

**AMERICAN TRANSMISSION SYSTEMS, INCORPORATED  
AND  
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY,  
SUBSIDIARIES OF FIRSTENERGY CORP.**

**LETTER OF NOTIFICATION**

**ASHTABULA - PITTSCONN DOCKS 138 kV  
TRANSMISSION LINE  
TAP TO MILLENNIUM INORGANIC CHEMICALS**

**OPSB CASE NO.: 11- 5844 -EL-BLN**

**November 30, 2011**

**PUCO**

**2011 DEC -1 AM 10:14**

**RECEIVED-DOCKETING DIV**

**American Transmission Systems, Incorporated  
76 South Main Street  
Akron, Ohio 44308  
and  
The Cleveland Electric  
Illuminating Company  
6896 Miller Road  
Brecksville, Ohio 44141**

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**LETTER OF NOTIFICATION  
ASHTABULA – PITTSCONN DOCKS 138 kV TRANSMISSION LINE  
TAP TO MILLENNIUM INORGANIC CHEMICALS**

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

**4906-11-01 (B): General Information**

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

Name of Project: Ashtabula – Pittsconn Docks 138 kV Transmission Line  
Tap to Millennium Inorganic Chemicals Project  
("Project")

2011 LTFR Reference: This Project is not identified in FirstEnergy Corp.'s 2011 Electric Long-Term Forecast Report ("LTFR") submitted to the Public Utility Commission of Ohio in Case Number 11-1435-EL-FOR.

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

In this Project, American Transmission Systems, Incorporated ("ATSI") and The Cleveland Electric Illuminating Company ("CEI"), subsidiaries of FirstEnergy Corp., are proposing to install an approximately 56 foot long, radial transmission line tap from the existing Ashtabula – Pittsconn Docks 138kV transmission line to a new customer-owned substation.

The layout of the Project is shown on Exhibit 2. The transmission line tap will extend westerly approximately 56 feet from an existing structure of the existing Ashtabula – Pittsconn Docks (Q-15 transmission line) 138 kV transmission line to the new customer substation. The customer substation is being installed approximately 3,492 feet east and 330 feet south of the intersection of State Road

and Middle Road. As a part of installing the Project, two (2) new poles will also be installed in the existing Ashtabula – Pittsconn Docks 138 kV Transmission Line to accommodate electrical switches. The switches will be located to the north and south of the tap location. Also as part of the Project two (2) new tangent structures will be installed next to the new switch structures in the adjacent Ashtabula – Pittsconn Docks (Q-16 transmission line) 138 kV Transmission Line in order to maintain circuit to circuit clearances.

ATSI owns the existing Ashtabula – Pittsconn Docks 138 kV transmission line and will own the new structures and switches. The Cleveland Electric Illuminating Company will own the new transmission line tap up to the new-customer owned substation. Millennium Inorganic Chemicals will own the substation.

The Project area is located near the intersection of State Road and Middle Road, in Ashtabula Township, Ashtabula County, Ohio. The general location of the Project is shown in Exhibit 1, which is a partial copy of the United States Geologic Survey, Ashtabula County Ohio Quad Map, ID number 41080-H7. Exhibit 2 shows the general layout of the proposed Project. The proposed Millennium Inorganic Chemicals 138 kV Transmission Line Tap is located in the vicinity of the second existing transmission line structure immediately south of Middle Road, east of State Road.

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

The Project meets the requirements for a Construction Notice and a Letter of Notification because the Project is within the types of project defined by Items (1)(d) and (4)(a) of the Application Requirement Matrix for Electric Power Transmission Lines in Appendix A of 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 not greater than 0.2 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 required.*

The proposed Project includes installing one approximately 56 foot long single-circuit 138 kV transmission line tap, with two (2) new poles in the existing transmission line to support electrical switches and two (2) new poles in the adjacent transmission line.

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

The proposed Project is essential for serving an existing customer. Millennium Inorganic Chemicals is an industrial customer that is looking to improve reliability by moving from 13.8 kV service to a 138 kV service. Non-conforming loads, the largest of which is a 500 HP motor, exist at the customer site. Also three additional 1 MW air compressors will be added in the near future. ATSI and CEI will be providing partial service of 20 MW with reserve capacity for an additional 10 MW. The Ashtabula – Pittsconn Docks 138 kV Transmission Line is the closest transmission line to the customer's facility.

