

FILE

FirstEnergy

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71
76 South Main Street
Akron, Ohio 44308

2016 OCT 12 AM 11:13

1-800-646-0400

PUCO October 11, 2016

Ms. Barcy F. McNeal
Docketing Division
The Public Utilities Commission of Ohio
180 East Broad Street
Columbus, OH 43215-3793

**Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR**

Dear Ms. McNeal:

In accordance with Ohio Administrative Code ("OAC") Rule 4906-2-04(A)(3) and OAC Chapter 4906-6, American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, transmit one (1) original and eleven (11) copies of the enclosed Construction Notice for the above captioned Project. The Construction Notice Application, which is attached, was completed in accordance with the requirements of OAC Chapter 4906-6.

In this Project, ATSI and OE are proposing to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. One new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed. Also one existing structure will be removed from the existing London-Tangy 138 kV Transmission Line. The Project will be located in Deer Creek Township, Madison County, Ohio.

ATSI and OE are requesting an expedited review of this Project.

Pursuant to OAC Rule 4906-2-04(A)(3), please be advised of the following:

a) Name and address of the applicants:

American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308

Ohio Edison Company
76 South Main Street
Akron, Ohio 44308

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.
Technician SM Date Processed OCT 12 2016

b) Name and location of proposed facilities:

London-Tangy 138 kV Transmission Line Tap to National Substation.

The Project area is located in Deer Creek Township, Madison County, Ohio.

c) Applicant's representative:

William R. Beutler
Engineer III
Energy Delivery Transmission and Substation Design
FirstEnergy Service Company
76 South Main Street
Akron, OH 44308-1890

d) No information that was provided in the pre-application letter required by OAC Rule 4906-6-03 has been amended or changed in the attached Letter of Notification Application.

e) A notarized statement that the information contained in the application is complete and accurate is attached as Attachment 1.

We have provided a copy of the Construction Notice by certified mail, with return receipt requested, to each official of the political subdivisions immediately affected by the proposed Project as listed in Exhibit 1. Copies of the transmittal letters addressed to the local government representatives of Deer Creek Township, Madison County, Ohio are enclosed for your file. These materials are being provided as proof of compliance with OAC Rule 4906-6-07.

After docketing this filing, please return one time-stamped copy of the Letter of Notification for our records to us in the enclosed envelope. Should staff of the Ohio Power Siting Board desire further information or discussion of this submittal, please contact me at (330) 384-2740.

Sincerely,



William R. Beutler
Engineer III
Energy Delivery Transmission and Substation Design
FirstEnergy Service Company

Attachments

**London-Tangy 138 kV Transmission Line Tap to National Substation Project
Case Number 16-1930-EL-BNR**

Date: October 11, 2016

**Attachment 1
Affidavit of William R. Beutler**

In The Matter Of:)
The Application of American Transmission)
Systems, Incorporated for a Certificate of)
Environmental Compatibility and Public)
Need for the Construction for the London-)
Tangy 138 kV Transmission Line Tap to)
Nation Substation Project)

Exhibit 1
Officials Served Copy of Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR

Madison County

Commissioner David Dhume, Chairman
Madison County Commissioners
1 North Main Street
P.O. Box 618
London, OH 43140

Mr. Charles E. Reed
Madison County Recorder
1 North Main Street
Room 40
London, OH 43140

Commissioner Mark Forrest
Madison County Commissioners
1 North Main Street
P.O. Box 618
London, OH 43140

Mr. Bryan Dhume, P.E., P.S.
Madison County Engineer's Office
825 US 42 NE
London, OH 43140

Commissioner Paul Gross
Madison County Commissioners
1 North Main Street
P.O. Box 618
London, OH 43140

Deer Creek Township

Mr. Mark Modlich,
Deer Creek Township Trustee
861 Glade Run Rd.
West Jefferson, OH, 43162

Mr. Robert J. Turvy, Jr.
Deer Creek Township Trustee
65 US 40 SE
London, OH 43140

Mr. Robert W. Sellars,
Deer Creek Township Trustee
315 Simpson Rd.
London, OH 43140

Ms. Erin K. Morris, Fiscal Officer
Deer Creek Township
1081 US Hwy 42 SE
London, OH 43140

Libraries

Mr. Mike Hensel, Director
London Public Library
20 E 1st St.
London, OH 43140

Ms. Cathy Allen, Director
Hurt-Battelle Memorial Library
270 Lily Chapel Rd.
West Jefferson, OH 43162

October 11, 2016

Commissioner David Dhume, Chairman
Madison County Commissioners
1 North Main Street
P.O. Box 618
London, OH 43140

Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR

Dear Commissioner Dhume,

American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, are proposing to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. One new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed if this Project is approved. Also one existing structure will be removed from the existing London-Tangy 138 kV Transmission Line.

The Project is located in Deer Creek Township, Madison County, Ohio.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this Project falls within the Ohio Power Siting Board's ("OPSB") requirements for a Construction Notice ("CN") application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached CN application with the OPSB for their review and approval. The CN application contains a description of the Project, and is provided for your information.

I will be happy to answer your questions concerning this matter. You can contact me at (330) 384-2740.

Sincerely,



William R. Beutler
Engineer III
Energy Delivery Transmission & Substation Design
FirstEnergy Service Company

Attachment

October 11, 2016

Commissioner Mark Forrest
Madison County Commissioners
1 North Main Street
P.O. Box 618
London, OH 43140

Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR

Dear Commissioner Forrest,

American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, are proposing to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. One new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed if this Project is approved. Also one existing structure will be removed from the existing London-Tangy 138 kV Transmission Line.

The Project is located in Deer Creek Township, Madison County, Ohio.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this Project falls within the Ohio Power Siting Board's ("OPSB") requirements for a Construction Notice ("CN") application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached CN application with the OPSB for their review and approval. The CN application contains a description of the Project, and is provided for your information.

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Sincerely,



William R. Beutler
Engineer III
Energy Delivery Transmission & Substation Design
FirstEnergy Service Company

Attachment

October 11, 2016

Commissioner Paul Gross
Madison County Commissioners
1 North Main Street
P.O. Box 618
London, OH 43140

Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR

Dear Commissioner Gross,

American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, are proposing to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. One new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed if this Project is approved. Also one existing structure will be removed from the existing London-Tangy 138 kV Transmission Line.

The Project is located in Deer Creek Township, Madison County, Ohio.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this Project falls within the Ohio Power Siting Board's ("OPSB") requirements for a Construction Notice ("CN") application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached CN application with the OPSB for their review and approval. The CN application contains a description of the Project, and is provided for your information.

I will be happy to answer your questions concerning this matter. You can contact me at (330) 384-2740.

Sincerely,



William R. Beutler
Engineer III
Energy Delivery Transmission & Substation Design
FirstEnergy Service Company

Attachment

October 11, 2016

Mr. Charles E. Reed
Madison County Recorder
1 North Main Street
Room 40
London, OH 43140

Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR

Dear Mr. Reed,

American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, are proposing to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. One new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed if this Project is approved. Also one existing structure will be removed from the existing London-Tangy 138 kV Transmission Line.

The Project is located in Deer Creek Township, Madison County, Ohio.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this Project falls within the Ohio Power Siting Board's ("OPSB") requirements for a Construction Notice ("CN") application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached CN application with the OPSB for their review and approval. The CN application contains a description of the Project, and is provided for your information.

I will be happy to answer your questions concerning this matter. You can contact me at (330) 384-2740.

Sincerely,



William R. Beutler
Engineer III
Energy Delivery Transmission & Substation Design
FirstEnergy Service Company

Attachment

October 11, 2016

Mr. Bryan Dhume, P.E., P.S.
Madison County Engineer's Office
825 US 42 NE
London, OH 43140

Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR

Dear Mr. Dhume,

American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, are proposing to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. One new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed if this Project is approved. Also one existing structure will be removed from the existing London-Tangy 138 kV Transmission Line.

The Project is located in Deer Creek Township, Madison County, Ohio.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this Project falls within the Ohio Power Siting Board's ("OPSB") requirements for a Construction Notice ("CN") application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached CN application with the OPSB for their review and approval. The CN application contains a description of the Project, and is provided for your information.

I will be happy to answer your questions concerning this matter. You can contact me at (330) 384-2740.

Sincerely,



William R. Beutler
Engineer III
Energy Delivery Transmission & Substation Design
FirstEnergy Service Company

Attachment

October 11, 2016

Mr. Mark Modlich,
Deer Creek Township Trustee
861 Glade Run Rd.
West Jefferson, OH, 43162

Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR

Dear Mr. Modlich,

American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, are proposing to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. One new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed if this Project is approved. Also one existing structure will be removed from the existing London-Tangy 138 kV Transmission Line.

The Project is located in Deer Creek Township, Madison County, Ohio.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this Project falls within the Ohio Power Siting Board's ("OPSB") requirements for a Construction Notice ("CN") application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached CN application with the OPSB for their review and approval. The CN application contains a description of the Project, and is provided for your information.

I will be happy to answer your questions concerning this matter. You can contact me at (330) 384-2740.

Sincerely,



William R. Beutler
Engineer III
Energy Delivery Transmission & Substation Design
FirstEnergy Service Company

Attachment

October 11, 2016

Mr. Robert W. Sellars,
Deer Creek Township Trustee
315 Simpson Rd.
London, OH 43140

Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR

Dear Mr. Sellars,


American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, are proposing to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. One new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed if this Project is approved. Also one existing structure will be removed from the existing London-Tangy 138 kV Transmission Line.

The Project is located in Deer Creek Township, Madison County, Ohio.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this Project falls within the Ohio Power Siting Board's ("OPSB") requirements for a Construction Notice ("CN") application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached CN application with the OPSB for their review and approval. The CN application contains a description of the Project, and is provided for your information.

I will be happy to answer your questions concerning this matter. You can contact me at (330) 384-2740.

Sincerely,



William R. Beutler
Engineer III
Energy Delivery Transmission & Substation Design
FirstEnergy Service Company

Attachment

October 11, 2016

Mr. Robert J. Turvy, Jr.
Deer Creek Township Trustee
65 US 40 SE
London, OH 43140

Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR

Dear Mr. Turvy,

American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, are proposing to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. One new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed if this Project is approved. Also one existing structure will be removed from the existing London-Tangy 138 kV Transmission Line.

The Project is located in Deer Creek Township, Madison County, Ohio.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this Project falls within the Ohio Power Siting Board's ("OPSB") requirements for a Construction Notice ("CN") application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached CN application with the OPSB for their review and approval. The CN application contains a description of the Project, and is provided for your information.

I will be happy to answer your questions concerning this matter. You can contact me at (330) 384-2740.

Sincerely,



William R. Beutler
Engineer III
Energy Delivery Transmission & Substation Design
FirstEnergy Service Company

Attachment

October 11, 2016

Ms. Erin K. Morris, Fiscal Officer
Deer Creek Township
1081 US Hwy 42 SE
London, OH 43140

Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR

Dear Ms. Morris,

American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, are proposing to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. One new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed if this Project is approved. Also one existing structure will be removed from the existing London-Tangy 138 kV Transmission Line.

The Project is located in Deer Creek Township, Madison County, Ohio.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this Project falls within the Ohio Power Siting Board's ("OPSB") requirements for a Construction Notice ("CN") application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached CN application with the OPSB for their review and approval. The CN application contains a description of the Project, and is provided for your information.

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Sincerely,



William R. Beutler
Engineer III
Energy Delivery Transmission & Substation Design
FirstEnergy Service Company

Attachment

October 11, 2016

Mr. Mike Hensel, Director
London Public Library
20 E 1st St.
London, OH 43140

**Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR**

Dear Mr. Hensel,

Enclosed please find one copy of the Construction Notice ("CN") Application of American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, for the London-Tangy 138 kV Transmission Line Tap to National Substation Project ("Project") that has been filed with the Ohio Power Siting Board ("OPSB"). Please make the CN Application available for public reference in the London Public Library. We are providing a copy of the CN Application for placement in your library in response to the requirements of the Ohio Administrative Code ("OAC") Rule 4906-6-07(A)(2), which requires us to place a copy of the CN Application in the main public libraries of the political subdivisions in which any portion of the Project is to be located.

As described in the CN Application, the Project proposes to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. One new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed if the Project is approved. Also one existing structure will be removed from the existing London-Tangy 138 kV Transmission Line.

The Project is located in Deer Creek Township, Madison County, Ohio.

Please feel free to call me with any question you have on making the CN available to your patrons. My phone number is (330) 384-2740.

