, 2016, and the in-service date (completion date) of the Project is expected to be on or about May 1, 2019.

B(7) The applicant shall provide a map of at least 1:24,000 scale clearly depicting the facility with clearly marked streets, roads, and highways, and an aerial image.

Figure 1.1 in Appendix A identifies the location of the proposed Project on Chesterville and Marengo 7.5' USGS quadrangle maps. Figure 1.2 (Appendix A) shows the location of the Project on aerial photographs. Figure 1.4 (Appendix A) shows the general location of the Project relative to local communities and the primary road network. To visit the Project from Columbus, drive north on Interstate 71 to State Route 61 (Exit 140), then drive north on State Route 61 to State Route 229. Drive east on State Route 229 for approximately nine miles to Hedding Road (Morrow County Road 194), then drive north for approximately one mile to Hedding Station. The 138 kV transmission line rebuild project extends approximately 10.3 miles northwest of Fulton Station, and is located along the west side of Worthington-New Haven Road (Morrow County Road 24), approximately one mile southwest of Fulton, Ohio.

B(8) The applicant shall provide a list of properties for which the applicant has obtained easements, options, and/or land use agreements necessary to construct and operate the facility and a list of the additional properties for which such agreements have not been obtained.

All of the proposed transmission line rebuild work for the Project will occur within existing AEP Ohio Transco ROW (see Figure 1.2 in Appendix A). AEP Ohio Transco has reached agreements with adjacent property owners to access AEP Ohio Transco ROW during construction (Planned access road locations are shown on Figures 1.1, 1.2, and 1.3 in Appendix A). No other property easements, options, or land use agreements are necessary to construct the Project or operate the transmission line.

B(9) The applicant shall describe the following information regarding the technical features of the Project:

(a) Operating characteristics, estimated number and types of structures required, and right-of-way and/or land requirements.

The 10.3-mile rebuild of the portion of West Mount Vernon – South Kenton 138kV Line between Hedding Road Switch and Fulton Station involves replacing 87 existing H-frame wood pole structures with new steel pole structures (single pole, three-pole, and H-frame). New 1033.5 kcmil 54/7 ACSR (Curlew) conductors will be installed, along with a 7#8 alumoweld shield wire and 0.646 diameter OPGW. The existing conductor is 477 kcmil ACSR and the existing shield wire is (2) 7#8 alumoweld. All deadends will utilize pier foundations with anchor cages. Preliminary design drawings for the Hedding Road Switch to Fulton Station 138 kV Transmission Line Rebuild Project are included in Appendix B.

(b) For electric power transmission lines that are within one hundred feet of an occupied residence or institution, the production of electric and magnetic fields during the operation of the proposed electric power transmission line. The discussion shall include:

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(i) Calculated Electric and Magnetic Field Strength Levels

The Electric and Magnetic Field level calculations pursuant to this section have not been finalized. Final numbers will be filed under separate cover in this docket.

(ii) A discussion of the applicant's consideration of design alternatives with respect to electric and magnetic fields and their strength levels, including alternate conductor configuration and phasing, tower height, corridor location, and right-of-way width.

Design alternatives were not considered due to electric and magnetic fields (EMF) and their strength levels. Transmission lines, when energized, generate EMF. Laboratory studies have failed to establish a strong correlation between exposure to EMF and effects on human health. However, some people are concerned that EMF has impacts on human health. Due to their concerns, EMF associated with the new circuits will be reported under a separate cover in this docket. The EMF will be computed assuming the highest possible EMF values that could exist along the proposed transmission line. Normal daily EMF levels will operate below these maximum load conditions. Based on studies from the National Institute of Health, the magnetic field (measured in milliGauss) associated with emergency loading at the highest EMF value for this transmission line, is lower than those associated with normal household appliances like microwaves, electric shavers and hair dryers. For additional information regarding EMF, the National Institute of Health has posted information on their website: http://www.niehs.nih.gov/health/assets/docs_p_z/results_of_emf_research_emf_questions_answers_booklet.pdf.