**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, included as the last page of Chapter 3 of the confidential portion of the FirstEnergy Corp. 2011 Long-Term Forecast Report submitted to the PUCO in case no. 11-1435-EL-FOR under rules 4901:5-5:04 (C) of the Ohio Administrative Code. This map is incorporated by reference only, and shows ATSI's 345 kV and 138 kV transmission lines and transmission substations, including the location of the Ashtabula-Pittsconn Docks 138 kV

transmission line. The project area is located approximately 4 7/8 inches (11 by 17 inch printed version) from the right edge of the map box and 2 inches (11 by 17 inch printed version) from the top of the map box. The general location of the Project is shown on Exhibit No. 1. The general layout of the Project is shown in Exhibit No. 2.

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

There were no other reasonable alternatives.

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

Construction on the Project is expected to begin on approximately May 1, 2012 and is expected to be completed and placed in-service by June 1, 2012.

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

Exhibit No. 1 is a map depicting the general location of the project site. To locate and view the project site from the Columbus, Ohio area, travel north on Interstate 71 for approximately 113 miles. Take exit 220 to merge onto I-271 N toward Erie, PA approximately 40.3 miles. Merge onto I-90 E for approximately 39.5 miles. Take exit 228 for OH-11 toward Youngstown/Ashtabula for 0.2 miles. Keep left at fork to continue toward OH-11 N go approximately 0.2 miles. Keep right at fork and follow signs for OH-11 N/Ashtabula and merge onto OH-11 N go approximately 4.8 miles. Take the E 21<sup>st</sup> Street exit go approximately 0.3 miles. Turn right onto E 21<sup>st</sup> Street go approximately 0.4 miles. Take the first left onto State Road go approximately 459 feet. Take the first right onto Middle Road go approximately 0.5 miles, and the Project site will be on the south side of Middle Road.

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

The following is the property information for which an easement has not yet been obtained to construct the project; an easement will be obtained prior to the start of construction.

ABC Chemicals Inc.  
DBA\ Millennium Inorganic Chemicals

20 Wight Ave.  
Hunt Valley, MD 21030

**4906-11-01 (C): Technical Features of the Project**

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

The new transmission line tap will be designed and constructed for 138 kV operation. The transmission line tap has the following characteristics:

Voltage:	138 kV
Conductor:	795 kcmil 26/7 ACSR
Ground Wire:	7#8 Alumoweld
Insulators:	Polymer Horizontal Post
Structure types:	Exhibit No. 3 – Tangent Structure Exhibit No. 4 – Switch Structure Exhibit No. 5 – Existing Tap Structure

The proposed project is located within the existing 100 foot right-of-way of the Ashtabula – Pittsconn Docks 138 kV Transmission Line, and all new rights-of-way to be obtained are located on property owned by the customer requesting the Project. Because the project is located on customer property and is being installed at the customer's request, the Applicants expect that there will be no issues in obtaining the rights-of-way from the customer that are necessary to support the Project.

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

The following table itemizes the line loading of the transmission line tap being installed in the proposed Project. The normal line loading of 71.1 amps and emergency line loading of 71.1 amps is based on the maximum load to be served to the customer owned substation. The winter rating is based on the continuous maximum conductor ratings (MCR) of the circuits for 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
Ashtabula-Pittsconn Docks 138 kV Transmission Line Tap to Millennium Inorganic Chemical	71.1	71.1	1318

The following EMF calculations were performed using 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 circuits. The model utilizes the normal, emergency, and winter rating of the tap.

