

1-800-646-0400

December 23, 2014

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

Letter of Notification 138 kV Transmission Line Extensions to **AEP Holloway Substation Project** Case No. 14-2173-EL-BLN

Dear Ms. McNeal:

In accordance with Administrative Code Rule 4906-1-11, American Transmission Systems, Incorporated ("ATSI") transmits one (1) original and eleven (11) copies of the enclosed Letter of Notification for the above captioned project. ATSI is requesting expedited review of this Letter of Notification.

In this Project, ATSI is proposing to loop or extend six existing 138 kV transmission lines, owned by ATSI, to connect to American Electric Power's ("AEP") Holloway Substation. The Project area is located in Mead Township, Belmont County, Ohio. 2014 DEC 24 AM 11: 36 Please be advised of the following: a) Name and address of the applicants:

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

b) Name of proposed facilities:

138 kV Transmission Line Extensions to AEP Holloway Substation Project

c) Location of proposed facilities:

The Project area is located in Mead Township, Belmont County, Ohio.

This is to certify that the images appearing are an accurate and complete reproduction of a case file jocument delivered in the regular course of _ Date Processed . Technician.

d) Description of proposed facilities:

The Project involves looping two and extending four existing 138 kV transmission lines to connect to AEP's Holloway Substation. The Project area is located in Mead Township, Belmont County, Ohio.

e) Applicant's representative:

Scott Humphrys
Transmission Services Specialist
Energy Delivery Transmission and Substation Design
FirstEnergy Service Company
76 South Main Street
Akron, OH 44308-1890

We have provided a copy of the Letter of Notification by certified mail, with return receipt requested, to each official of the political subdivisions immediately affected by the proposed project as listed in the attached Exhibit 1. Copies of the transmittal letters addressed to the local government representatives of Mead Township and Belmont County are enclosed for your file.

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) 384-2526.

Sincerely,

Scott Humphrys

Transmission Services Specialist

Energy Delivery Transmission and Substation Design

FirstEnergy Service Company

Attachments

AMERICAN TRANSMISSION SYSTEMS, INCORPORATED A FIRSTENERGY COMPANY

LETTER OF NOTIFICATION

138 kV TRANSMISSION LINE EXTENSIONS TO AEP HOLLOWAY SUBSTATION PROJECT

OPSB CASE NO.: 14-2173-EL-BLN

December 23, 2014

RECEIVED-DOCKETING DIV.
2014 DEC 24 AM II: 36
PUCO

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

LETTER OF NOTIFICATION 138 kV TRANSMISSION LINE EXTENSIONS TO AEP HOLLOWAY SUBSTATION PROJECT

The following information is being provided in accordance with the procedures delineated in Ohio Administrative Code Rule 4906-11-01: <u>Letter of Notification Requirements</u> of the Rules and Regulations of the Ohio Power Siting Board.

4906-11-01 (B): LETTER OF NOTIFICATION REQUIREMENTS

4906-11-01 (B) (1) a: Name and Reference Number

Name of Project: 138 kV Transmission Line Extensions to AEP Holloway

Substation Project ("Project")

2014 LTFR Reference: This Project is not included in FirstEnergy Corp. 2014 Long-

Term Forecast Report submitted to the Public Utility Commission of Ohio in Case Number 14-0625-EL-FOR.

4906-11-01 (B) (1) b: Brief Description of Project

In this Project, American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to extend six (6) existing 138 kV transmission lines to American Electric Power's ("AEP") Holloway Substation. These lines include: Burger-Knox, Burger-Cloverdale #1, Burger Loop (Burger Capacitance), Burger-Cloverdale #2, and Burger-Cloverdale #3 138 kV Transmission Lines. AEP submitted a separate filing to the Ohio Power Siting Board for their relocation of the Muskingum River-Tidd 345 kV Transmission Line and installation of the Holloway Substation Projects (Case No. 14-0141-EL-BLN) on February 3, 2014, which was approved on March 4, 2014.