Sincerely,



William R. Beutler
Engineer III
Energy Delivery Transmission and Substation
Design
FirstEnergy Service Company

Enclosure

October 11, 2016

Ms. Cathy Allen, Director
Hurt-Battelle Memorial Library
270 Lily Chapel Rd.
West Jefferson, OH 43162

Construction Notice
London-Tangy 138 kV Transmission Line
Tap to National Substation Project
Case No. 16-1930-EL-BNR

Dear Ms. Allen,

Enclosed please find one copy of the Construction Notice ("CN") Application of American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, for the London-Tangy 138 kV Transmission Line Tap to National Substation Project ("Project") that has been filed with the Ohio Power Siting Board ("OPSB"). Please make the CN Application available for public reference in the London Public Library. We are providing a copy of the CN Application for placement in your library in response to the requirements of the Ohio Administrative Code ("OAC") Rule 4906-6-07(A)(2), which requires us to place a copy of the CN Application in the main public libraries of the political subdivisions in which any portion of the Project is to be located.

As described in the CN Application, the Project proposes to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. One new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed if the Project is approved. Also one existing structure will be removed from the existing London-Tangy 138 kV Transmission Line.

The Project is located in Deer Creek Township, Madison County, Ohio.

Please feel free to call me with any question you have on making the CN available to your patrons. My phone number is (330) 384-2740.

Sincerely,



William R. Beutler
Engineer III
Energy Delivery Transmission and Substation
Design
FirstEnergy Service Company

Enclosure

RECEIVED-CORRECTION

2016 OCT 12 AM 11:13

PUCO

**AMERICAN TRANSMISSION SYSTEMS,
INCORPORATED and
OHIO EDISON COMPANY
FIRSTENERGY COMPANIES**

CONSTRUCTION NOTICE

**LONDON-TANGY 138 kV TRANSMISSION LINE TAP TO
NATIONAL SUBSTATION PROJECT**

OPSB CASE NO.: 16-1930-EL-BNR

October 11, 2016

**American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308**

**Ohio Edison Company
76 South Main Street
Akron, Ohio 44308**

**CONSTRUCTION NOTICE
LONDON-TANGY 138 kV TRANSMISSION LINE
TAP TO NATIONAL SUBSTATION PROJECT**

The following information is being provided in accordance with the procedures in the Ohio Administrative Code ("OAC") Chapter 4906-6 for the application and review of Accelerated Certificate Applications. Based upon the requirements found in Appendix A to OAC Rule 4906-1-01, this Project qualifies for submittal to the Ohio Power Siting Board ("Board") as a Construction Notice application.

4906-6-05: ACCELERATED APPLICATION REQUIREMENTS

4906-6-05: Name and Reference Number

<u>Name of Project:</u>	London-Tangy 138 kV Transmission Line Tap to National Substation Project ("Project").
<u>2015 LTFR Reference:</u>	This Project is not included in the FirstEnergy Corp. 2015 Long Term Forecast Report submitted to the Public Utility Commission of Ohio ("PUCO") in Case Number 15-0649-EL-FOR.

4906-6-05 (B)(1): Brief Description of the Project

American Transmission Systems, Incorporated ("ATSI") and Ohio Edison Company ("OE"), FirstEnergy companies, are proposing to install approximately 260 feet of transmission line for a new tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. As part of the Project, one new tap structure, two new switch structures, one new tangent structure, and one new static wire support structure will be installed. Also one existing structure will be removed on the existing London-Tangy 138 kV Transmission Line.

The general location of the Project is shown in Exhibit 1, a partial copy of the United States Geologic Survey, West Jefferson, OH, Quad Map, ID number 39083-H3. Exhibit 2 is a partial copy of aerial imagery, Digital Orthophoto Quarter Quads ("DOQQ"). The Project is located at 4950 U.S. 40, West Jefferson, Ohio. The general layout is shown in Exhibit 3. The Project will be located in Deer Creek Township, Madison County Ohio.

Existing Structure #13515 will be removed and will be replaced and relocated approximately 35 feet (0.01 miles) to the south of its existing location, with a single circuit, wood pole, 3-way deadend structure with disconnectable taps, as shown in Exhibit 4. Two (2) single circuit, wood pole switch structures, shown in Exhibit 5, will be installed approximately 50 feet (0.01 miles) to the northeast and approximately 50 feet (0.01 miles) to the southwest of proposed Structure #13515.

The proposed Structure #13515 and the proposed switch structures will be located approximately 10 feet to the east of the existing London-Tangy 138 kV Transmission Line centerline. This will slightly shift the London-Tangy 138 kV Transmission Line centerline between Structure #13514 & Structure #13516 to the east of the existing centerline. This segment is approximately 840 feet (0.16 miles) long. The conductor on this section of the London-Tangy 138 kV Transmission Line will remain as 605 kcmil 24/7 ACSR and the static wire will remain as 7#8 Alumoweld. No work is proposed to occur on either Structure #13514 & Structure #13516.

As part of the proposed Project, approximately 260 feet (0.05 miles) of new 605 kcmil 24/7 ACSR transmission line will be installed between the proposed Structure #13515 and the proposed National Substation. One (1) single circuit, wood pole, tangent deadend structure, shown in Exhibit 6, will be installed approximately 145 feet (0.03 miles) from proposed Structure #13515. The new transmission line tap will cross overhead of an existing 69 kV Transmission Line.

One (1) single wood pole, static wire deadend structure, shown in Exhibit 7, will be placed approximately 195 feet (0.04 miles) east of the proposed single circuit, wood pole, tangent deadend structure and approximately 6 feet east of the proposed substation fence line. This structure will support the static wire between it and proposed single circuit, wood pole, tangent deadend structure. Approximately 335 feet (0.06 miles) of 7#8 Alumoweld static wire will be installed between the proposed Structure #13515 and the

static wire deadend structure. Communication equipment will also be placed above the static wire on the static wire deadend structure.

A 15 foot wide permanent access road is proposed to be installed from US-40 National Pike to the proposed Structure #13515 and Switch Structures locations for future operation and maintenance of the structures. The proposed permanent access road is shown in Exhibit 3. The proposed access does not impact any delineated wetlands, streams or floodplains.

4906-6-05 (B)(1): Letter of Notification Requirement

The Project meets the requirements for a Construction Notice because the Project is within the types of projects defined by Items (1)(a) and (2)(a) of the Application Requirement Matrix for Electric Power Transmission Lines, Appendix A of OAC Rule 4906-1-01. These items state:

(1) New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution line(s) for operating at a higher transmission voltage, as follows:

(b) Line(s) not greater than 0.2 miles in length.

(2) 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:

(a) Two miles or less

The proposed Project is within the requirements of Item (1)(a) as the length of the transmission line tap is approximately 260 feet (0.05 miles) and therefore is not greater than 0.2 miles in length. The proposed Project is within the requirements of Item (2)(a)

as two (2) new and one (1) replacement structures will be added to the existing London-Tangy 138 kV Transmission Line for an approximately 840 feet (0.16 miles) span. This distance is less than 2 miles.

4906-6-05 (B)(2): Need For the Project

The Project is needed to relieve loading on the Lafayette and Deer Substations and provide capacity for proposed load additions at the Duke Industrial Park and the surrounding commercial and industrial lots near State Route 29 and U.S. 40 in West Jefferson, Ohio, as well as the proposed Eagleton Industrial Park in London, Ohio. Lafayette Substation has been loaded at 100% capacity since 2014. Deer Substation is projected to be loaded at 82% capacity by 2018 with the known proposed load additions by Stanley Electric, Eagleton Industrial Park, Restoration Hardware and another unnamed commercial warehouse at the Duke Industrial Park. Two of the circuits from Deer Substation that are proposed to feed these proposed facilities will be loaded to near capacity by their additions. The Project is located near the existing and proposed industrial parks located at State Route 29 & U.S. 40 and will relieve loading on the Lafayette and Deer Substations by providing capacity for existing and the proposed new customers.

4906-6-05 (B)(3): Location of the Project Relative to Existing or Proposed Lines

The location of the Project relative to existing or proposed lines is shown in the ATSI Transmission Network Map, included as part of the confidential portion of the FirstEnergy Corp. 2015 Long-Term Forecast Report. This map was submitted to the PUCO in Case No. 15-0649-EL-FOR under Rule 4901:5-5:04 (C)(2)(b) of the Ohio Administrative Code. The map is incorporated by reference only. This map shows ATSI's 345 kV and 138 kV transmission lines and transmission substations including the London-Tangy 138 kV Transmission Line. The project area is located approximately 4 ¾" inches (11" x 17" printed version) from the left edge of the map and 8 ½" inches (11" x 17" printed version) from the top of the map. The general location and layout of the project area is shown in Exhibit 1 and 2.

4906-6-05 (B)(4): Alternatives Considered

The general area of the Project was carefully considered to identify potential routes for the Project that are constructible, minimize potential impacts to the extent practical, and meet the needs of the Project. One alternative was considered for the Project. The alternative was to upgrade the transformer at Lafayette Substation from 7 to 14 MVA. However this option would only provide an additional 3 MVA of new capacity which will be absorbed by the proposed load additions for Restoration Hardware and a new unnamed warehouse at the Duke Industrial Park both of which are expected in 2017. Also because the London-Tangy 69 kV Transmission Line that the Lafayette substation is connected to is loaded to capacity, the London-Tangy 69 kV Transmission Line would have to be reconductored or upgraded to increase its capacity for this alternative to be practical. This alternative would therefore cost more, have more impacts compared to the proposed Project and would not provide capacity for any future growth.

4906-6-05 (B)(5): Public Information Program

ATSI's and OE's Manager of External Affairs will advise local officials of features and the status of the proposed Transmission Line Project as necessary. ATSI and OE will maintain a copy of this Letter of Notification on FirstEnergy's website. Letters will be sent to affected property owners at least 7 days before construction begins on the project informing them of the Project's start and a proposed timeframe of construction and restoration activities.

4906-6-05 (B)(6): Construction Schedule

The construction schedule for this Project is expected to begin as early as November 7, 2016 and completed by March 31, 2017.

4906-6-05 (B)(7): Area Map

Exhibit 1 depicts the general location of the Project. This Exhibit provides a partial copy of the United States Geological Survey, West Jefferson, OH, quadrangle map (Quad Order ID 39083-H3). Exhibit 2 provides a partial copy of Bing aerial imagery of the Project area.

4906-6-05 (B)(8): Property Owner List

The Project is located on new and existing right-of-way. The new right-of-way is located on a parcel Owned in Fee by the Ohio Edison Company. Table 1 contains a list of property owners affected by the project.

Table 1: Property Owner List

Parcel Number	Property Owner	Property Address	Easement Status
05-00296.002	Ohio Edison Company	4950 US 40	Owned in Fee

4906-6-05 (B)(9): TECHNICAL FEATURES OF THE PROJECT

4906-6-05 (B)(9)(a): Operating Characteristics

The transmission line construction will have the following characteristics:

- Voltage: 138 kV
- Conductors: 605 kcmil 24/7 ACSR
- Static Wire: 7#8 Alumoweld
- Insulators: Polymer
- ROW Width: 60 feet
- Structure Types: Exhibit 4: Single Circuit, Wood Pole, 3-Way Deadend Structure with Disconnectable Taps. Approximately one (1) structure is needed.
- Exhibit 5: Single Circuit, Wood Pole Switch Structure.
- Approximately two (2) structures are needed.
- Exhibit 6: Single Circuit, Wood Pole, Tangent Deadend Structure.
- Approximately one (1) structure is needed.
- Exhibit 7: Single Wood Pole, Static Wire Deadend Structure.
- Approximately one (1) structure is needed.

4906-6-05 (B)(9)(b): Electric and Magnetic Fields

The closest occupied residence or institution is approximately 135 feet from the proposed transmission line centerline therefore no Electric and Magnetic Field (“EMF”) calculations are required by this code provision.

4906-6-05 (B)(9)(c): Estimated Cost

The estimated capital cost for the proposed Project is approximately \$554,055.

4906-6-05 (B)(10): SOCIAL AND ECOLOGICAL IMPACTS

4906-6-05 (B)(10)(a): Land Uses

The Project is located in Deer Creek Township, Madison County Ohio. The main land use in the Project area is commercial land. Land use adjacent to the Project area is a mixture of agricultural land, US highway/public right-of-way land, and residential land. Minimal impacts are expected on the land adjacent to the Project area.

4906-6-05 (B)(10)(b): Agricultural Land

The Project is located on property that was formerly used as agricultural land. Agricultural land does not currently exist within the Project’s disturbance area as the entire parcel the Project is located on is now zoned as commercial land. No impacts to agricultural land are expected.

4906-6-05 (B)(10)(c): Archaeological or Cultural Resources

ATSI and OE conducted a search of Ohio Historic Preservation Office (“OHPO”) online database to identify the existence of any significant archeological or cultural resource sites within 0.5 miles of the Project Area. The results of the search are shown in Exhibit 8. The specific location of any archeological resources are excluded from the map and are instead listed in Table 2.

The OHPO database includes all Ohio listings on the National Register of Historic Places (“NRHP”), including districts, sites, building, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The results of the search indicate that there are no listed NRHP sites or NRHP eligible sites identified within 0.5 miles of the Project potential disturbance area.