EMF CALCULATIONS		Electric Field kV/meter	Magnetic Field mGauss
Normal Loading	Under Lowest Conductors	0.50	4.39
	At Right-of-Way Edges	0.15	3.35
Emergency Loading	Under Lowest Conductors	0.50	4.39
	At Right-of-Way Edges	0.15	3.35
Winter Rating	Under Lowest Conductors	0.50	81.47
	At Right-of-Way Edges	0.15	47.80

#### **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 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. These fields are thought to be too weak to break molecules or chemical bonds in cells. Extensive research has been conducted over the past three decades to determine whether EMFs are associated with 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 Institutes 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 is 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/emfrapid/home.htm>



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

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

Account	Cost
350 Land Rights, Engineering, Ect.	\$ 110,000
355 Poles and Fixtures	\$ 8,000
356 Overhead Conductors & Devices	\$ 60,000
<u>Removal</u>	<u>\$ 0</u>
Total	\$ 178,000

**4906-11-01 (D): Socioeconomic Data**

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

The Project area is located in an industrial area. Neighboring land use in the area of the proposed Project includes some residential and industrial. Based on the U.S. Bureau of Census estimates, the 2010 population of the Ashtabula Township was 20,941. The 2010 population of Ashtabula County, Ohio was estimated at 101,497.

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

The placement of the new structures will not impact agricultural land use. There will be no structures in agricultural land.

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

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

**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 the Ashtabula Township and Ashtabula County, Ohio.

**Ashtabula County**

The Honorable Peggy A. Carlo  
President, Ashtabula County Commissioner  
25 West Jefferson Street  
Jefferson, OH 44047

Mr. Timothy T. Martin, P.E., P.S.  
Ashtabula County Engineer  
186 East Satin Street  
Jefferson, OH 44047

The Honorable Joe Moroski  
Ashtabula County Commissioner  
25 West Jefferson Street  
Jefferson, OH 44047

Mr. Albert J. Dispenza Jr.  
Ashtabula County Planning Commission  
25 West Jefferson Street  
Jefferson, OH 44047

The Honorable Daniel R. Claypool  
Ashtabula County Commissioner  
25 West Jefferson Street  
Jefferson, OH 44047

Ms. Lisa Hawkins  
Clerk of Commissioners, Ashtabula County  
25 West Jefferson Street.  
Jefferson, OH 44047

**Ashtabula Township**

The Honorable Joseph J. Pete  
Ashtabula Township Trustee,  
Trustee Chairman  
2718 North Ridge Road East  
Ashtabula, Ohio 44004

The Honorable Bambi Paulchel  
Ashtabula Township Trustee  
2718 North Ridge Road East  
Ashtabula, Ohio 44004

The Honorable Stephen J. McClure  
Ashtabula Township Trustee,  
Trustee Vice-Chairman  
2718 North Ridge Road East  
Ashtabula, Ohio 44004

Mr. Robert S. Dille  
Ashtabula Township,  
Fiscal Officer  
2718 North Ridge Road East  
Ashtabula, Ohio 44004

Copies of the transmittal letters to these officials have been included with the transmittal letter submitting this Letter of Notification to the Ohio Power Siting Board.

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

The Cleveland Electric Illuminating Company External Affairs Manager 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 on the proposed transmission line Project.

**4906-11-01 (E): Environmental Data**

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

A written request was submitted via fax to the Ohio Department of Natural Resources (ODNR) on November 16, 2011 to research the presence of any endangered, threatened, or rare species within the Project area. The ODNR's response of November 16, 2011, attached as Exhibit 6, indicated that they have no records of rare or endangered species within one half mile of the identified Project area.

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

A visual assessment of the Project area did not identify areas of ecological concern in the immediate vicinity of the Project.

**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 NESC, as adopted by the PUCO, and will meet all applicable safety standards established by OSHA.

# EXHIBIT 1

Project Area

Orig Date: 1970  
 Quad Series: 7.5'  
 Paper Source: Topographic 1:24,000  
 Quad Order ID: 41080-H7  
 Coverage: Ashtabula, OH  
 Vendor: USGS