The existing Burger-Knox 138 kV and existing Burger-Cloverdale #1 Transmission Lines will extend as transmission line loops into and out of AEP's Holloway Substation. These transmission line loops will create the Holloway-Knox 138 kV Transmission Line, the Cloverdale-Holloway #1 138 kV Transmission Line, the Burger-Holloway #1 138 kV Transmission Line, and the Burger-Holloway #2 138 kV Transmission Line. The Holloway-Knox 138 kV Transmission Line will extend

1

approximately 700 feet (0.13 mile) from its current location to the Holloway Substation. The Cloverdale-Holloway #1 138 kV Transmission Line will extend approximately 700 feet (0.13 mile) from its current location to the Holloway Substation. The Burger-Holloway #1 138 kV Transmission Line will extend approximately 1,300 feet (0.25 mile) from its current location to the Holloway Substation. The Burger-Holloway #2 138 kV Transmission Line will extend approximately 1,200 feet (0.23 mile) from its current location to the Holloway Substation. Each loop will be constructed with approximately eight (8) new structures, consisting of wood single circuit dead-end structures and wood single circuit tangent structures.

The existing Burger Loop (Burger Capacitance) 138 kV Transmission Line currently extends from the Burger Substation to the Brookside and Longview Substations. At two tower locations, approximately 95 miles from the Burger Substation, via open connections and jumpers between the conductors on opposite sides of the tower, the existing configuration operates as a loop from the Burger Substation. The jumpers will be removed and the open connections closed and transmission lines will be extended to the Holloway Substation and the remaining portion will be de-energized. As shown in Exhibit 2, the two new extensions are the Brookside-Holloway 138 kV Transmission Line and the Holloway-Longview 138 Transmission Line. The Brookside-Holloway 138 kV Transmission Line will extend approximately 700 feet (0.13 mile) and the Holloway-Longview 138 kV Transmission Line tap will extend approximately 700 feet (0.13 mile) to the substation. Each extension will be constructed with approximately three (3) new structures, consisting of a steel double circuit dead-end structure, wood single circuit dead-end structures, and wood single circuit tangent structures. The remainder of the original Burger Loop (Burger Capacitance) 138 kV Transmission Line will become the Burger De-Energized #1 and Burger De-Energized #2 Transmission Lines.

The existing Burger-Cloverdale #2 and #3 138 kV Transmission Lines connect the Cloverdale Substation to the Burger Substation. These transmission lines will

connect to the Holloway Substation as transmission line extensions, and the remaining portion will be de-energized. The transmission line extending from the Burger-Cloverdale #2 138 kV Transmission Line will become the Cloverdale-Holloway #2 138 kV Transmission Line. The transmission line extending from the Burger-Cloverdale #3 138 kV Transmission Line will become the Cloverdale-Holloway #3 138 kV Transmission Line. These extensions will extend to the Holloway Substation approximately 750 feet (0.13 mile). The transmission line taps will be constructed with approximately three (3) new structures each, consisting of a steel double circuit dead-end structure, wood single circuit dead-end structures, and wood single circuit tangent structures. The remainder of the existing Burger-Cloverdale #2 and #3 138 kV Transmission Lines will become the Burger De-Energized #4 Transmission Lines.

The general location of the Project is shown in Exhibit 1. The general layout is shown in Exhibit 2. The Project will be located in Mead Township, Belmont County, Ohio.

4906-11-01 (B) (1) c: Why the Project Meets the Requirements for a Letter of Notification

The Project meets the requirements for a Letter of Notification because the Project is within the types of projects defined by Items (1)(d) and (4)(a) of the Interim Application Requirement Matrix for Electric Power Transmission Lines in the Finding and Order issued on September 4, 2012, as subsequently modified on December 17, 2012, in Case No. 12-1981-GE-BRO which modified Appendix A of Rule 4906-1-01 of the Ohio Administrative Code. These items state:

- (1) Rerouting or extension or new construction of single or multiple circuit electric power transmission line(s) as follows:
 - (d) Line(s) one hundred twenty-five kV and above, but less than three hundred kV, and greater than 0.2 miles in length but not greater than two miles in length.

- (4) Replacing electric power transmission line structure(s) with a different type of structure(s) or adding structure(s) within an existing electric power transmission line and:
 - (a) Two miles or less of new right-of-way is required.

The proposed Project extends six (6) existing 138 kV transmission lines as loops and taps to AEP's Holloway Substation. The installation will occur within the existing right-of-way and less than 2 miles of new right-of-way.

4906-11-01 (B) (2): Need for the Project

The Project is needed due to AEP's Muskingum River-Tidd 345 kV Relocation and Installation of the Holloway Substation Project and the associated request to FirstEnergy to connect the 138 kV transmission lines to the Holloway Substation. AEP submitted a separate filing to the Ohio Power Siting Board for their relocation of the Muskingum River-Tidd 345 kV Transmission Line and installation of the Holloway Substation Projects (Case No. 14-0141-EL-BLN) on February 3, 2014, which was approved on March 4, 2014.