The OHPO database also includes listing of the Ohio Archaeological Inventory (“OAI”), the Ohio Historic Inventory (“OHI”), previous historic and cultural resource surveys, and the Ohio Genealogical Society (“OGS”) cemetery inventory. Two (2) OAI listed archeological resources have been previously inventoried within 0.5 miles of the Project area and are shown in Table 2. Seven (7) OHI listed structural resource are located within 0.5 miles of the Project area and are shown in Table 3. One (1) previous historic survey and three (3) previous cultural resource surveys were conducted within 0.5 miles of the Project area and are provided in Table 5. No OSG cemeteries are located within 0.5 miles of the Project area.

Table 2. List of OAI Listed Archeological Resources

OAI Number	Affiliation	Description	County	Quad Name
MA0239	Historic	Non-Aboriginal	Madison	West Jefferson
MA0279	Prehistoric	Unknown Prehistoric	Madison	West Jefferson

Table 3. List of OHI Listed Structural Resources

OAI Number	Present Name	Historic Use	County	Municipality
MAD0025707	US 40 Concrete Culvert	Culvert	Madison	Jefferson Township
MAD0031706	Charles & Linda Kollar House	Single Dwelling	Madison	Deer Creek Township
MAD0031306	Picket Fences Trailer Park	Residential/ Domestic	Madison	Deer Creek Township
MAD0031406	Janette & Vaughn Viator House	Single Dwelling	Madison	Deer Creek Township
MAD0031506	Arnold Hoyne House	Single Dwelling	Madison	Deer Creek Township
MAD0031606	Glen & Martin Nitchman House	Single Dwelling	Madison	Deer Creek Township
MAD0031806	House, 4690 US Route 40	Single Dwelling	Madison	Deer Creek Township

Table 4. List of Previous Historic & Cultural Resource Survey

Year	Name	County	Municipality
1998	National Road/U.S. 40 Historic Properties Inventory in Ohio 3 Vols.	Madison	Jefferson & Deer Creek Township
1986	An Archaeological Survey of the Central Darby Creek River Drainage, Franklin and Madison Counties, Ohio	Madison	Jefferson & Deer Creek Township
2007	Phase I Cultural Resource Management Investigations for a 112.1 ha (277 ac) Industrial Development Site in Deer Creek and Jefferson Townships, Madison County, Ohio	Madison	Jefferson & Deer Creek Township
2013	Phase I Archaeological Survey for the London-Tangy Electric Transmission Line Project, (Survey Segments 1-5 in Canaan, Deer Creek, Jefferson, Monroe, & Union Townships) Madison County, Ohio	Madison	Jefferson & Deer Creek Township

Based upon the results of the OHPO online database there is one OAI listed archeological resource and one Phase I Archeological Survey located within the Project area. The Phase I Archaeological Survey for the London-Tangy Electric Transmission Line Project, (Survey Segments 1-5 in Canaan, Deer Creek, Jefferson, Monroe, & Union Townships) Madison County, Ohio, 2013 was conducted by URS for the East Springfield-London-Tangy 138 kV Transmission Line Project, Case No. 11-4884-EL-BTX in 2013. This survey covered the entire Project area for the London-Tangy 138 kV Transmission Line Tap to National Substation.

The one OAI listed archeological resource in the Project area, 33MA279, was discovered as a part of the Phase I Archaeological Survey for the London-Tangy Electric Transmission Line Project. URS's report on the site said it was "most appropriately characterized as an isolated findspot of a non-diagnostic prehistoric point-projectile-knife fragment recovered in the absence of any subsurface context or association with a larger prehistoric deposit." The report concluded that "No further work is recommended at the site 33MA279, as the research potential of this resource has been exhausted by the URS Phase I survey and would not contribute further information regarding regional prehistory, as stipulated under Criterion D, or any of the other criteria for evaluation for NRHP."

Based upon the results of the OHPO online database and the Phase I Archaeological Survey for the London-Tangy Electric Transmission Line Project which covers the entire Project area, there are minimal impacts to cultural resources within the Project's area.

4906-6-05 (B)(10)(d): Local, State, and Federal Requirements

Table 5 shows the list of government agency requirements and the filing status at the time of filing.

Table 5. List of Government Agency Requirements to be Secured Prior to Construction

Agency	Permit Requirement	Status
Ohio EPA	NPDES Construction Site Storm Water General Permit	Obtained
ODOT	Driveway Permit for U.S. 40	Obtained
ODOT	Aerial Crossing Permit for U.S. 40	To Be Obtained
Madison County Engineer	Storm Water Pollution Prevention Plan	Obtained

4906-6-05 (B)(10)(c): Endangered, Threatened, and Rare Species Investigation

As part of the investigation, ATSI and OE submitted a request to the Ohio Department of Natural Resources (“ODNR”) Office of Real Estate to conduct an Environmental Review on August 29, 2016. As part of the Environmental Review, the ODNR Office of Real Estate conducted a search of the ODNR Division of Wildlife’s Natural Heritage Database to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project area. The ODNR’s Office of Real Estate’s response on October 6, 2016 indicated that twelve (12) state endangered species, one (1) state threatened species, and one (1) state species of concern are within the range of the identified Project area. A copy of ODNR’s Office of Real Estate’s response is included as Exhibit 9.

As part of the investigation, ATSI and OE also submitted a request to the US Fish and Wildlife Service (“USFWS”) for an Ecological Review on August 29, 2016, to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project area. A copy of USFWS’s Ecological Review response is included as Exhibit 10. The USFW’s response on September 20, 2016 indicated that they have records of one (1) endangered and (1) threatened species. A list of all endangered, threatened, and rare species, as identified by ODNR and USFWS, is provided in Table 6.

Table 6. List of Endangered, Threatened, and Rare Species.

Table 6: List of Endangered, Threatened, and Rare Species				
Common Name	Scientific Name	Federal Listed Status	State Listed Status	Affected Habitat
Indiana Bat	<i>Myotis sodalis</i>	Endangered	Endangered	Trees & Forest
Northern Long-Ear Bat	<i>Myotis septentrionalis</i>	Threatened	N/A	Trees & Forest
Snuffbox	<i>Epioblasma triquetra</i>	Endangered	Endangered	Water & Perennial Streams
Clubshell	<i>Pleurobema clava</i>	Endangered	Endangered	Water & Perennial Streams
Riffleshell	<i>Epioblasma torulosa rangiana</i>	Endangered	Endangered	Water & Perennial Streams
Rayed Bean	<i>Villosa fabalis</i>	Endangered	Endangered	Water & Perennial Streams
Rabbitsfoot	<i>Quadrula cylindrical cylindrica</i>	Candidate Species	Endangered	Water & Perennial Streams
Elephant-Ear	<i>Elliptio crassidens crassidens</i>	N/A	Endangered	Water & Perennial Streams
Wavy-Rayed Lampmussel	<i>Lampsilis fasciola</i>	N/A	Species of Concern	Water & Perennial Streams
Scioto Madtom	<i>Noturus trautmani</i>	Endangered	Endangered	Water & Perennial Streams
Spotted Darter	<i>Etheostoma maculatum</i>	N/A	Endangered	Water & Perennial Streams
Tippecanoe Darter	<i>Etheostoma Tippecanoe</i>	N/A	Threatened	Water & Perennial Streams
Upland Sandpiper	<i>Bartramia longicauda</i>	N/A	Endangered	Grasslands
King Rail	<i>Rallus elegans</i>	N/A	Endangered	Marsh
Northern Harrier	<i>Circus cyaneus</i>	N/A	Endangered	Grasslands & Wetlands

The response from ODNR and USFWS indicated the federal and state endangered Indiana Bat (*Myotis sodalis*) and the federal threatened Northern Long-Eared Bat (*Myotis septentrionalis*) are within the range of the Project. No tree clearing is expected for the Project as it consist of previously cleared right-of-way and former agricultural land. If tree clearing is deemed necessary during construction it will be scheduled to be completed between October 1st and March 31st to avoid affecting any potential bat habitat. If this schedule cannot be achieved and the clearing of trees outside of this window is deemed necessary, consultation with ODNR and USFWS will be completed prior to clearing.

The response from ODNR indicated that the Snuffbox (*Epioblasma triquetra*), Clubshell (*Pleurobema clava*), Riffleshell (*Epioblasma torulosa rangiana*), Rayed Bean (*Villosa fabalis*), Scioto Madtom (*Noturus trautmani*), Elephant-Ear (*Elliptio crassidens crassidens*), Spotted Darter (*Etheostoma maculatum*), Rabbitsfoot (*Quadrula cylindrical cylindrical*), Tippecanoe Darter (*Etheostoma Tippecanoe*), and Wavy-Rayed Lampmussel (*Lampsilis fasciola*) are within the range of the Project Area. No impacts to these species are expected due to the Project's location and that no work is proposed in streams or wetlands.

The response from ODNR indicated that the Upland Sandpiper's (*Bartramia longicauda*) range is within the Project area. This species nests on grassland or pasture habitats and the nesting period is April 15th to July 31st. Construction matting and/or permanent access roads will be installed prior to April 15th to avoid potential impacts to this species.

The response from ODNR indicated that the King Rail (*Rallus elegans*) range is within the Project area. This species nests in marshes and the nesting period is May 1st to August 1st. Construction matting and/or permanent access roads will be installed prior to May 1st to avoid potential impacts to this species.

The response from ODNR indicated that the Northern Harrier's (*Circus cyaneus*) range is within the Project area. This species nests on grassland and the nesting period is May 15th

to August 1st. Construction matting and/or permanent access roads will be installed prior to May 15th to avoid potential impacts to this species.

4906-6-05 (B)(10)(f): Areas of Ecological Concern

ATSI and OE submitted a request to the Ohio Department of Natural Resources (“ODNR”) Office of Real Estate to conduct an Environmental Review on August 29, 2016. The ODNR Office of Real Estate researched the presence of any unique ecological sites, geological features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forest, national wildlife refuges, or other protected natural areas *within one (1) mile of the project area. The ODNR’s Office of Real Estate’s response on October 6, 2016 indicated that they have no records of the aforementioned areas within one mile of the identified project area.*

ATSI and OE hired AECOM to re-evaluate a wetland and stream assessment of the Project area that was previously completed as part of the East Springfield-London-Tangy 138 kV Transmission Line Project, Case No. 11-4884-EL-BTX in 2011. AECOM’s investigation focused on an approximately 3.75 acre study area around the proposed Project substation site, transmission center line, access roads, and additional workspace areas. During this survey AECOM identified one wetland and no streams with in the Project Area.

For the proposed Project, AECOM resurveyed the Project Area to confirm the boundaries of the wetland. AECOM identified one wetland, totaling 0.19 acres and no streams in the study area. The wetland’s eastern boundary, originally delineated in the 2011 survey, does not appeared to have changed. Detailed results of AECOM’s 2016 wetland and stream delineation are found in Appendix 1. No impacts to the wetland are expected since it is located outside of the Project’s work limits.

The Project work limits do not encroach on any regulated flood plains based on a review of online FEMA Flood Insurance Rate Mapping.

4906-6-05(B)(10)(g): Other Information

Construction and operation of the proposed facility will be in accordance with the requirements specified in the latest version of the National Electric Safety Code as adopted by the PUCO and will meet all applicable safety standards established by the Occupational Safety and Health Administration.

No other or unusual conditions are expected that will result in significant environmental, social, health or safety impacts.

4906-6-07: Documentation of Letter of Notification Transmittal and Availability for Public Review

This Letter of Notification is being provided concurrently with its docketing with the Board to the following officials in Deer Creek Township, Madison County, Ohio.

Madison County

Commissioner David Dhume,
Chairman
Madison County Commissioners
1 North Main Street
P.O. Box 618
London, OH 43140

Commissioner Mark Forrest
Madison County Commissioners
1 North Main Street
P.O. Box 618
London, OH 43140

Commissioner Paul Gross
Madison County Commissioners
1 North Main Street
P.O. Box 618
London, OH 43140

Mr. Charles E. Reed
Madison County Recorder
1 North Main Street
Room 40
London, OH 43140

Mr. Bryan Dhume, P.E., P.S.
Madison County Engineer's Office
825 US 42 NE
London, OH 43140

Deer Creek Township

Mr. Mark Modlich,
Deer Creek Township Trustee
861 Glade Run Rd.
West Jefferson, OH, 43162

Mr. Robert J. Turvy, Jr.
Deer Creek Township Trustee
65 US 40 SE
London, OH 43140.