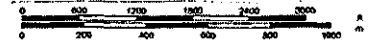
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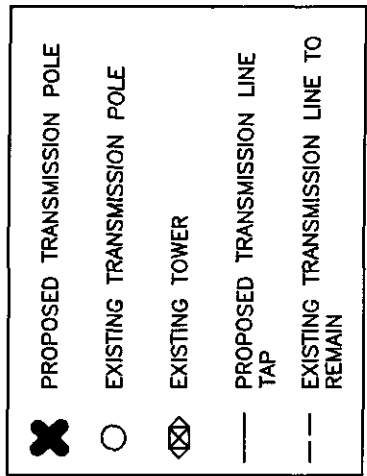
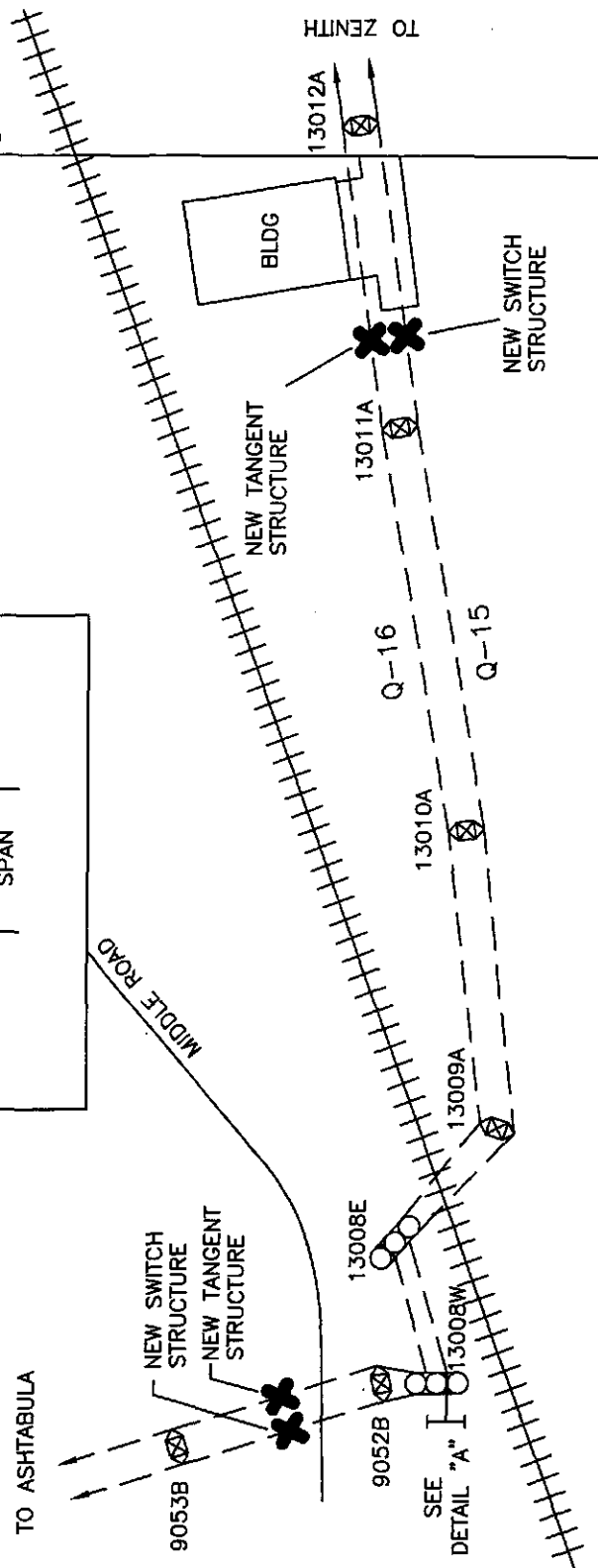
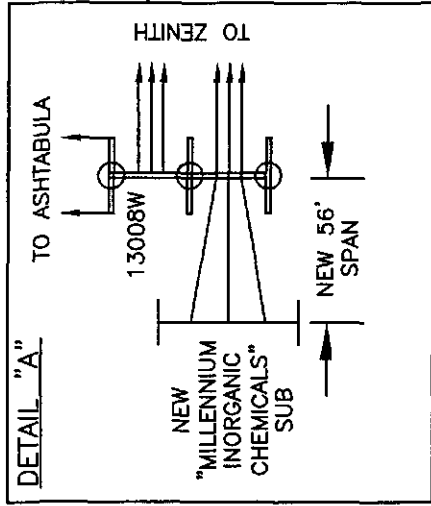
Scale 1 : 24,000