4906-11-01 (B) (3): Location Relative to Existing or Proposed Lines

The location of the Project relative to existing or proposed transmission lines is shown in the FirstEnergy System Facilities map, "TL-MAP-2," included as part of the confidential portion of the FirstEnergy Corp. 2014 Long-Term Forecast Report. This map was submitted to the PUCO in Case No. 14-0625-EL-FOR under Rule 4901:5-5:04 (C) 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 location of the Burger-Knox, Burger-Cloverdale #1, Burger Cloverdale #2, Burger-Cloverdale #3, and the Burger Loop (Burger Capacitance) 138 kV Transmission Lines. The Project area is located approximately 3 inches (11 by 17 inch printed version) from the right edge of the map and 8¼ inches (11 by 17 inch printed version) from the top of the map. The general location and layout of the Project is shown on Exhibit 1.

4906-11-01 (B) (4): Alternatives Considered

There were no alternatives considered.

4906-11-01 (B) (5): Construction Schedule

Construction on the project is expected to begin as early as February 1, 2015 and be completed by November 30, 2015.

4906-11-01 (B) (6): Area Map

Exhibit 1 depicts the general location of the Project. This exhibit provides a partial copy of the United States Geologic Survey, Businessburg Ohio Quad, Quad ID Number 39080-H7. To locate and view the project site from the Columbus, Ohio area, merge onto I-70 east for approximately 120 miles. Then take exit 220 for State Route 214 towards US-40/National Road. Turn right onto Bellaire-High Ridge Road and travel for approximately 1.9 miles. Turn right onto Dixon Hill Road and travel for approximately 1.9 miles. Turn right onto Pike Street and travel for approximately 0.6 miles. Turn left onto Sand Hill Road and travel for approximately 3.1 miles. Turn left onto OH-147 East and travel for approximately 0.1 mile. Take the 1st right onto Hawthorne Hill Road and travel approximately 1.2 miles. Turn right to stay on Hawthorne Hill Road and travel approximately 0.7 mile, then turn left to stay on Hawthorne Hill Road and travel approximately 30 feet to reach the intersection of Hawthorne Hill Road and Meek Road.

4906-11-01 (B) (7): Property Owner List

The Project is located on AEP owned property and existing right of way easements. A right-of-way easement from AEP for the 138 kV construction is necessary. No other new easements or right-of-way are needed for the Project.

Parcel Number(s)	Property Owner	Easement Status
14-00186.000	AEP Ohio Transmission	Easement to be obtained
14-00227.001	AEP Ohio Transmission	Easement to be obtained

4906-11-01 (C): TECHNICAL FEATURES OF THE PROJECT

4906-11-01 (C) (1): Operating Characteristics

The transmission line construction will have the following characteristics:

Voltage: 138 kV

Conductors:

605 kemil 24/7 ACSR, 477 kemil 24/7 ACSR, and 795 kemil

26/7 ACSR

Static wire:

7#8 Alumoweld

Insulators:

Polymer Suspension and Polymer Horizontal Line Post

Structure Types: Exhibi t 3: Steel Double Circuit Deadend

Exhibit 4: Wood Single Circuit Guyed Deadend

Exhibit 5: Wood Single Circuit Tangent

4906-11-01 (C) (2) a: Calculated Electric and Magnetic Fields

The following table itemizes the line loading of the Project. The normal line loading represents FirstEnergy's peak system load for the transmission lines. The emergency line loading represents the maximum line loading under contingency operation. The winter rating is based on the continuous maximum conductor ratings (MCR) of the circuits for the single conductors per phase 336 kcmil 18/1 ACSR conductors and an ambient temperature of zero degrees centigrade (32 deg. F), wind speed of 1.3 miles per hour, and a circuit design operating temperature of 100 degrees centigrade (212 deg. F).