Mr. Robert W. Sellars,
Deer Creek Township Trustee
315 Simpson Rd.
London, OH 43140

Ms. Erin K. Morris, Fiscal Officer
Deer Creek Township
1081 US Hwy 42 SE
London, OH 43140

Libraries

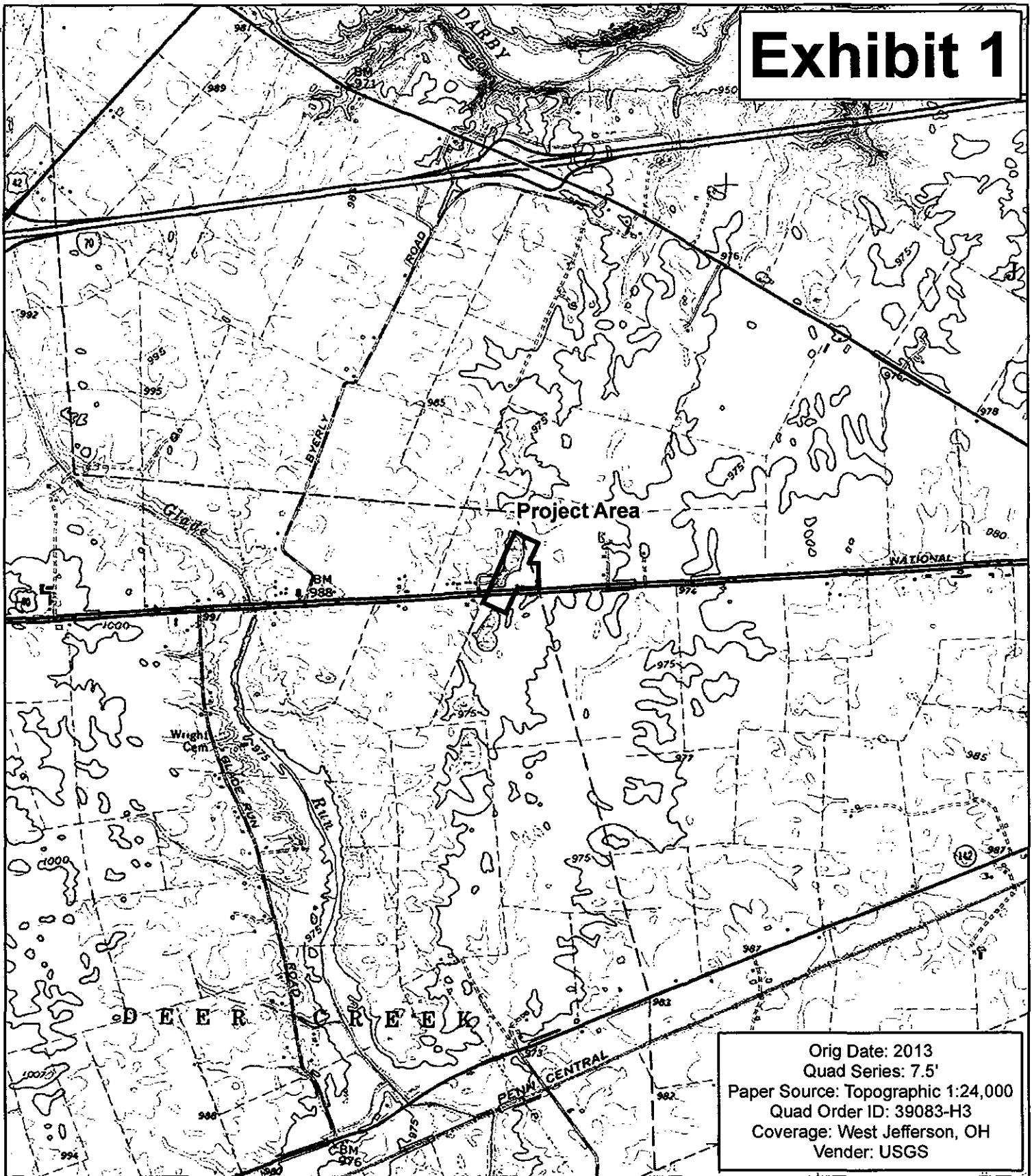
Mr. Mike Hensel, Director
London Public Library
20 E 1st St.
London, OH 43140

Ms. Cathy Allen, Director
Hurt-Battelle Memorial Library
270 Lily Chapel Rd.
West Jefferson, OH 43162

Copies of the transmittal letters to these officials have been included with the transmittal letter submitting this Construction Notice to the Board, and are being provided to meet the requirement of OAC Rule 4906-6-07 (B) to provide the Board with proof of compliance with the notice requirement to local officials in OAC Rule 4906-6-07 (A)(1) and to libraries in OAC Rule 4906-6-07 (A)(2).

Information is posted on www.firstenergycorp.com/about/transmission_project/ohio.html on how to request an electronic or paper copy of this Construction Notice. The link to website is being provided to meet the requirement of OAC Rule 4906-6-07 (B) and to provide the Board with proof of compliance with the notice requirements in OAC Rule 4906-6-07 (A)(3).

Exhibit 1



London-Tangy 138kV Transmission Line Tap to National Substation Project



Exhibit 2



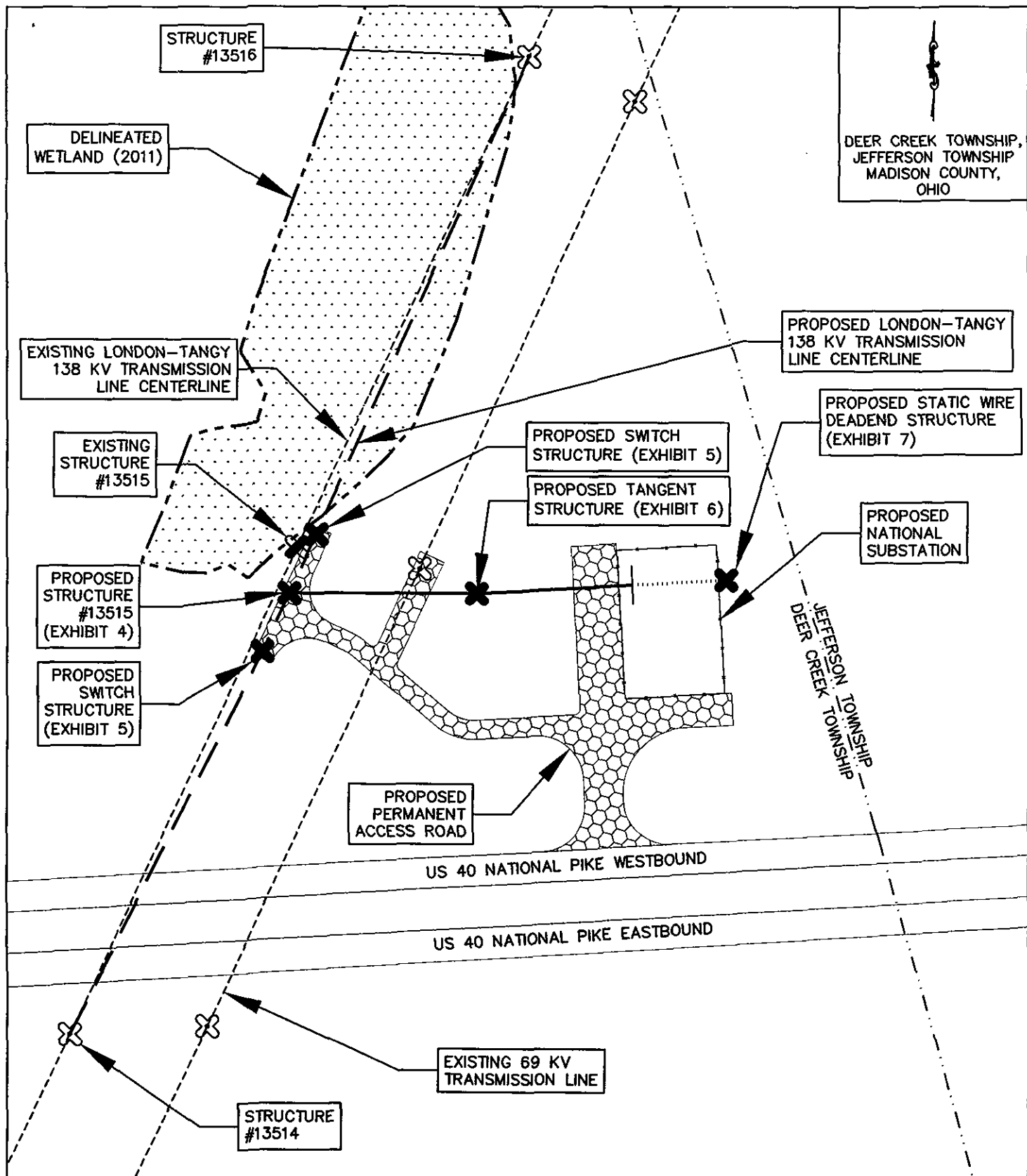
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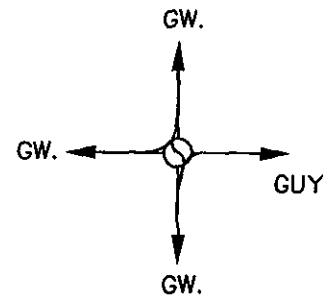
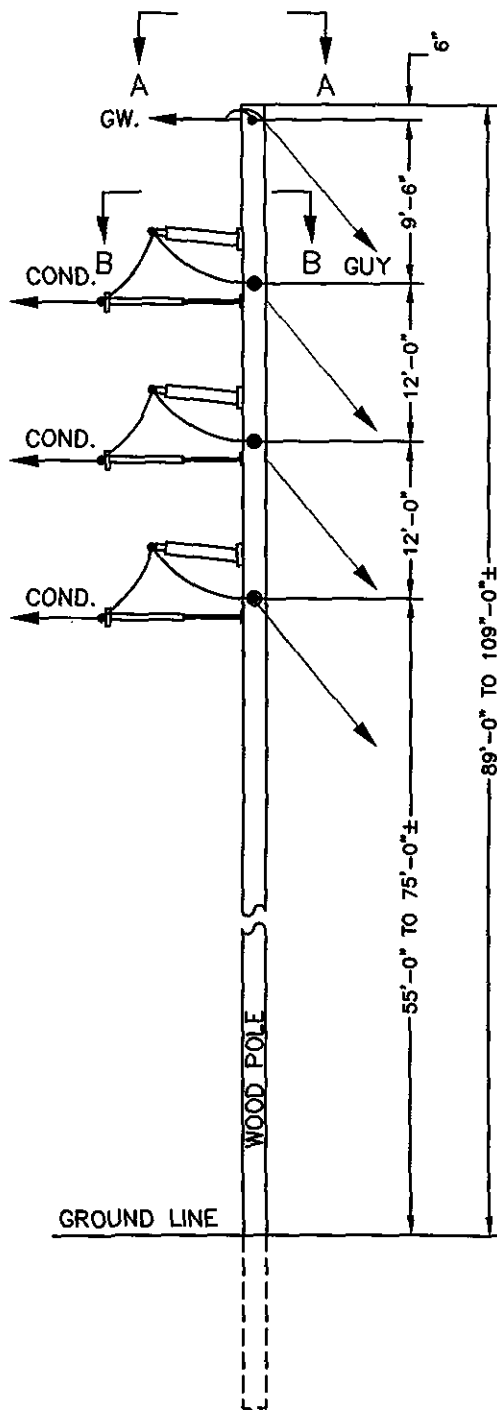
London-Tangy 138kV Transmission Line Tap to National Substation Project

 Project Area

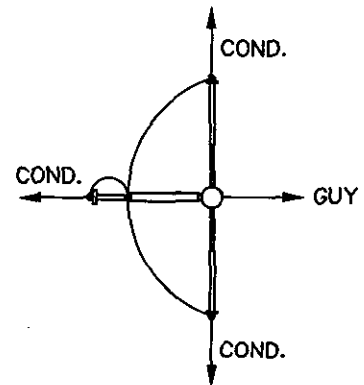




LEGEND		ATSI American Transmission Systems, Inc. a subsidiary of FirstEnergy Corp. Ohio Edison A FirstEnergy Company	
--- EXISTING CONDUCTOR CENTERLINE --- RELOCATED CONDUCTOR CENTERLINE --- NEW CONDUCTOR CENTERLINE NEW STATIC WIRE CENTERLINE --- SUBSTATION FENCELINE --- MUNICIPAL BOUNDARY	DELINEATED WETLAND PERMANENT ACCESS ROAD EXISTING 1-POLE WOOD STRUCTURE EXISTING 1-POLE WOOD STRUCTURE TO BE REMOVED NEW 1-POLE WOOD STRUCTURE	LONDON-TANGY 138 KV TRANSMISSION LINE TAP TO NATIONAL SUBSTATION PROJECT GENERAL LAYOUT EXHIBIT 3	