(c) The estimated capital cost of the project.

The 2016 capital cost estimates for the proposed Project have been tabulated by the Federal Energy Regulatory Commission (FERC) Electric Plant Transmission Accounts:

ESTIMATES OF APPLICABLE INTANGIBLE AND CAPITAL COSTS		
FERC Account Number	Description	Cost
350	Land and Land Rights	Not Applicable
352	Structures & Improvement	Not Applicable
353	Substation Equipment	Not Applicable
354	Towers & Fixtures	Not Applicable
355	Poles & Fixtures	11,909,000
356	Overhead Conductors & Devices	2,850,000
357	Underground Conductors & Devices	Not Applicable
358	Underground-to-overhead Conversion Equipment	Not Applicable
359	Right-of-way Clearing, Roads, Trails or Other Access	Not Applicable
	TOTAL	\$14,759,000

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B(10) The applicant shall describe the social and ecological impacts of the project.

(a) Provide a brief, general description of land use within the vicinity of the proposed project, including a list of municipalities, townships, and counties affected.

The proposed Project is located within South Bloomfield, Chester, Harmony, and Lincoln Townships, Morrow County, Ohio. According to the Morrow County zoning regulations, South Bloomfield, Chester, Harmony, and Lincoln Townships are all zoned – primarily Agricultural and Residential (<http://morrowcountyohio.gov/www/index.php/zoning-resolutions>).

Land uses in the Project area primarily consist of old field habitats, residential lawn, and agricultural land (pasture/hay and cultivated cropland; see Figure 1.3 in Appendix A). Within AEP Ohio Transco's existing transmission line ROW, agricultural land uses are actively farmed, pasture, and hay field, and deciduous forest has been cleared in most areas and currently consists of Developed – Open Space land use (see Figure 1.2 for aerial photography showing AEP Ohio Transco ROW corridor). Appendix D contains photographs and descriptions of specific ecological habitat types within AEP Ohio Transco ROW in the Project area. There are currently 132 residences within 1,000 feet of the centerline of the proposed Project. No churches, schools, cemeteries, parks, preserves, or wildlife management areas are located within 1,000 feet of the centerline of the proposed Project (see Figure 1.3, Appendix A).

(b) Provide the acreage and a general description of all agricultural land, and separately all agricultural district land, existing at least sixty days prior to submission of the application within the potential disturbance area of the project.

Based on field surveys, there are approximately 57.2 acres of agricultural land in the Hedding Road Switch to Fulton Station 138 kV Rebuild Project area, comprised primarily of pasture/hay fields and cultivated cropland. According to the Morrow County Auditor's Office, there are no registered agricultural district parcels located in the Project area.

(c) Provide a description of the applicant's investigation concerning the presence or absence of significant archeological or cultural resources that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

From March through May 2016, AEP Ohio Transco's consultant completed Phase I archaeology and history/architecture surveys for the proposed Project (see Appendix C) in accordance with the guidelines set forth by the Ohio State Historic Preservation Office and Ohio Administrative Code Chapter 4906-15-06(F). In August 2016, AEP Ohio Transco's consultant completed additional cultural resources survey for proposed access roads (see Appendix C). The Project area extends through the southeastern part of Morrow County. This is a lowly populated area that is mostly affiliated with agricultural countryside and occasional small patches of woods. The western terminus of the project corridor is at Fulton Station, which is just west of the Alum Creek Valley and Worthington-New Haven Road. The corridor crosses Alum Creek, Big Walnut Creek, and other drainages before it meets the eastern terminus at Hedding Station. The terrain in this area ranges from gently undulating to slightly rolling as it involves topography that is resultant from glacial end

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moraine deposition. The western part of the corridor is within the Scioto River watershed and the eastern part is within the Kokosing/Muskingum River watershed. The literature review for this Project indicated that there are cultural resources identified in the Project vicinity, but there are no previously-recorded archaeological sites in the Project area. There are no National Register of Historic Places (NRHP)/Determination of Eligibility sites in the Project area.

