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Chairman Andre T. Porter
Ohio Power Siting Board
180 East Broad Street
Columbus, Ohio 43215

November 5, 2015

**Re: Case No. 15-1734 Letter of Notification
Yager-Azalea 138 kV Transmission Line Project**

Dear Chairman Porter,

Attached please find a copy of the Letter of Notification (LON) for the Yager-Azalea 138 kV Transmission Line 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.

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

Respectfully Submitted,

/s/ Hector Garcia

Hector Garcia
Senior Counsel
AEP Ohio Transmission Company, Inc.

cc. Counsel OPSB Staff
Patrick Donlon and Jon Pawley, OPSB Staff

**LETTER OF NOTIFICATION FOR THE
YAGER-AZALEA 138 KV
TRANSMISSION LINE PROJECT**

PUCO Case No. 15-1734-EL-BLN

Submitted pursuant to OAC 4906-11-01

**AEP Ohio Transmission Company, Inc.
(AEP Ohio Transco)**

NOVEMBER 2015

LETTER OF NOTIFICATION
Yager-Azalea 138 kV Electric Transmission Line Project

AEP Ohio Transmission Company, Inc. (AEP Ohio Transco) is providing the following information in accordance with the procedures delineated in Ohio Administrative Code Section 4906-11-01: Letter of Notification Requirements of the Rules and Regulations of the Ohio Power Siting Board (OPSB).

4906-11-01(B) GENERAL INFORMATION

- 1. The name of the project and applicant's reference number, if any, names and reference numbers(s) of resulting circuits and a brief description of the project, and why the project meets the requirements of a letter of notification.**

The proposed Yager-Azalea 138 kV Transmission Line Project (Project) is for a specific customer and was identified in the 2015 Long-Term Forecast Reports (LTFRs) for the AEP Ohio Transco (Document 15-1501-EL-FOR).

The Project consists of constructing a transmission line originating at a new 138 kV transmission station to be known as Yager Station and extending generally north approximately 4.2 miles to the existing Azalea Station. Yager Station is associated with the Yager-Azalea 138 kV line, but was submitted to the OPSB under separate cover (OPSB Case Number 15-1666-EL-BLN). Figure 1 shows the location of the project in relation to the surrounding vicinity.

The project meets the requirements for a Letter of Notification because it is within the types of projects defined by Item (1)(f) of Attachment A of the interim process defined in the OPSB's September 4, 2012 Finding and Order in Docket 12-1981-GE-BRO. This item states:

(1) Rerouting or extension of new construction of single or multiple circuit electric power transmission line(s) as follows:

(f) Lines(s) primarily needed to attract or meet the requirements of a specific customer or customers.

- 2. If the proposed letter of notification project is an electric power transmission line or gas or natural gas transmission line, a statement explaining the need for the proposed facility.**

The purpose of this Project is to meet the needs of a specific customer. Utica East Ohio Midstream has requested an increase in load capacity from 20 MW to 63 MW at its existing Leesville Plant along Azalea Road west of the Village of Leesville, Carroll County, Ohio. An existing 69 kV circuit currently serves the Leesville Plant. The 69 kV system does not have the capacity to serve the significant load increase, so the customer has been instructed to place their plant expansion plans on hold until the new 138kV line can be built to their site. This 138 kV project will allow AEP Ohio Transco to reliably serve the load increase of the customer.

- 3. The location of the project in relation to existing or proposed lines and stations shown on maps and overlays provided to the Public Utilities Commission of Ohio in the applicant's most recent long term forecast report.**

This project is designed to meet the needs of a specific customer, Utica East Ohio Midstream, and is referenced in AEP Ohio Transco's 2015 LTFRs submitted to the Public Utilities Commission of Ohio. Figure 1 shows the general location of the Project in relation to existing and proposed lines and stations in the area.