SECTION A-A



SECTION B-B

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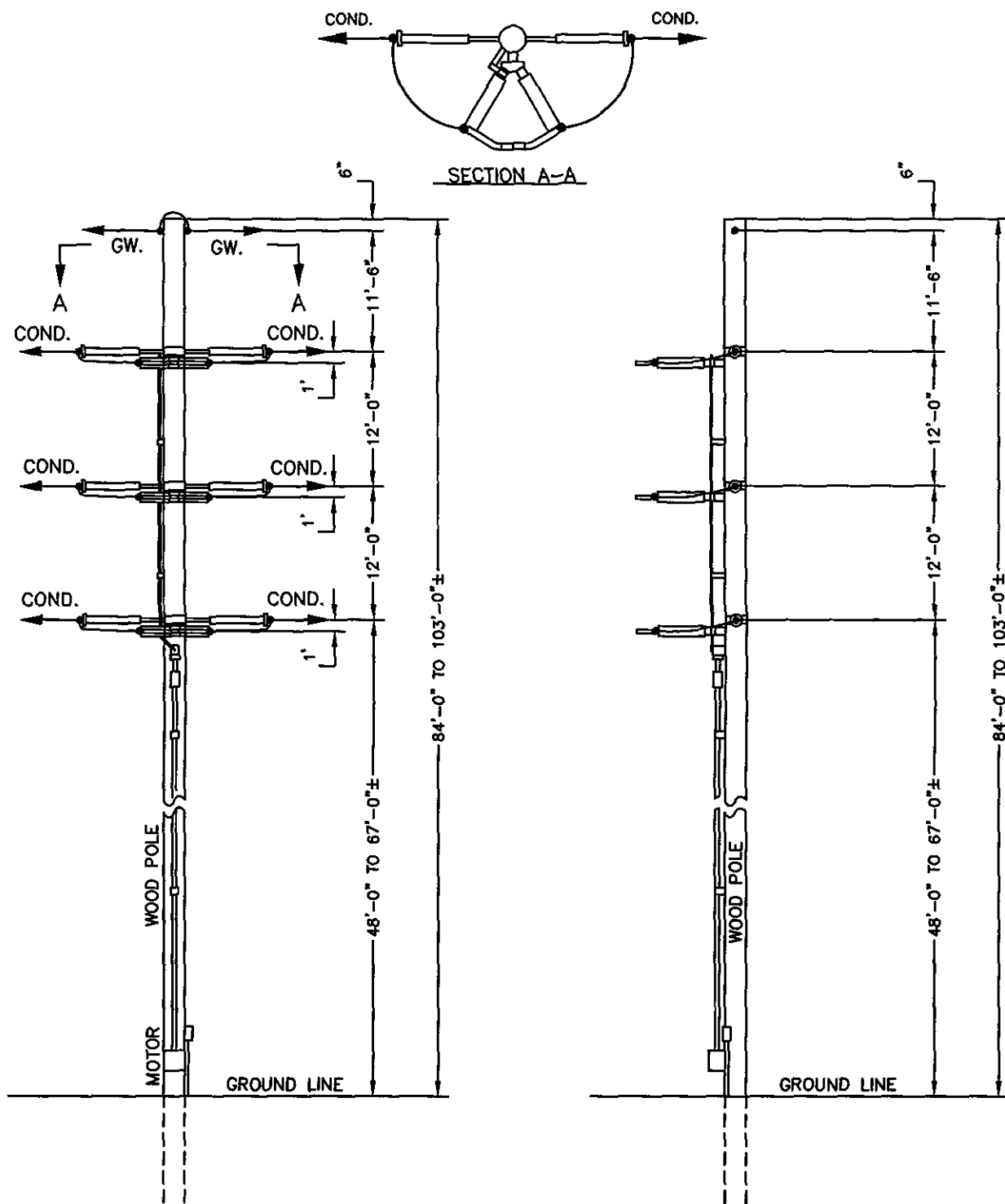
ATSI.

American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

LONDON-TANGY 138 kV
TRANSMISSION LINE TAP TO
NATIONAL SUBSTATION

SINGLE CIRCUIT, WOOD POLE, 3-WAY
DEADEND WITH DISCONNECTABLE TAPS
STRUCTURE

EXHIBIT 4



**NOT TO SCALE

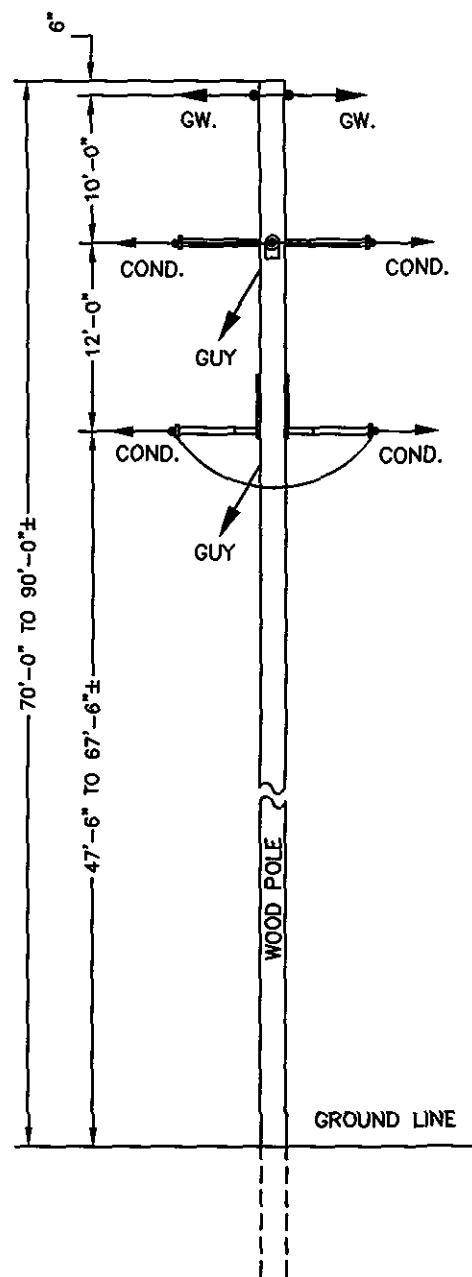
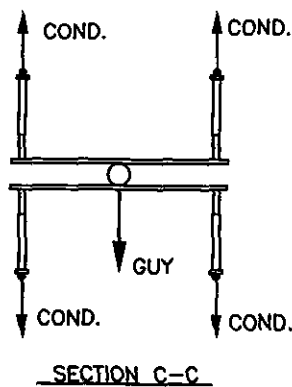
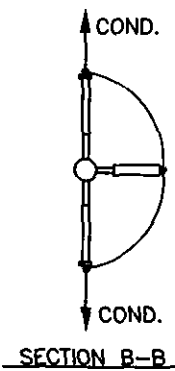
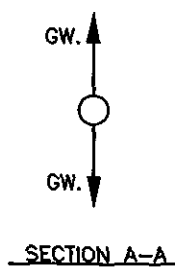
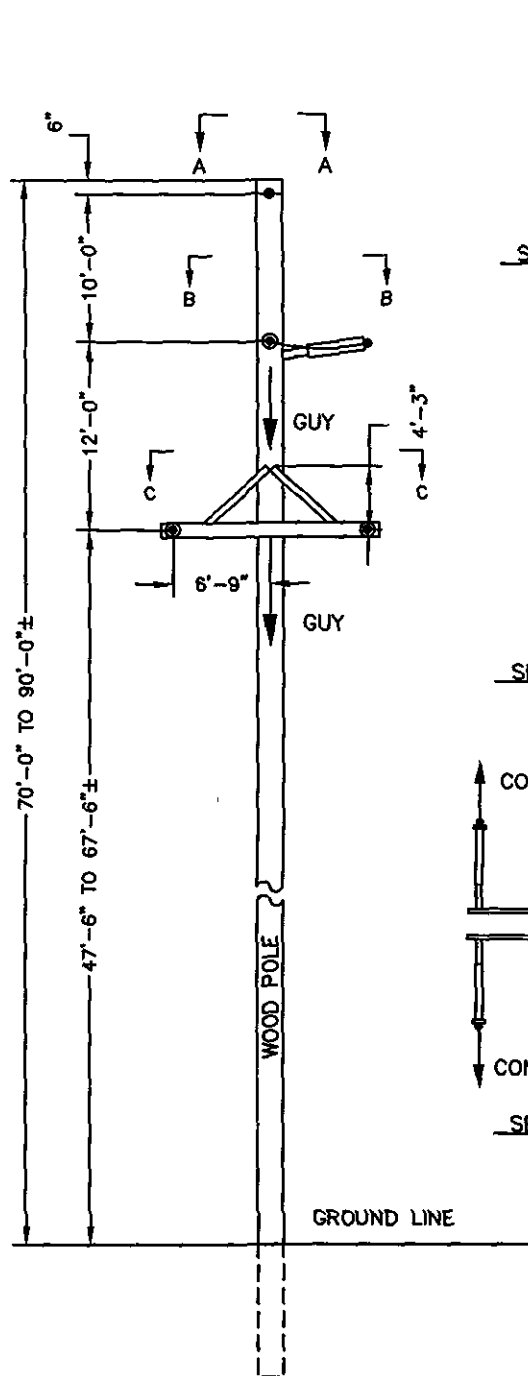
ATSI

American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

LONDON-TANGY 138 kV
TRANSMISSION LINE TAP TO
NATIONAL SUBSTATION

SINGLE CIRCUIT, WOOD POLE, SWITCH
STRUCTURE

EXHIBIT 5



**NOT TO SCALE

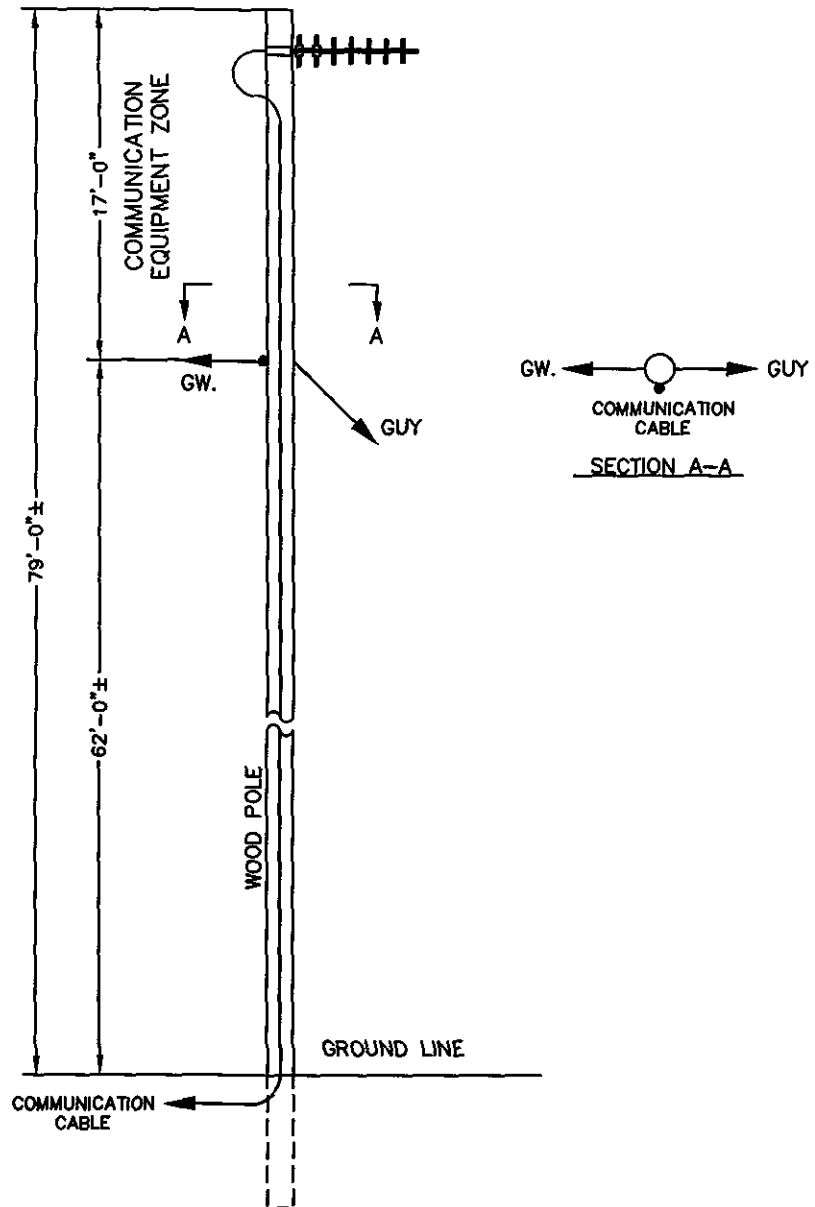
ATSI

American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

LONDON-TANGY 138 kV
TRANSMISSION LINE TAP TO
NATIONAL SUBSTATION

SINGLE CIRCUIT, WOOD POLE, TANGENT
DEADEND STRUCTURE

EXHIBIT 6



**NOT TO SCALE

ATSI

American Transmission Systems, Inc.
a subsidiary of FirstEnergy Corp.