Line Name	Normal Loading Amps	Emergency Loading Amps	Winter Rating Amps
Holloway-Knox 138 kV	302	329	950
Cloverdale-Holloway #1 138 kV	236	264	950
Brookside-Holloway 138 kV	228	241	1102
Holloway-Longview 138 kV	220	248	1102
Cloverdale-Holloway #2 138 kV	266	296	1320
Cloverdale-Holloway #3 138 kV	252	282	1320

Line Name	Normal Loading Amps	Emergency Loading Amps	Winter Rating Amps
Burger-Holloway #1 138 kV	15	29	950
Burger-Holloway #2 138 kV	15	29	950

The following calculations provide an approximation of the magnetic and electric fields strengths of the 138 kV Transmission Line Extensions in the right-of-way. The calculations provide an approximation of the electric and magnetic field levels based on specific assumptions utilizing the EPRI EMF Workstation 2009 program software. This program software assumes the input transmission line configuration is located on flat terrain. Also, a balanced, three-phase circuit loading is assumed for the transmission circuit. The model utilizes the normal, emergency, and winter rating of the transmission lines.

EMF	CALCULATIONS	Electric Field kV/meter	Magnet Field mGauss
Normal -	Under Lowest Conductors	1.991	33.071
Loading	At Right-of-Way Edges	0.042	4.997/15.1
Emergency Loading	Under Lowest Conductors	1.991	35.609
	At Right-of-Way Edges	0.042	6.129/16.0
Winter Rating	Under Lowest Conductors	1.991	130.285
	At Right-of-Way Edges	0.042	57.841/60.5

4906-11-01 (C) (2) b: EMF Discussion

Background Information

Electric and magnetic fields (EMFs) are naturally occurring in the environment and can be found in the Earth's interior and in the human body. EMFs are generated essentially anywhere where there is a flow of electricity, including electrical appliances and power equipment. Electric fields are associated with the voltage of the source; magnetic fields are associated with the flow of current in a wire. The strength of these fields decreases rapidly with distance from the source. EMFs associated with electricity use are not disruptive to cells like x-rays or ultraviolet rays from the sun. EMF fields are thought to be too weak to break molecules or

chemical bonds in cells. Scientists have conducted extensive research over the past two decades to determine whether EMFs are associated with adverse health effects, and although the research and debate of this issue continues, at this time there is no firm basis to conclude that EMFs cause adverse health effects. A number of independent scientific panels have reviewed the research and have stated that there is no basis to conclude that EMFs cause adverse health effects nor has it been shown that levels in everyday life are harmful.

Recent Developments

As a part of the National Energy Policy Act of 1992, the Electric and Magnetic Fields Research and Public Information Dissemination (EMF RAPID) program was initiated within the five-year effort under the National EMF Research Program. The culmination of this five-year effort resulted in a final RAPID Working Group report, which was released for public review in August 1998. The Director of the National Institute of Environmental Health Sciences (NIEHS) then prepared a final report to Congress after receiving public comments. The NIEHS' Director's final report, released to Congress on May 4, 1999, concluded that extremely low frequency electric and magnetic fields (ELF-EMF) exposure cannot be recognized at this time as entirely safe because of weak scientific evidence that exposure may pose a leukemia hazard. The Director further stated that the conclusion of this report was insufficient to warrant aggressive regulatory concern.

Sources for Additional Information

The following websites sponsored by federal agencies or other organizations provide additional information on EMF:

- Centers for Disease Control/National Institute for Occupational Safety and Health: http://www.cdc.gov/niosh/topics/emf/
- National Institute of Environmental Health Sciences (NIEHS) EMF Rapid Program: http://www.niehs.nih.gov/health/topics/agents/emf/

4906-11-01 (C) (3): Estimated Costs

The following are the estimated capital costs by FERC Accounts for the proposed project:

Account		Cost
350	Land Rights, Engineering, etc.	\$ 1,350,341
355	Poles and Fixtures	\$ 1,500,000
356	Overhead Conductors & Devices	\$ 1,200,000
		
	Total	\$ 4,050,341

4906-11-01 D: SOCIOECONOMIC DATA

4906-11-01 (D) (1): Land Use

The Project is located in Mead Township, in Belmont County, Ohio. The various land uses along the route of the line are residential, open field, and woods. Based on the U.S. Bureau of Census estimates, the 2010 population of Mead Township was 5,967. The 2010 population of Belmont County was 70,400. As the proposed Project involves extending the existing transmission lines over land currently owned by AEP, no significant changes or impacts to the current land use are anticipated.

4906-11-01 (D) (2): Agricultural Land

Agricultural land use does not exist through Project right-of-way.