- 4. 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, natural environment, construction, or engineering aspects of the project.**

AEP Ohio Transco was contacted by Utica East Ohio Midstream regarding their specific needs. AEP Ohio Transco worked with Utica East Ohio Midstream to identify a solution for their specific projected electrical load needs. Inserting a 138 kV station adjacent to the three existing FirstEnergy 138 kV circuits and extending a 138 kV line north to Azalea Station was identified as the best solution. AEP Ohio Transco explored available property options near the three FirstEnergy 138 kV lines in the area of customer need. AEP Ohio Transco identified the selected Yager Station site as having developable land and closest to the FirstEnergy circuits, as well as to AEP's existing 69kV circuit. An engineering study determined the specified Yager to Azalea line route as being optimal. AEP purchased the Yager Station site in mid-2015. Hilly terrain limited available options between the two end

points of the proposed 138 kV line. The AEP team identified the route submitted in this LON based on review of likely suitable structure locations and familiarity with property owners in the project vicinity.

5. The anticipated construction schedule and proposed in-service date of project.

Construction of the line is scheduled to begin in February 2016. The in-service date for the Project is October 2016.

6. An area map of not less than 1:24,000-scale clearly depicting the facility's centerline with clearly marked streets, roads, and highways, and clearly written instructions for locating and viewing the facility.

Figure 1 provides the proposed Project location on the United States Geological Survey (USGS) 7.5-minute topographic maps of the Bowerstown, Ohio and Uhrichsville, Ohio quadrangles. To access the Project location from public roads, take Interstate 70 East from Columbus for approximately 80 miles to Exit 180B to Interstate 77 North toward Cleveland. After approximately 21 miles, take Exit 65 for U.S. 36 toward Port Washington/Newcomerstown. Turn right onto U.S. 36 East and continue for approximately 15 miles before turning left onto U.S. 250. After approximately 4.5 miles, turn left onto Patterson Road and continue for approximately 1.5 miles. The Yager Station property (the southern end of the Yager-Azalea transmission line) is located near the intersection of Patterson Road and Yager Road. Azalea station, the northern terminus of the 138kV line, is located at approximately 8349 Azalea Road, Dennison Ohio.

7. 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.

No easements, options, or land use agreements have been obtained to date for the Yager-Azalea 138 kV line. AEP Ohio Transco will obtain easements from these landowners prior to construction. A list of parcels and property owners for which AEP will obtain right-of-way easements for the project are provided below.

PARCELS AND PROPERTY OWNERS		
Parcel Number	Owner	Address
Harrison County		
150000098000	Troup, Richard E. and Rita M.	175 Frederick St, Doylestown, OH 44230
150000101006	Craig Cernik, et. al	3659 Clark Mill Rd, Norton, OH 44203
150000101002	Palmer, William	30500 Taylor Rd, Dennison, OH 44621
150000263000	Palmer, William	30500 Taylor Rd, Dennison, OH 44621
150000811000	Veverka, Helen	30559 Fernwood Rd, Dennison, OH 44621
150000841000	Ross, Kristine	30580 Fernwood Rd, Dennison, OH 44621
Carroll County		
25-0000643.000	Leeper, William and Janette Lee Haver	16862 Bronze Heights, Caldwell, OH 43724
25-0000640000	Leeper, William and Janette Lee Haver	16862 Bronze Heights, Caldwell, OH 43724
25-0000910.002	David Christman	9110 Cottage Rd SW, Dennison, OH 44621
25-0000910.000	David Christman	9111 Cottage Rd SW, Dennison, OH 44621
25-0001174.000	Mark Schrock	7895 Stoney Point Rd, Sugarcreek, OH 44681
25-0001174.000	Mark Schrock	7895 Stoney Point Rd, Sugarcreek, OH 44681
25-0001172.000	Mark Schrock	7895 Stoney Point Rd, Sugarcreek, OH 44681
25-0000656.000	Sue Ann Cooper & Arthur Lewis	PO Box 45, Sherrodsville, OH 44675
25-0000656.000	Sue Ann Cooper & Arthur Lewis	PO Box 45, Sherrodsville, OH 44675
25-0000639.000	Utica East Ohio Midstream LLC	1900 Dalrock Rd, Rowlett, TX 75088

(C) TECHNICAL FEATURES OF THE PROJECT

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

The Yager-Azalea line will operate at 138 kV. It will consist of three-phase, 1,033 kmil ACSR “Curlew” conductors. One 7#8 alumoweld and one fiber-optic overhead groundwire will be used as shield wires. The insulator assemblies will consist of one string of polymer insulators for each phase. The 138 kV transmission line structures to be installed will include approximately 33 steel H-frame structures.