LONDON-TANGY 138 kV
TRANSMISSION LINE TAP TO
NATIONAL SUBSTATION

SINGLE WOOD POLE, STATIC WIRE
DEADEND STRUCTURE

EXHIBIT 7



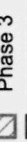
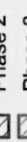
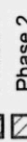
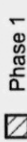
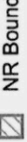
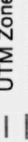
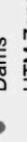
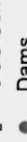
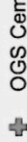
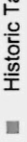
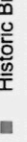
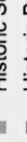
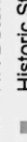
Ohio Historic
Preservation Office

Legend

NR Listings



NR Determinations of Eligibility



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Datum: [Datum]

Projection: WGS_1984_Web_Mercator_Auxiliary
Sphere



EXHIBIT 8



EXHIBIT 9

Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

Office of Real Estate
Paul R. Baldridge, Chief
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
Phone: (614) 265-6649
Fax: (614) 267-4764

October 6, 2016

William Beutler
FirstEnergy
76 South Main Street
Akron, Ohio 44308

Re: 16-620; London-Tangy 138 kV Transmission Line Tap to National Substation Project

Project: The proposed project involves the construction of approximately 250 feet of a transmission line tap from the existing London-Tangy 138 kV Transmission Line to the proposed National Substation. Three new structures are proposed for this project and one structure is being replaced.

Location: The proposed project is located in the City of Willoughby, Lake County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has no data at or within a one mile radius of the project area.

A review of the Ohio Natural Heritage Database indicates there are no records of state endangered or threatened plants or animals within the project area. There are also no records of state potentially threatened plants, special interest or species of concern animals, or any federally listed species. In addition, we are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, state nature preserves, state or national parks, state or national forests, national wildlife refuges, or other protected natural areas within the project area. The review was performed on the project area you specified in your request as well as an additional one mile radius. Records searched date from 1980.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that best management practices be utilized to minimize erosion and sedimentation.

The project is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees: shagbark hickory (*Carya ovata*), shellbark hickory (*Carya laciniosa*), bitternut hickory (*Carya cordiformis*), black ash (*Fraxinus nigra*), green ash (*Fraxinus pennsylvanica*), white ash (*Fraxinus americana*), shingle oak (*Quercus imbricaria*), northern red oak (*Quercus rubra*), slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), sassafras (*Sassafras albidum*), post oak (*Quercus stellata*), and white oak (*Quercus alba*). Indiana bat roost trees consists of trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. However, Indiana bats are also dependent on the forest structure surrounding roost trees. If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If suitable trees must be cut during the summer months, the DOW recommends a net survey be conducted between June 1 and August 15, prior to any cutting. Net surveys should incorporate either nine net nights per square 0.5 kilometer of project area, or four net nights per kilometer for linear projects. If no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of for the snuffbox (*Epioblasma triquetra*), a state endangered and federally endangered mussel; the clubshell (*Pleurobema clava*), a state endangered and federally endangered mussel; the northern riffleshell (*Epioblasma torulosa rangiana*), a state endangered and federally endangered mussel; the rayed bean (*Villosa fabalis*), a state endangered and federally endangered mussel; the rabbitsfoot (*Quadrula cylindrica cylindrica*), a state endangered and federal candidate mussel; the elephant-ear (*Elliptio crassidens crassidens*), a state endangered mussel; and the wavy-rayed lampmussel (*Lampsilis fasciola*), a state species of concern. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the Scioto madtom (*Noturus trautmani*), a state endangered and federally endangered fish, the spotted darter (*Etheostoma maculatum*), a state endangered fish, and the Tippecanoe darter (*Etheostoma Tippecanoe*), a state threatened fish. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. If this type of habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the king rail (*Rallus elegans*), a state endangered bird. Nests for this species are deep bowls constructed out of grass and usually hidden very well in marsh vegetation. If this type of habitat will be impacted, construction should be avoided in this habitat

EXHIBIT 9

during the species' nesting period of May 1 to August 1. If no wetland habitat will be impacted, the project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus cyaneus*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 15 to August 1. If this habitat will not be impacted, the project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the U.S. Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

<http://water.ohiodnr.gov/water-use-planning/floodplain-management#PUB>

ODNR appreciates the opportunity to provide these comments. Please contact John Kessler at (614) 265-6621 if you have questions about these comments or need additional information.

John Kessler
ODNR Office of Real Estate
2045 Morse Road, Building E-2
Columbus, Ohio 43229-6693
John.Kessler@dnr.state.oh.us

EXHIBIT 10

From: susan_zimmermann@fws.gov on behalf of Ohio, FW3
To: Beutler, William R
Cc: nathan.reardon@dnr.state.oh.us; kate.parsons@dnr.state.oh.us
Subject: *EXTERNAL* London-Tangy 138kV Transmission Line Tap to National Substation, Madison Co.
Date: Tuesday, September 20, 2016 12:18:01 PM
Attachments: Capture of Dan.PNG



UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Ecological Services Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / Fax (614) 416-8994



TAILS: 03E15000-2016-TA-1664

Dear Mr. Beutler,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

The U.S. Fish and Wildlife Service (Service) recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat (e.g., forests, streams, wetlands). Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. All disturbed areas should be mulched and revegetated with native plant species. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

FEDERALLY LISTED SPECIES COMMENTS: All projects in the State of Ohio lie within the range of the federally endangered **Indiana bat** (*Myotis sodalis*) and the federally threatened **northern long-eared bat** (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥ 3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

Should the proposed site contain trees ≥ 3 inches dbh, we recommend that trees be saved wherever possible. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and trees ≥ 3 inches dbh cannot be avoided, we recommend that removal of any trees ≥ 3 inches dbh only occur between October 1 and March 31. Seasonal clearing is being recommended to avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see <http://www.fws.gov/midwest/endangered/mammals/nleb/index.html>), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

EXHIBIT 10

If implementation of this seasonal tree cutting recommendation is not possible, summer surveys may be conducted to document the presence or probable absence of Indiana bats within the project area during the summer. If a summer survey documents probable absence of Indiana bats, the 4(d) rule for the northern long-eared bat could be applied. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Endangered Species Coordinator for this office. Surveyors must have a valid federal permit. Please note that summer surveys may only be conducted between June 1 and August 15.

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend that the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be initiated to assess any potential impacts.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and/or state lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at john.kessler@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or orohio@fws.gov.

Sincerely,



Dan Everson
Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW

Kate Parsons, ODNR-DOW

**London-Tangy 138 kV Transmission Lines Tap to National Substation Project
Case Number 16-1930-EL-BNR**

Date: October 11, 2016

**Appendix 1
National Substation Project
Wetland Delineation And Stream Assessment Report**

NATIONAL SUBSTATION PROJECT

WETLAND DELINEATION AND STREAM ASSESSMENT REPORT

Prepared for:
FirstEnergy
76 South Main Street
Akron, Ohio 44308

FirstEnergy.

AECOM

525 Vine Street, Suite 1800
Cincinnati, Ohio 45202

April 2016

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- C Delineated Wetland Photographs

LIST OF ACRONYMS and ABBREVIATIONS

DBH	Diameter at breast height
EPA	Environmental Protection Agency
FAC	Facultative
FACU	Facultative upland
FACW	Facultative wetland
GPS	Global Positioning System
HHEI	Headwater Habitat Evaluation Index
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OBL	Obligate wetland
OHWM	Ordinary high water mark
ORAM	Ohio Rapid Assessment Method
PEM	Palustrine emergent
PFO	Palustrine forested
PHWH	Primary Headwater Habitat
PSS	Palustrine scrub/shrub
QHEI	Qualitative Habitat Evaluation Index
ROW	Right-of-way
UPL	Upland
U.S.	United States
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 INTRODUCTION

FirstEnergy Service Company (FirstEnergy) is proposing to construct a new transmission line substation in Deercreek Township, Madison County, Ohio, that is referred to as the National Substation Project (Project). In 2011, AECOM conducted a wetland delineation and stream assessment for FirstEnergy's East Springfield-London-Tangy 138 kV Transmission Line Project, which crosses the western portion of the proposed Project site. During AECOM's 2011 transmission line delineation, one wetland and no streams were identified within the current Project survey area. Since the previous delineation occurred in 2011, FirstEnergy has requested AECOM to reevaluate the boundary of the previously delineated feature and remaining portions of the Project site. The Project site is located adjacent to National Road (State Route 40) in Madison County, Ohio. The proposed Project is illustrated on Figure 1.

Land uses within the Project survey area were assigned a general classification based upon the principal land characteristics as observed within a given area, aerial photograph review, and field surveys. General land use types within the proposed Project area include wetland, agricultural field, and maintained transmission line right-of-way (ROW).

2.0 METHODOLOGY

The purpose of the field survey was to assess whether wetlands and other "waters of the U.S." exist within the approximately 3.75-acre Project survey area. Prior to conducting the field survey, digital and published county Natural Resources Conservation Service (NRCS) soil surveys, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps, and U.S. Geological Survey (USGS) 7.5-minute topographic maps were reviewed as an exercise to identify the occurrence and location of potential wetland areas.

On April 22nd, 2016, an AECOM biologist walked the Project survey area to conduct a wetland delineation and stream assessment. During the field survey, the physical boundaries of observed water features were recorded using decimeter accurate Trimble Global Positioning System (GPS) units. The GPS data was then imported into ArcMap GIS software, where the data was then reviewed and edited for accuracy.

2.1 WETLAND DELINEATION

The Project survey area was evaluated according to the procedures outlined in the U.S. Army Corps of Engineers (USACE) *1987 Wetland Delineation Manual (1987 Manual)* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) (Regional Supplement)* (USACE, 2010). The *Regional*

Supplement was released in September 2010 by the USACE to address regional wetland characteristics and improve the accuracy and efficiency of wetland delineation procedures. The *1987 Manual and Regional Supplement* define wetlands as areas that have positive evidence of three environmental parameters: hydric soils, wetland hydrology, and hydrophytic vegetation. Wetland boundaries are placed where one or more of these parameters give way to upland characteristics.

Since quantitative data were not available for any of the identified wetlands, AECOM utilized the routine delineation method described in the *1987 Manual and Regional Supplement* that consisted of a pedestrian site reconnaissance, including identifying the vegetation communities, soils identification, a geomorphologic assessment of hydrology, and notation of disturbance. The methodology used to examine each parameter is described in the following sections.

2.1.1 SOILS

Soils were extracted using a spade shovel to examine soil samples for hydric soil characteristics. A *Munsell Soil Color Chart* (Kollmorgen Corporation, 2010) was used to identify the hue, value, and chroma of the matrix and mottles of the soils. Generally, mottled soils with a matrix chroma of two or less, or unmottled soils with a matrix chroma of one or less are considered to exhibit hydric soil characteristics (Environmental Laboratory, 1987). In sandy soils, mottled soils with a matrix chroma of three or less, or unmottled soils with a matrix chroma of two or less are considered to be hydric soils.

2.1.2 HYDROLOGY

The *1987 Manual* requires that an area be inundated or saturated to the surface for an absolute minimum of five percent of the growing season (areas saturated between five percent and 12.5 percent of the growing season may or may not be wetlands, while areas saturated over 12.5 percent of the growing season fulfill the hydrology requirements for wetlands). The *Regional Supplement* states that the growing season dates are determined through onsite observations of the following indicators of biological activity in a given year: (1) above-ground growth and development of vascular plants, and/or (2) soil temperature (12-in. depth) is 41 degrees Fahrenheit (°F) or higher as an indicator of soil microbial activity. Therefore, the beginning of the growing season in a given year is indicated by whichever condition occurs earlier, and the end of the growing season by whichever persists later.

The *Regional Supplement* also states that if onsite data gathering is not practical, the growing season can be approximated by the number of days between the average (five years out of ten, or 50 percent probability) date of the last and first 28 °F air temperature in the spring and fall,

respectively. The National Weather Service WETS data obtained from the NRCS National Water and Climate Center reveals that in an average year, this period lasts from April 17 to October 29, or 179 days in Madison County. In the Project area, five percent of the growing season equates to approximately 10 days.

The soils and ground surface were examined for evidence of wetland hydrology in lieu of detailed hydrological data. This is an acceptable approach according to the *1987 Manual* and the *Regional Supplement*. Evidence indicating wetland hydrology typically includes primary indicators such as surface water, saturation, water marks, drift deposits, water-stained leaves, sediment deposits and oxidized rhizospheres on living roots; and secondary indicators such as, drainage patterns, geomorphic position, micro-topographic relief, and a positive Facultative (FAC)-neutral test (USACE, 2011).

2.1.3 VEGETATION

Dominant vegetation was visually assessed for each stratum (tree, sapling/shrub, herb and woody vine) and an indicator status of obligate wetland (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), and/or upland (UPL) was assigned to each plant species based on the U.S. Army Corps of Engineers *2014 National Wetland Plant List: Midwest Region* which encompasses the area of the Project. An area was determined to have hydrophytic vegetation when, under normal circumstances, 50 percent or more of the composition of the dominant species were OBL, FACW and/or FAC species. Vegetation of an area was determined to be non-hydrophytic when more than 50 percent of the composition of the dominant species was FACU and/or UPL species. In addition to the dominance test, the FAC-Neutral test and prevalence tests are used to evaluate if a wetland has a predominance of hydrophytic vegetation. Recent USACE guidance indicates that to the extent possible, the hydrophytic vegetation decision should be based on the plant community that is normally present during the wet portion of the growing season in a normal rainfall year (USACE, 2011).