These investigations involved subsurface testing, surface collection, and visual inspection. The surveys and testing identified 23 sites, 33MW0202-224 that mostly date from the prehistoric period. No further work is considered to be necessary for 33MW0202-222 and 224 as they do not meet the minimum requirements to be regarded as significant/eligible for the NRHP. They are not landmarks. Site 33MW0223 dates from the Late Paleo-Indian period and is recommended by AEP Ohio Transco's consultant for Phase II assessment if it cannot be avoided. Due to this, AEP Ohio Transco intends to complete the Phase II study to further assess the extent and significance of the site and use a timber mat access road and work pad in the vicinity of this site to minimize disturbance, as necessary.

The history/architecture investigations identified 19 individual properties 50 years of age or older that may have a direct line-of-sight to the project. Photographs and structural data for each property were collected in the field. Seventeen (17) properties were determined not eligible for listing in the NRHP. The remaining two properties within the Project survey area were advanced for additional detailed study, but were ultimately found to be not eligible for listing in the NRHP. Therefore, AEP Ohio Transco's consultant recommends that no historic properties will be affected by the Project.

(d) Provide a list of the local, state, and federal governmental agencies known to have requirements that must be met in connection with the construction of the project, and a list of documents that have been or are being filed with those agencies in connection with siting and constructing the project.

A Notice of Intent will be filed with the Ohio Environmental Protection Agency ("OEPA") for authorization of construction storm water discharges under General Permit OHCD00004. AEP Ohio Transco will also coordinate storm water permitting needs with local government agencies, as necessary. AEP Ohio Transco will implement and maintain best management practices as outlined in the project-specific Storm Water Pollution Prevention Plan to minimize erosion and control sediment to protect surface water quality during storm events.

There are 100-year floodplains mapped at two locations within the Project area: along Walnut Creek and along Alum Creek (see Appendix D). Two proposed pole structure replacements and proposed access roads are located in the Walnut Creek floodplain. AEP Ohio Transco is evaluating the potential need for a floodplain permit for these activities and will coordinate with the Morrow County Floodplain Administrator, as necessary. No pole replacements or access roads are proposed in the Alum Creek floodplain.

Project construction activities may require the placement of a small amount of permanent fills within four wetlands (Wetlands 2, 4, 12, and 25). See Appendix D for more information regarding these wetlands and their locations within the Project area. AEP Ohio Transco is evaluating the potential

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need for a Clean Water Act Section 404 Permit and will coordinate with the U.S. Army Corps of Engineers, as necessary. A discussion of threatened and endangered species is provided in Section B(10)(e). There are no other known local, state or federal requirements that must be met prior to commencement of the proposed Project.

(e) Provide a description of the applicant's investigation concerning the presence or absence of federal and state designated species (including endangered species, threatened species, rare species, species proposed for listing, species under review for listing, and species of special interest) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

The United States Fish and Wildlife Service (USFWS) *Federally Listed Species by Ohio Counties October 2015* (available at www.fws.gov/midwest/ohio/pdf/OhioTEListByCountyOct2015.pdf) was reviewed to determine the threatened and endangered species currently known to occur in Morrow County. This USFWS publication lists Indiana bat (*Myotis sodalis*; federally listed endangered) and northern long-eared bat (*Myotis septentrionalis*; federally listed threatened) as threatened and endangered species currently known to occur in Morrow County. The bald eagle (*Haliaeetus leucocephalus*; species of concern) is also on this list of species for Morrow County. As part of the ecological study completed for this project, a coordination letter was submitted to the USFWS Ohio Ecological Services Field seeking an environmental review of the proposed Project for potential impacts to threatened or endangered species. The August 23, 2016 response letter from USFWS (see Appendix D) indicated that the Project is within the range of the Indiana bat and northern long-eared bat in Ohio and recommends saving trees ≥ 3 inches diameter at breast height whenever possible. The USFWS response letter indicated that, due to the project type, size, and location, if caves and mines (potential bat hibernacula) will not be disturbed and seasonal tree cutting (clearing of trees ≥ 3 inches diameter at breast height between October 1 and March 31) to avoid impacts to Indiana bats and northern long-eared bats is implemented, they do not anticipate adverse effects to any federally endangered, threatened, proposed, or candidate species.