4906-11-01 (D) (3): Archaeological or Cultural Resources

As part of ATSI's investigation of the project site, a search of Ohio Historic Preservation Office (OHPO) National Register of Historic Places on-line database was conducted and did not identify the existence of any historic sites within the Project area. The OHPO database includes all Ohio listings on the National Register of Historic Places, including districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.

As part of the investigation, AEP contracted Weller & Associates, Inc. to perform a cultural resources study of the Project area, which included ATSI's portion of the Project. Weller & Associates, Inc. conducted two (2) different investigations (2a and 2b locations are indicated on the attached maps). The studies found disturbed land, a

residence not older than 50 years, steep slopes, and did not identify any cultural remains. Therefore, it is anticipated that the proposed Project will not affect any cultural resources.

4906-11-01 (D) (4) a: Documentation of Letter of Notification Transmittal

This Letter of Notification is being provided concurrently to the following officials of Mead Township and Belmont County, Ohio.

Belmont County

Ginny Favede, President Belmont County Board of Commissioners 101 West Main Street St. Clairsville, OH 43950

Matt Coffland, Vice President Belmont County Board of Commissioners 101 West Main Street St. Clairsville, OH 43950

Mark Thomas
Belmont County Board of
Commissioners
101 West Main Street
St. Clairsville, OH 43950

Sue Douglas, Executive Director Belmont County Department of Development/CIC 101 West Main Street St. Clairsville, OH 43950

Fred Bennett, P.E., P.S. Belmont County Engineer 101 West Main Street St. Clairsville, OH 43950

Mead Township

David Mellott Mead Township Trustee 52418 Pipe Creek Road Jacobsburg, OH 43933

Gregg Warren Mead Township Trustee 215 West 43rd Street Shadyside, OH 43947 Edward Good Mead Township Trustee 56080 Matts Lane Shadyside, OH 43947

David Albright Mead Township Fiscal Officer 53322 Cash Ridge Road Shadyside, OH 43947

Copies of the transmittal letters to these officials have been included with the

4906-11-01 (D) (4) b: Public Information Program

ATSI's manager of External Affairs will advise local officials of features and the status of the proposed Project as necessary.

4906-11-01 (D) 5: Current or Pending Litigation

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

4906-11-01 (D) 6: Local, State, and Federal Requirements

There are no known local, state, or federal requirements that must be met prior to commencement of construction of the proposed Project.

4906-11-01 (E): ENVIRONMENTAL DATA

4906-11-01 (E) (1): Endangered, Threatened, and Rare Species Investigation

As part of the investigation, a request was submitted by AEP to the Ohio Department of Natural Resources-Division of Wildlife (ODNR) to research the presence of any endangered, threatened, or rare species within the Project area. The ODNR's January 15, 2014 response, attached as Exhibit No. 6, indicated that the Project is within range of the Indiana bat (*Myotis sodalis*). If suitable trees occur within the Project area, these trees should be conserved. If suitable habitat occurs within the Project area and trees must be cut, cutting must occur between October 1 and March 31. All tree clearing is proposed to occur prior to March 31, 2015. The Project is within range of two other threatened or endangered species. Due to the nature and location of the project, and the mobility of some of the species, this Project is not likely to impact the species. ODNR has no record of any rare or endangered species at the Project site.

As part of the investigation, a request was submitted by AEP to the U.S. Fish & Wildlife Service ("USFWS") to research the presence of any endangered, threatened, or rare species within the Project area. The USFWS's January 3, 2014 response also indicated that the Project is within range of the Indiana bat, as well as the long-eared

bat (*Myotis septentrionalis*), an endangered species. If suitable trees occur within the Project area, these trees should be conserved. If suitable habitat occurs within the Project area and trees must be cut, cutting must occur between October 1 and March 31. All tree clearing is proposed to occur prior to March 31, 2015. Due to the type, size, and location, the USFWS does not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species.