2.1.4 WETLAND CLASSIFICATIONS

Wetlands were classified based on the naming convention found in *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin *et al*, 1979). All identified wetlands within the survey area were classified as freshwater, Palustrine systems, which include non-tidal wetlands dominated by trees, shrubs, emergents, mosses or lichens. Two Palustrine wetland classes, were identified within the Project survey area:

- **PEM** – Emergent wetlands are characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.
- **PSS** – Scrub/shrub wetlands are characterized by woody vegetation that is less than three inches diameter at breast height (DBH), and greater than 3.28 feet tall. The woody angiosperms (i.e. small trees or shrubs) in this broad leaved deciduous community have relatively wide, flat leaves that are shed annually during the cold or dry season.

2.2 OHIO RAPID ASSESSMENT METHOD v. 5.0

The Ohio Environmental Protection Agency (OEPA) Ohio Rapid Assessment Method for Wetlands v. 5.0 (ORAM) was developed to determine the relative ecological quality and level of disturbance of a particular wetland in order to meet requirements under Section 401 of the Clean Water Act. Wetlands are scored on the basis of hydrology, upland buffer, habitat alteration, special wetland communities, and vegetation communities. Each of these subject areas is further divided into subcategories under ORAM v. 5.0, resulting in a score that describes the wetland using a range from 0 (low quality and high disturbance) to 100 (high quality and low disturbance). Wetlands scored from 0 to 29.9 are grouped into "Category 1", 30 to 59.9 are "Category 2" and 60 to 100 are "Category 3". Transitional zones exist between "Categories 1 and 2" from 30 to 34.9 and between "Categories 2 and 3" from 60 to 64.9. However, according to the Ohio EPA, if the wetland score falls into the transitional range, it must be given the higher Category unless scientific data can prove it should be in a lower Category (Mack, 2001).

Category 1 Wetlands

Category 1 wetlands support minimal wildlife habitat, hydrological and recreational functions, and do not provide for or contain critical habitats for threatened or endangered species. In addition, Category 1 wetlands are often hydrologically isolated and have some or all of the following characteristics: low species diversity, no significant habitat or wildlife use, limited potential to achieve wetland functions, and/or a predominance of non-native species. These limited quality wetlands are considered to be a resource that has been severely degraded or has a limited potential for restoration, or are of low ecological functionality.

Category 2 Wetlands

Category 2 wetlands "...support moderate wildlife habitat, or hydrological or recreational functions," and are "...dominated by native species but generally without the presence of, or habitat for, rare, threatened or endangered species; and wetlands which are degraded but have a reasonable potential for reestablishing lost wetland functions." Category 2 wetlands constitute

the broad middle category of "good" quality wetlands, and can be considered a functioning, diverse, healthy water resource that has ecological integrity and human value. Some Category 2 wetlands are lacking in human disturbance and considered to be naturally of moderate quality; others may have been Category 3 wetlands in the past, but have been degraded to Category 2 status.

Category 3 Wetlands

Wetlands that are assigned to Category 3 have "...superior habitat, or superior hydrological or recreational functions." They are typified by high levels of diversity, a high proportion of native species, and/or high functional values. Category 3 wetlands include wetlands which contain or provide habitat for threatened or endangered species, are high quality mature forested wetlands, vernal pools, bogs, fens, or which are scarce regionally and/or statewide. It is important to stress that a wetland may be a Category 3 wetland because it exhibits one or all of the above characteristics. For example, a forested wetland located in the flood plain of a river may exhibit "superior" hydrologic functions (e.g. flood retention, nutrient removal), but not contain mature trees or high levels of plant species diversity.

2.3 STREAM CROSSINGS

Regulatory activities under the Clean Water Act provide authority for states to issue water quality standards and "designated uses" to all waters of the U.S. upstream to the highest reaches of the tributary streams. In addition, the Federal Water Pollution Control Act of 1972 and its 1977 and 1987 amendments require knowledge of the potential fish or biological communities that can be supported in a stream or river, including upstream headwaters. Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high water mark (OHWM). The USACE defines OHWM as the "line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (USACE, 2005).

3.0 RESULTS

Within the approximately 3.75-acre Project survey area, AECOM delineated one wetland. No streams were identified within the Project survey area. The identified wetland is discussed in further detail in the following sections.

3.1 WETLAND DELINEATION

3.1.1 Preliminary Soils Evaluation

According to the USDA/NRCS Web Soil Survey of Madison County, Ohio (NRCS 2016), and the NRCS Hydric Soils List of Ohio, Three map units from three soil series are mapped within the Project survey area (NRCS, 2016). All three soil maps units mapped within the Project survey area (Carlisle muck, Crosby-Lewisburg silt loam 0-2 percent slopes, and Kokomo silty clay loam 0-2 percent slopes) are classified as hydric. Soils in the wetland were observed and documented as part of the delineation methodology. Soil map units located within the Project survey area are shown on Figure 2.

3.1.2 National Wetland Inventory Map Review

National Wetland Inventory (NWI) wetlands are areas of potential wetland that have been identified from USFWS aerial photograph interpretation which have typically not been field verified. Forested and heavy scrub/shrub wetlands are often not shown on NWI maps, as foliage effectively hides the visual signature that indicates the presence of standing water and moist soils from an aerial view. The USFWS website states that the NWI maps are not intended or designed for jurisdictional wetland identification or location. As a result, NWI maps do not show all the wetlands found in a particular area, nor do they necessarily provide accurate wetland boundaries. NWI maps are useful for providing indications of potential wetland areas, which are often supported by soil mapping and hydrologic predictions, based upon topographical analysis using USGS topographic maps.

According to the NWI map of the West Jefferson, Ohio quadrangle, the Project survey area contains one NWI wetland located on the western portion of the survey boundary. This mapped NWI wetland is located in the area of Wetland Pr-w11b and is listed as a Palustrine scrub-shrub, persistent seasonally flooded wetland (PSS1C). The location and approximate extent of the mapped NWI wetland is shown on Figure 2.

3.1.3 Delineated Wetlands

AECOM confirmed the wetland boundary of one wetland (Wetland Pr-w11b), totaling 0.19 acre, within the Project survey area. This wetland was originally delineated during the 2011 delineation and is currently a PSS/PEM wetland. The eastern wetland boundary of wetland Pr-w11b does not appear to have changed from the previous 2011 delineation. However, due to the construction of the London-Tangy 138kV Transmission line Project, the palustrine forested (PFO) portion of this wetland (Pr-w11a) was cleared and converted to PSS/PEM. During the April 2016 field assessment, this wetland was observed entirely to be a PSS/PEM wetland. The location, approximate extent, and acreage of the wetland delineated within the Project survey area is shown on Figure 3.

The previous wetland evaluation in 2011 identified Wetland Pr-w11a as a Category 2 wetland and Pr-w11b as a Category 1 wetland with ORAM scores of 38 and 29, respectively. This wetland typically exhibits narrow upland buffers and intensive use of adjacent upland areas (row cropping, residential), exhibited limited plant community development with a moderate to high percentage of invasive species, and characteristically had habitat and hydrology in the early stages of recovering from previous manipulation because of farming or other disturbances. The original completed USACE wetland form for Pr-w11b is provided in Appendix A, and ORAM wetland form is provided in Appendix B. Color photographs were taken of the delineated wetland during the field survey and are provided in Appendix C.

3.2 STREAM CROSSINGS

No streams were identified by AECOM within the Project survey area.

4.0 SUMMARY

In 2011, AECOM conducted a wetland delineation and stream assessment on the western side of the proposed Project site as part of FirstEnergy's East Springfield-London-Tangy 138 kV Transmission Line Project. AECOM reassessed the approximately 3.75-acre Project survey area on April 22, 2016. The reassessment confirmed that the Project survey area still contains one PSS/PEM wetland, consisting of a total of 0.19 acre. The eastern boundary of the wetland does not appear to have changed from the previous delineation.

No streams were identified by AECOM within the Project survey area.

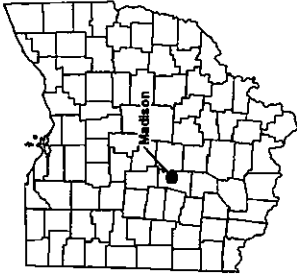
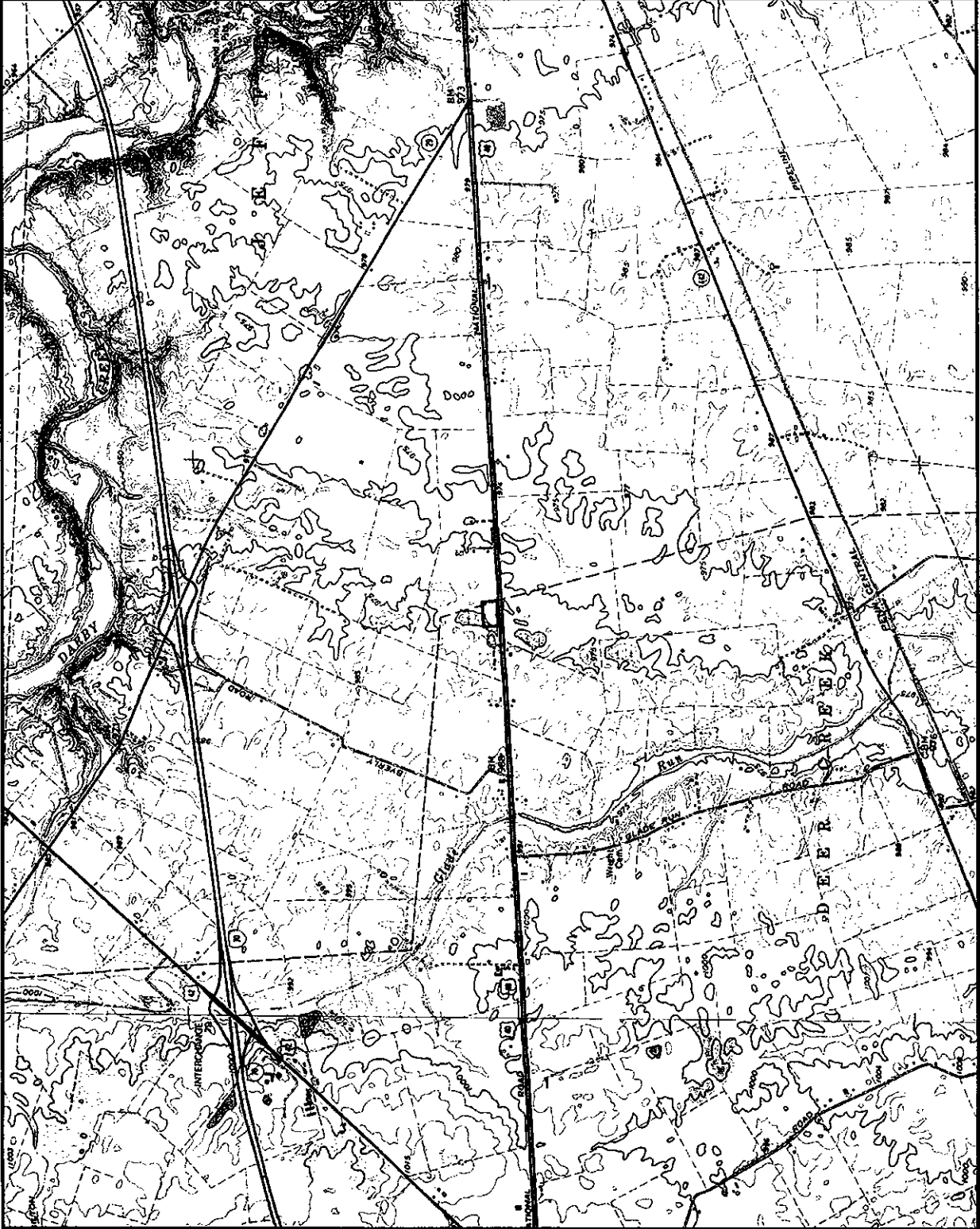
The information contained in this wetland delineation report is for a study area that may be much larger than the actual Project limits-of-disturbance; therefore, lengths and acreages listed in this report may not constitute the actual impacts of the Project defined in subsequent permit


applications. If necessary, a separate report that identifies the actual Project impacts will be provided with agency submittals.

The field survey results presented herein apply to the existing and reasonably foreseeable site conditions at the time of our assessment. They cannot apply to site changes of which AECOM is unaware and has not had the opportunity to review. Changes in the condition of a property may occur with time due to natural processes or human impacts at the project site or on adjacent properties. Changes in applicable standards may also occur as a result of legislation or the expansion of knowledge over time. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond the control of AECOM.