As summarized in Appendix D, ecological field surveys conducted by AEP Ohio Transco's consultant did not identify any potentially suitable Indiana bat/northern long-eared bat roost trees within the Project area. No suitable habitat for bald eagle was observed within the Project area, and the USFWS has indicated that due to the project type, size, and location, no adverse effects to this species are anticipated.

As part of the ecological study completed for this project, coordination letters were also submitted to the Ohio Department of Natural Resources (ODNR) Division of Wildlife (DOW) Ohio Natural Heritage Program (ONHP) and ODNR-Office of Real Estate. Correspondence received from ODNR-ONHP (Appendix D) indicated that Project area does not contain any known occurrences of state-listed species, federally-listed species, or rare species within a mile of the Project. A response from ODNR-Office of Real Estate has not yet been received. Several state-listed threatened and endangered species are listed by the ODNR-DOW (<http://wildlife.ohiodnr.gov/species-and-habitats/state-listed-species/state-listed-species-by-county>) as occurring, or potentially occurring in

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Morrow County. As summarized in Appendix D, only suitable habitat for the state-listed endangered loggerhead shrike (*Lanius ludovicianus*) was observed in the Project area during ecological field surveys conducted by AEP Ohio Transco's consultant and no impacts to this species are anticipated.

(f) Provide a description of the applicant's investigation concerning the presence or absence of areas of ecological concern (including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

Correspondence received from USFWS (see Appendix D) indicated that there are no federal wilderness areas, wildlife refuges, or designated critical habitat in the vicinity of the Project. Correspondence from ODNR-OHNP (Appendix D) indicated that they are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests, national wildlife refuges, or other protected natural areas within a one mile radius of the Project area.

There are mapped 100-year floodplains at two locations in the Project area: along Walnut Creek and along Alum Creek (see Appendix D). Two proposed pole structure replacements and proposed access roads are located in the Walnut Creek floodplain. AEP Ohio Transco is evaluating the potential need for a floodplain permit for these activities and will coordinate with the Morrow County Floodplain Administrator, as necessary. No pole replacements or access roads are proposed in the Alum Creek floodplain.

On July 5 and July 6, 2016, a wetland and stream reconnaissance survey was completed by AEP Ohio Transco's consultant within the Hedding Station to Fulton Station 138 kV transmission line ROW corridor and proposed access roads. Twenty-six (26) wetlands and sixteen (16) streams were identified. The locations of these features can be found on Figure 2 in Appendix D. AEP Ohio Transco will avoid these features or cross using temporary timber mat structures (to the extent possible). Project construction activities may require the placement of a small amount of permanent fills within three wetlands (Wetlands 2, 4, 12, and 25). See Appendix D for more information regarding these wetlands and their locations within the Project area. AEP Ohio Transco is evaluating the potential need for a Clean Water Act Section 404 Permit and will coordinate with the U.S. Army Corps of Engineers, as necessary.

(g) Provide any known additional information that will describe any unusual conditions resulting in significant environmental, social, health, or safety impacts.

To the best of AEP Ohio Transco's knowledge, there are no known unusual conditions that are would result in significant environmental, social, health, or safety impacts.

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Appendix A Project Maps
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Appendix A Project Maps

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Appendix B Design Drawings
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Appendix B Design Drawings

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Appendix C Cultural Resources Survey Reports
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Appendix C Cultural Resources Survey Reports

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Appendix D Ecological Information
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Appendix D Ecological Information

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

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in

Case No(s). 16-1531-EL-BLN

Summary: Letter of Notification Part 1 electronically filed by Mr. Hector Garcia on behalf of AEP Ohio Transmission Company