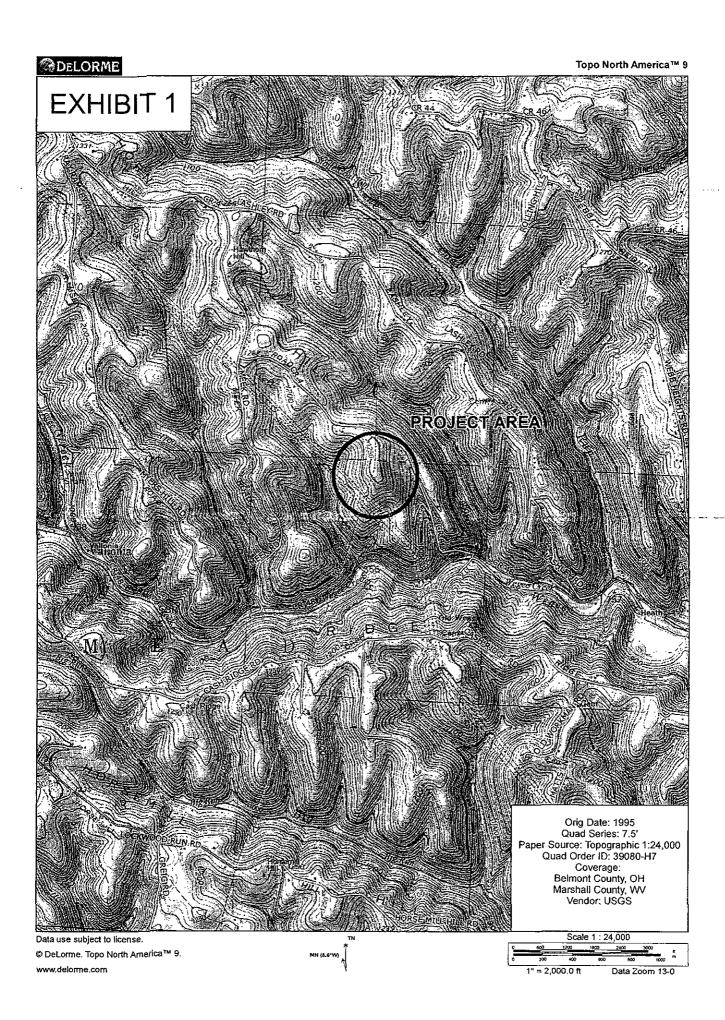
4906-11-01 (E) (2): Areas of Ecological Concern

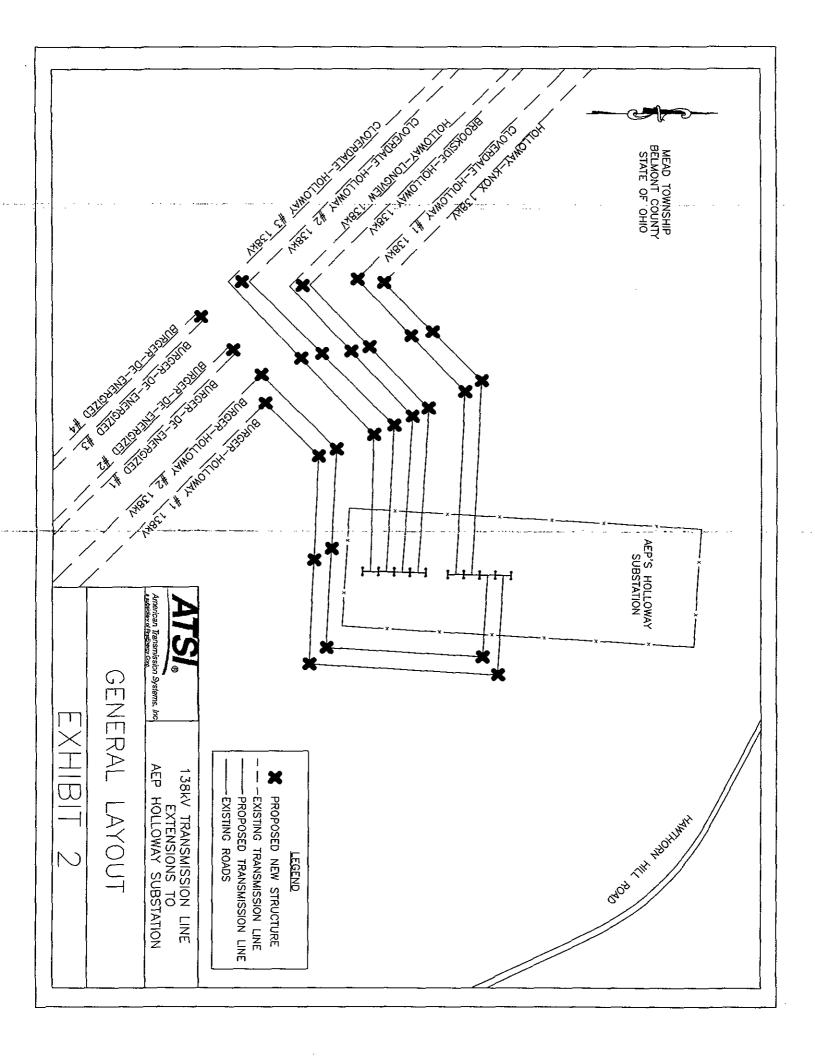
As part of the investigation, a request was submitted by AEP to the Ohio Department of Natural Resources-Division of Wildlife (ODNR) to research the presence of any unique ecological sites, geological features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests, national wildlife refuges, or other protected natural areas within the Project area. The ODNR's January 15, 2014 response, attached as Exhibit No. 6, indicated that they have no records of the aforementioned "areas" within one mile of the identified Project area.