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LEGEND:
 Project Survey Boundary



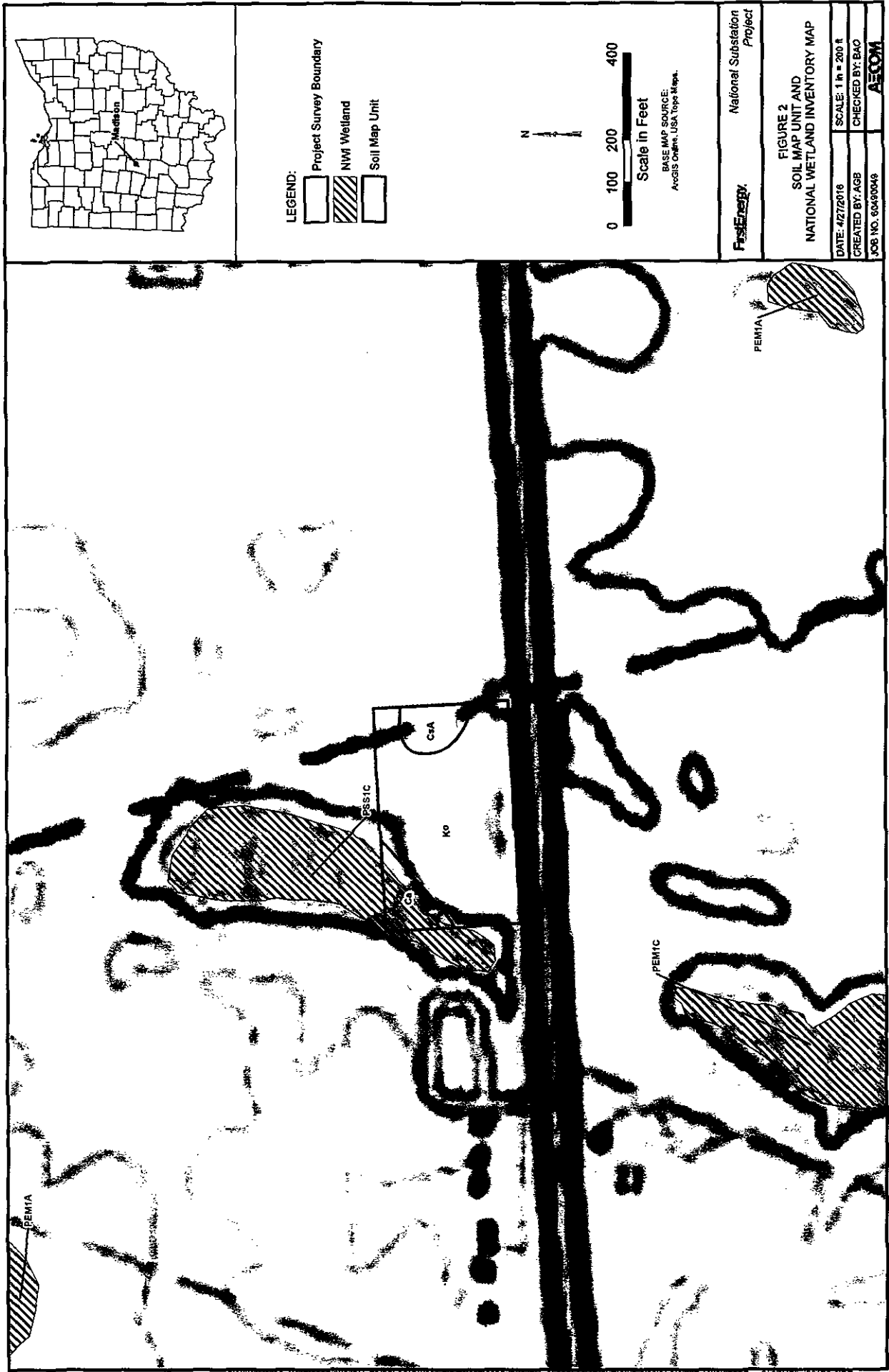
0 1,000 2,000 4,000
 Scale in Feet

BASE MAP SOURCE:
 ArcGIS Online, USA Topo Maps.

FirstEnergy National Substation Project

FIGURE 1
 OVERVIEW MAP

DATE: 4/27/2018	SCALE: 1 in = 2,000 ft
CREATED BY: AGB	CHECKED BY: BAO
JOB NO. 80490049	AECOM



FirstEnergy		National Substation Project	
FIGURE 2			
SOIL MAP UNIT AND			
NATIONAL WETLAND INVENTORY MAP			
DATE: 4/27/2019	SCALE: 1 in = 200 ft		
CREATED BY: AGB	CHECKED BY: BAO		
JOB NO. 60490049	AECOM		



LEGEND:



Delineated Wetland



Project Survey Boundary



0	100	200	400
0	100	200	400

Scale in Feet

BASE MAP SOURCE:
ArcGIS Online, Bing Maps Hybrid

FirstEnergy®

National Substation
Project

FIGURE 3
WETLAND DELINEATION MAP

DATE: 4/28/2016

SCALE: 1 in = 200 ft

CREATED BY: AGB

CHECKED BY: BAO

JOB NO. 60490049

A=COM

APPENDIX A

U.S. ARMY CORPS OF ENGINEERS WETLAND FORMS

Pr-W0116

W-Md-10/26/11-1B

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Lunkens Tangle Transmission Line City/County: Madison Co Sampling Date: 10/26/11
 Applicant/Owner: First Energy State: OH Sampling Point: 1B
 Investigator(s): J. Hillis, M. Thayer Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): Concave
 Slope (%): _____ Lat: 39.94183756 Long: -83.34519959 Datum: _____
 Soil Map Unit Name: Ca NWI classification: PSS1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks: <u>PSS/PEM wetland located between 2 ag. fields. Dirt piles along ditches associated with prior dumping, wetland part of a larger complex.</u>		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>8</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Acer saccharinum</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Salix nigra</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Populus deltoides</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>15</u> = Total Cover <u>7.5</u> %				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>35</u> x 1 = <u>35</u> FACW species <u>85</u> x 2 = <u>170</u> FAC species <u>80</u> x 3 = <u>240</u> FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>200</u> (A) <u>445</u> (B) Prevalence Index = B/A = <u>2.22</u>
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Salix nigra</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>	
2. <u>Acer saccharinum</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Cornus sericea</u>	<u>15</u>	<u>No</u>	<u>FACW</u>	
4. <u>Crataegus sp</u>	<u>15</u>	<u>No</u>	<u>FAC</u>	
5. _____	_____	_____	_____	
<u>85</u> = Total Cover <u>42.5</u> %				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Typha angustifolia</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>	
2. <u>Polygonum sp</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Cyperus erythrorhizos</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
4. <u>Salix nigra</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
5. <u>Toxicodendron radicans</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
6. <u>Eupatorium purpureum</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
<u>100</u> = Total Cover <u>50</u> %				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover _____ %				
Hydrophytic Vegetation Present? Yes <u>X</u> No _____				
Remarks: (Include photo numbers here or on a separate sheet.)				

W. Mat 10/26/11-18

Sampling Point:

HYDROLOGY

US Army Corps of Engineers

**APPENDIX B
OHIO RAPID ASSESSMENT METHOD WETLAND FORMS**

Pr - W O I I b

w-mdt 10/26/2011 1b

Site: <i>London Energy Transmission Line</i>	Rater(s): <i>M. Thomaier, S. Kullasby</i>	Date: <i>26 Oct 2011</i>
---	--	---------------------------------

<i>2</i>	<i>2</i>
max 6 pts.	subtotal

Metric 1. Wetland Area (size).

Select one size class and assign score.

- ☐ >50 acres (>20.2ha) (6 pts)
- ☐ 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- ☐ 10 to <25 acres (4 to <10.1ha) (4 pts)
- ☐ 3 to <10 acres (1.2 to <4ha) (3 pts)
- 2* ☒ 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- ☐ 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- ☐ <0.1 acres (0.04ha) (0 pts)

<i>1</i>	<i>3</i>
max 14 pts.	subtotal

Metric 2. Upland buffers and surrounding land use.

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- ☐ WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- ☐ MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- 0* ☐ NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- ☒ VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- ☐ VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- ☐ LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- 1* ☐ MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- ☒ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

<i>12</i>	<i>15</i>
max 30 pts.	subtotal

Metric 3. Hydrology.

3a. Sources of Water. Score all that apply.

- ☐ High pH groundwater (5)
- ☐ Other groundwater (3)
- 1* ☒ Precipitation (1)
- ☐ Seasonal/intermittent surface water (3)
- ☐ Perennial surface water (lake or stream) (5)

3c. Maximum water depth. Select only one and assign score.

- ☐ >0.7 (27.6in) (3)
- 1* ☐ 0.4 to 0.7m (15.7 to 27.6in) (2)
- ☒ <0.4m (<15.7in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- ☐ None or none apparent (12)
- 7* ☒ Recovered (7)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

3b. Connectivity. Score all that apply.

- ☐ 100 year floodplain (1)
- 0* ☐ Between stream/lake and other human use (1)
- ☐ Part of wetland/upland (e.g. forest), complex (1)
- ☐ Part of riparian or upland corridor (1)

3d. Duration of inundation/saturation. Score one or dbl check.

- ☐ Semi- to permanently inundated/saturated (4)
- 3* ☒ Regularly inundated/saturated (3)
- ☒ Seasonally inundated (2)
- ☒ Seasonally saturated in upper 30cm (12in) (1)

Check all disturbances observed

- ☐ ditch
- ☐ tile
- ☐ dike
- ☐ weir
- ☐ stormwater input

- ☒ point source (nonstormwater)
- ☒ filling/grading
- ☐ road bed/RR track
- ☐ dredging
- ☐ other

<i>8</i>	<i>13</i>
max 20 pts.	subtotal

Metric 4. Habitat Alteration and Development.

4a. Substrate disturbance. Score one or double check and average.

- ☐ None or none apparent (4)
- 3* ☒ Recovered (3)
- ☐ Recovering (2)
- ☐ Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- ☐ Excellent (7)
- ☐ Very good (6)
- ☐ Good (5)
- ☐ Moderately good (4)
- ☐ Fair (3)
- 2* ☒ Poor to fair (2)
- ☐ Poor (1)

4c. Habitat alteration. Score one or double check and average.

- ☐ None or none apparent (9)
- 3* ☒ Recovered (6)
- ☐ Recovering (3)
- ☐ Recent or no recovery (1)

Check all disturbances observed

- ☐ mowing
- ☐ grazing
- ☒ clearcutting
- ☒ selective cutting
- ☐ woody debris removal
- ☐ toxic pollutants

- ☒ shrub/sapling removal
- ☒ herbaceous/aquatic bed removal
- ☒ sedimentation
- ☐ dredging
- ☐ farming
- ☐ nutrient enrichment

<i>23</i>
subtotal this page

Pr-w0116

D-101 10/26/2011-16

ORAM v. 5.0 Field Form Quantitative Rating

Site: London Tarry Transmission Line Rater(s): H. Thonay, J. Killeady 1/1/15 Date: 26 Oct 2011

23

subtotal first page

0

23

max 10 pts.

subtotal

Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- 0
- ☐ Bog (10)
 - ☐ Fen (10)
 - ☐ Old growth forest (10)
 - ☐ Mature forested wetland (5)
 - ☐ Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
 - ☐ Lake Erie coastal/tributary wetland-restricted hydrology (5)
 - ☐ Lake Plain Sand Prairies (Oak Openings) (10)
 - ☐ Relict Wet Prairies (10)
 - ☐ Known occurrence state/federal threatened or endangered species (10)
 - ☐ Significant migratory songbird/water fowl habitat or usage (10)
 - ☐ Category 1 Wetland. See Question 1 Qualitative Rating (-10)

6

29

max 20 pts.

subtotal

Metric 6. Plant communities, interspersions, microtopography.**6a. Wetland Vegetation Communities.**

Score all present using 0 to 3 scale.

- 6
- ☐ Aquatic bed
 - ☐ Emergent
 - ☐ Shrub
 - ☒ Forest
 - ☐ Mudflats
 - ☐ Open water
 - ☐ Other

6b. horizontal (plan view) Interspersion.

Select only one.

- 2
- ☐ High (5)
 - ☐ Moderately high (4)
 - ☐ Moderate (3)
 - ☒ Moderately low (2)
 - ☐ Low (1)
 - ☐ None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- 3
- ☐ Extensive >75% cover (-5)
 - ☒ Moderate 25-75% cover (-3)
 - ☐ Sparse 5-25% cover (-1)
 - ☐ Nearly absent <5% cover (0)
 - ☐ Absent (1)

6d. Microtopography.

Score all present using 0 to 3 scale.

- 2
- ☐ Vegetated hummocks/tussocks
 - ☒ Coarse woody debris >15cm (6in)
 - ☐ Standing dead >25cm (10in) dbh
 - ☐ Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

Category I

29

End of Quantitative Rating. Complete Categorization Worksheets.

APPENDIX C
DELINEATED WETLAND PHOTOGRAPHS



PHOTOGRAPHIC RECORD

Wetlands

Client Name:

FirstEnergy

Site Location:

National Substation Project

Project No.

60490049

Photo No. 1**Date:**

April 22, 2016

Description:

Wetland Pr-w11b

PSS/PEM

Facing north

**Photo No. 2****Date:**

April 22, 2016

Description:

Wetland Pr-w11b

PSS/PEM

Facing south