A structure sketch is included as Figure 2.

2. For electric power transmission lines, the production of electric and magnetic fields during the operation of the proposed electric power transmission line.

(a) Calculated Electric and Magnetic Field Levels

Three loading conditions were examined: (1) normal maximum loading, (2) emergency line loading, and (3) winter normal conductor rating. Normal maximum loading represents the peak flow expected with all system facilities in service; daily/hourly flows fluctuate below this level. Emergency loading is the maximum current flow during unusual (contingency) conditions, which exist only for short periods of time. Winter normal (WN) conductor rating represents the maximum current flow that a line, including its terminal equipment, can carry during winter conditions. It is not anticipated that this line would operate near its WN rating for the foreseeable future.

Electric and magnetic fields (EMF) levels were calculated one meter above ground under the line and at the right-of-way edges (50 feet left and right of centerline). Results, calculated with Electric Power Research Institute's (EPRI's) EMF Workstation computer program, are summarized below.

EMF CALCULATIONS				
Condition	Circuit Load (A)	Ground Clearance (feet)	Electric Field (kV/m)*	Magnetic Field (mG)*
(1) Normal Maximum Loading	166.0	32.0	0.61 / 1.21 / 0.61	9.05 / 28.66 / 9.40
(2) Emergency Line Loading	285.0	32.0	0.61 / 1.21 / 0.61	15.53 / 49.21 / 16.14
(3) Winter Normal Conductor Rating	1,568	23.0	0.64 / 2.20 / 0.64	101.18 / 480.80 / 105.10

* EMF levels (left right-of-way edge/maximum/right right-of-way edge) calculated one meter above ground assuming balanced currents and nominal voltages. Electric fields reflect normal and emergency operations; lower electric fields are expected during emergency conditions when one mutually-coupled line is out of service.

(b) Discussion of the Company's Design Alternatives Regarding EMF Levels

Design alternatives were not considered due to 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 have impacts on human health. Due to these concerns, EMF associated with the new circuits was calculated in the table above. The EMF was 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 Institutes of Health, the magnetic field (measured in milliGauss, or

mG) 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

3. **The estimated cost of the project by Federal Energy Regulatory Commission account, unless the applicant is not an electric light company, a gas company or a natural gas company as defined in Chapter 4905. of the Revised Code (in which case, the applicant shall file the capital costs classified in the accounting format ordinarily used by the applicant in its normal course of business).**

The 2015 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	\$4,960,000
352	Structures & Improvement	Not Applicable
353	Substation Equipment	Not Applicable
354	Towers & Fixtures	\$8,349,237
355	Poles & Fixtures	Not Applicable
356	Overhead Conductors & Devices	\$3,129,177
357	Underground Conductors & Devices	Not Applicable
358	Underground-to-overhead Conversion Equipment	Not Applicable
359	Right-of-way Clearing, Roads, Trails or Other Access	\$6,000,000
	TOTAL	\$22,438,414

(D) SOCIOECONOMIC DATA

1. **A brief description of land use within the vicinity of the proposed project, including: (a) a list of municipalities, townships and counties affected; and (b) estimates of population density adjacent to rights of way within the study corridor (the U.S. census information may be used to meet this requirement.)**

On behalf of AEP Ohio Transco, AECOM prepared a Socioeconomic, Land Use, and Agricultural District Review Report. This report is included as Appendix A.