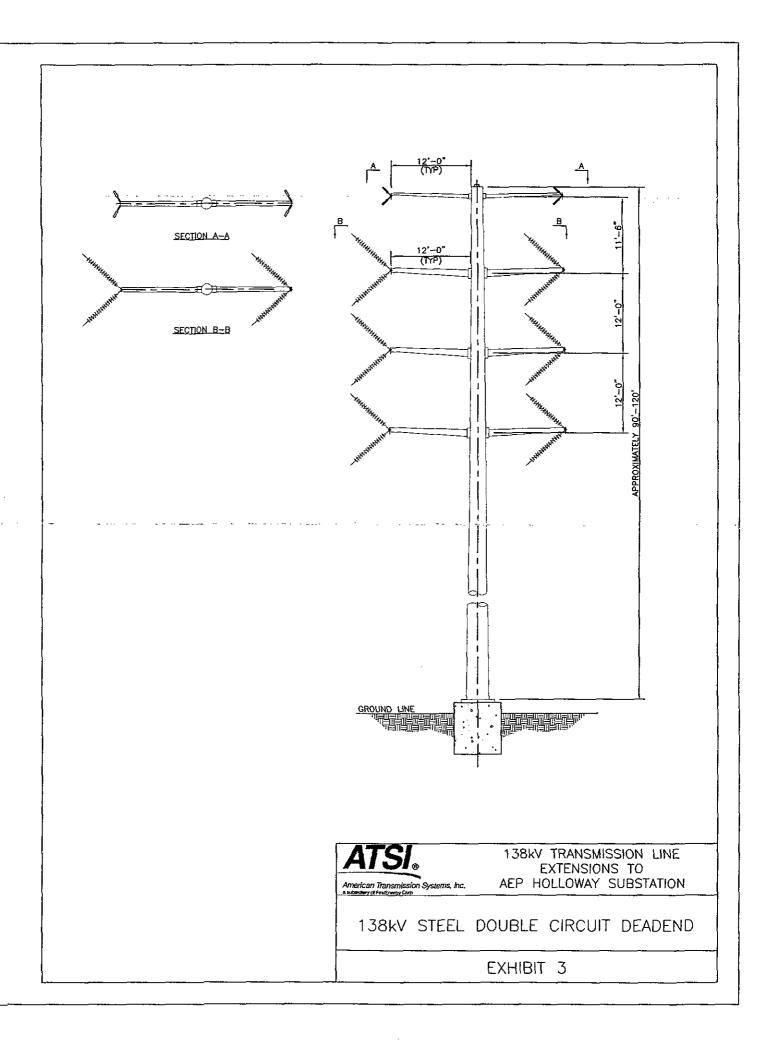
As part of the investigation, AEP contracted URS to conduct a wetland delineation and stream assessment for their Holloway Substation Project, which included ATSI's portion of the Project. These investigations focused on a 70-acre surveyed site proposed for development, which included ATSI's portion of the Project. Throughout the 70-acres, 11 streams, totally 3,197 feet, were identified, and no wetlands or ponds were identified. In the map attachments with the delineation, Stream 7 is near the limits of the transmission line work for this Project. If impacts are proposed to this stream, the appropriate coordination and permitting will be obtained.

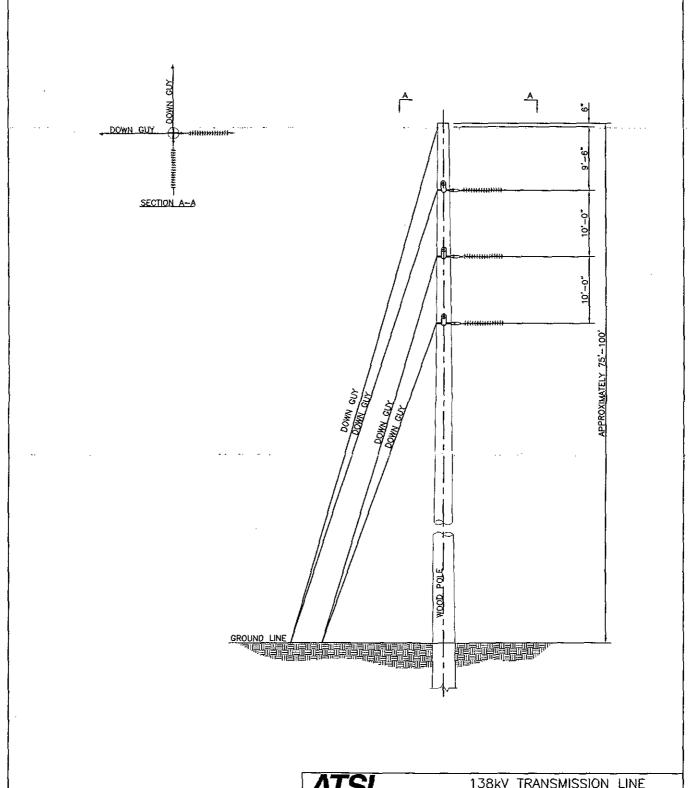
4906-11-01 (E) (3): Additional Information

Construction and operation of the proposed Project will be in accordance with the requirements specified in the latest revision of the National Electric Safety Code as adopted by the Public Utilities Commission of Ohio (PUCO) and will meet all applicable safety standards established by the Occupational Safety and Health Administration.









ATSI.

American Transmission Systems, In

138kV TRANSMISSION LINE EXTENSIONS TO AEP HOLLOWAY SUBSTATION

138kV WOOD SINGLE CIRCUIT GUYED DEADEND

EXHIBIT 4

SECTION A-A 138kV TRANSMISSION LINE EXTENSIONS TO AEP HOLLOWAY SUBSTATION American Transmission Systems, Inc. 138kV WOOD SINGLE CIRCUIT TANGENT

EXHIBIT 5





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

January 15, 2014

Aaron Geckle URS Corporation 525 Vine Street, Suite 1800 Cincinnati, Ohio 45202

Re: 13-652; Holloway Station Project - AEP

Project: The project involves AEP's construction of a 345 kV/138 kV substation and associated electric transmission line interconnections due to the retirement of electric generating facilities in Ohio.

Location: The project is located in Mead Township, Belmont 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.

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

The DOW recommends that impacts to 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 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 habitat consists of suitable 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. If suitable trees occur within the project area, these trees should be conserved. If suitable habitat occurs on the project area and trees must be cut, cutting must occur between October 1 and March 31. If suitable trees must be cut during the summer months, a net

survey must be conducted between June 15 and July 31, prior to cutting. Net surveys shall incorporate either two net sites per square kilometer of project area with each net site containing a minimum of two nets used for two consecutive nights, or one net site per kilometer of stream within the project limits with each net site containing a minimum of two nets used for two consecutive nights. If no tree removal is proposed, the project is not likely to impact this species.

The project is within the range of the eastern hellbender (Cryptobranchus alleganiensis alleganiensis), a state endangered species and a federal species of concern. This long-lived, entirely aquatic salamander inhabits perennial streams with large flat rocks. Once present throughout much of the Ohio River watershed in Ohio, recent state-wide surveys revealed an almost 80% decline in hellbender abundance since the 1980's. In-water work in hellbender streams can reduce availability of large cover rocks and can destroy hellbender nests and/or kill adults and juveniles. The contribution of additional sediment to hellbender streams can smother large cover rocks and gravel/cobble substrate (used by juveniles), making them unsuitable for refuge and nesting. Projects that contribute to altered flow regimes (e.g., by increasing areas of impervious surfaces or modifying the floodplain) can also adversely affect hellbender habitat. Due to the location, this project is not likely to impact this species.

The project is within the range of the black bear (*Ursus americanus*), a state endangered species, and the bobcat (*Lynx rufus*), a state threatened species. Due to the mobility of these species, this project is not likely to impact these species.

The ODNR Natural Heritage Database has no records for rare or endangered species at this project site. We are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests, national wildlife refuges or other protected natural areas within the project area. Our inventory program does not provide a complete survey of Ohio wildlife, and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area.

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