- 2. The location and general description of all agricultural land (including agricultural district land) existing at least sixty days prior to submission of the letter of notification within the proposed electric power transmission line right-of-way, or within the proposed electric power transmission substation fenced-in area, or within the construction site boundary of a proposed compressor station.**

On behalf of AEP Ohio Transco, AECOM prepared a Socioeconomic, Land Use, and Agricultural District Review Report. This report is included as Appendix A. Minimal or no agricultural land will be impacted by the construction of the Project, as detailed in Appendix A.

- 3. A description of the applicant's investigation (concerning the presence or absence of significant archaeological or cultural resources that may be located within the area likely to be disturbed by the project), a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.**

An archaeological investigation was completed for this project by Weller & Associates, Inc. No cultural resources of concern were identified. A copy of this report will be provided to the Ohio Power Siting Board under separate cover.

- 4. Documentation that the chief executive officer of each municipal corporation and county, and the head of each public agency charged with planning land use in the area in which any portion of the facility is to be located have been notified of the project and have been provided with a copy of the letter of notification. The applicant shall describe the company's public information program used in the siting of the proposed facility. The information submitted shall include either a copy of the material distributed to the public or a copy of the agenda and summary of the meeting(s) held by the applicant.**

AEP Ohio Transco notified Mr. Don Bethel, Mr. William Host, and Mr. Dale Norris, Harrison County Board of Commissioners; Mr. Robert Sterling, Harrison County Engineer; Mr. Bart A. Busby, Monroe Township Trustee; Mr. Gene Busby, Monroe Township Trustee; Mr. Ralph T. Ferguson, Monroe Township Trustee; Mr. Mr. Jeffrey L. Ohler, Mr. Robert E. Wirkner, and Mr. Thomas R. White, Carroll County Board of Commissioners; Mr. Brian Wise, Carroll County Engineer; Ms. Pam Grim, Carroll County Regional Planning Commission; Mr. Robert McClain, Orange Township Trustee, Mr. Joseph Nign, Orange Township Trustee; and Mr. James Romig, Orange Township Trustee in October 2015. Copies of this Letter of

Notification have been sent to the Harrison County Commissioners, Harrison County Engineer, Monroe Township Trustees, the Puskarich Public Library and the Carroll County District Library. Copies of the cover letters to these officials and the local library are attached in Appendix B. AEP Ohio Transco will advise local officials of features and the status of the proposed Project.

5. A brief description of any current or pending litigation involving the project known to the applicant at the time of the letter of notification.

There is no known current or pending litigation involving this Project.

6. A listing of local, state, and federal governmental agencies known to have requirements which must be met in connection with the construction of the project, and 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 for authorization of construction stormwater discharges under General Permit OHC000003. There are no other known local, state, or federal requirements that must be met prior to commencement of the proposed Project.

(E) ENVIRONMENTAL DATA

1. A description of the applicant's investigation concerning the presence or absence of federal or state endangered 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 area likely to be disturbed by the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

On behalf of AEP Ohio Transco, AECOM prepared a Threatened and Endangered Species Report. AECOM coordinated with the USFWS and ODNR regarding special status species in the vicinity of the Project. No impacts to rare, threatened, or endangered species are expected. The full Rare, Threatened, and Endangered Species Report for the Project is included as Appendix C.

- 2. 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 areas likely to be disturbed by the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.**

On behalf of AEP Ohio Transco, AECOM prepared an Areas of Ecological Concern, Wetland Delineation, and Stream Assessment Report. No impacts to wetlands or streams are anticipated. The full Areas of Ecological Concern, Wetland Delineation, and Stream Assessment Report for the Project is included as Appendix D.

- 3. 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, no unusual conditions exist that would result in environmental, social, health, or safety impacts. Construction and operation of the proposed Project will meet all applicable safety standards established by the Occupational Safety and Health Administration, and will be in accordance with the requirements specified in the latest revision of the National Electrical Safety Code as adopted by the Public Utilities Commission of Ohio. The Stormwater Pollution Prevention Plan (SWPPP), which will include the Access Plan, will be provided to the OPSB under separate cover, after submission of this Letter of Notification.

This foregoing document was electronically filed with the Public Utilities

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Case No(s). 15-1734-EL-BLN

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