1" = 2,000.0 ft Data Zoom 14-0



CITY OF ASHTABULA  
ASHTABULA CO.  
STATE OF OHIO



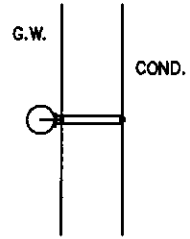
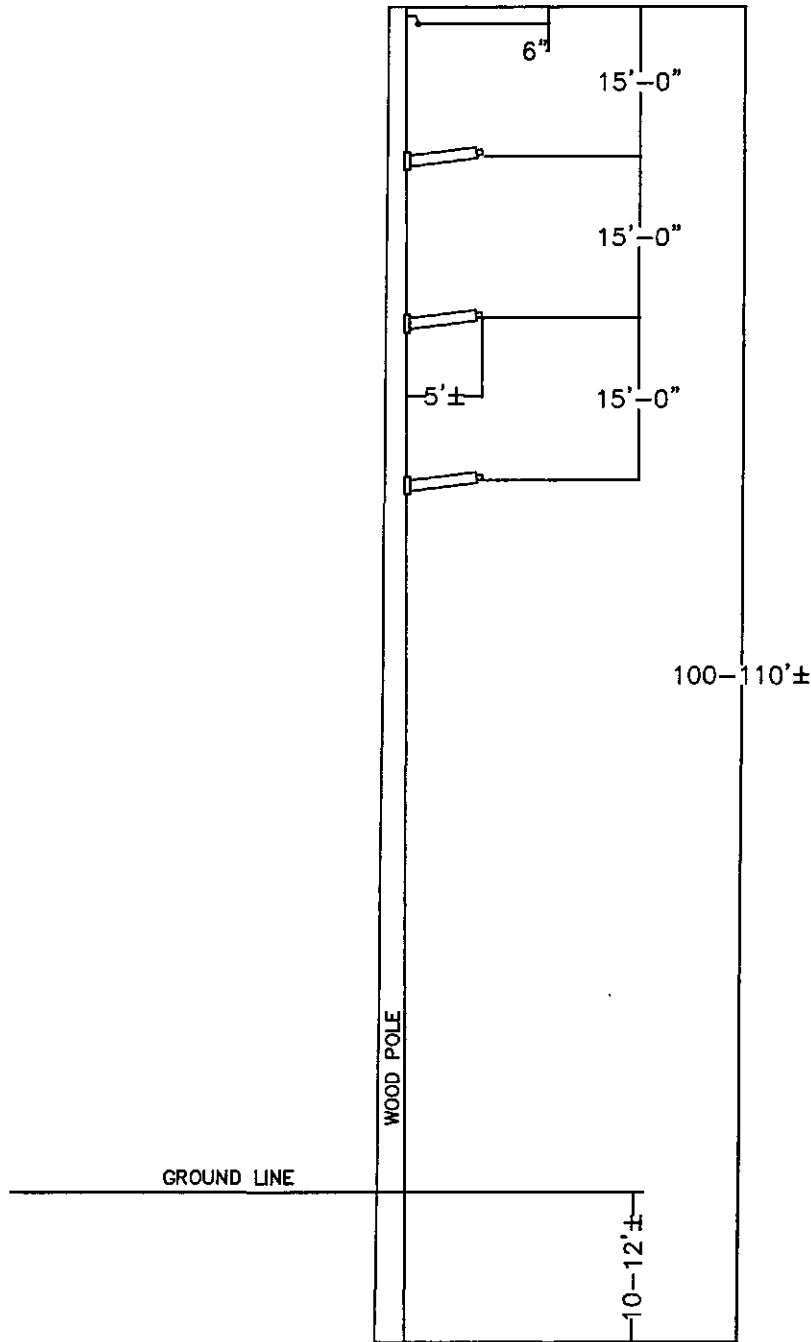
**The Illuminating Company**  
A FirstEnergy Company

ASHTABULA-PITTSBURGH DOCKS 138 kV  
TRANSMISSION LINE TAP TO MILLENNIUM  
INORGANIC CHEMICALS

# PROJECT LAYOUT

## EXHIBIT 2

A A

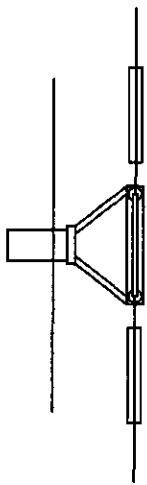


**the Illuminating Company**  
A FirstEnergy Company

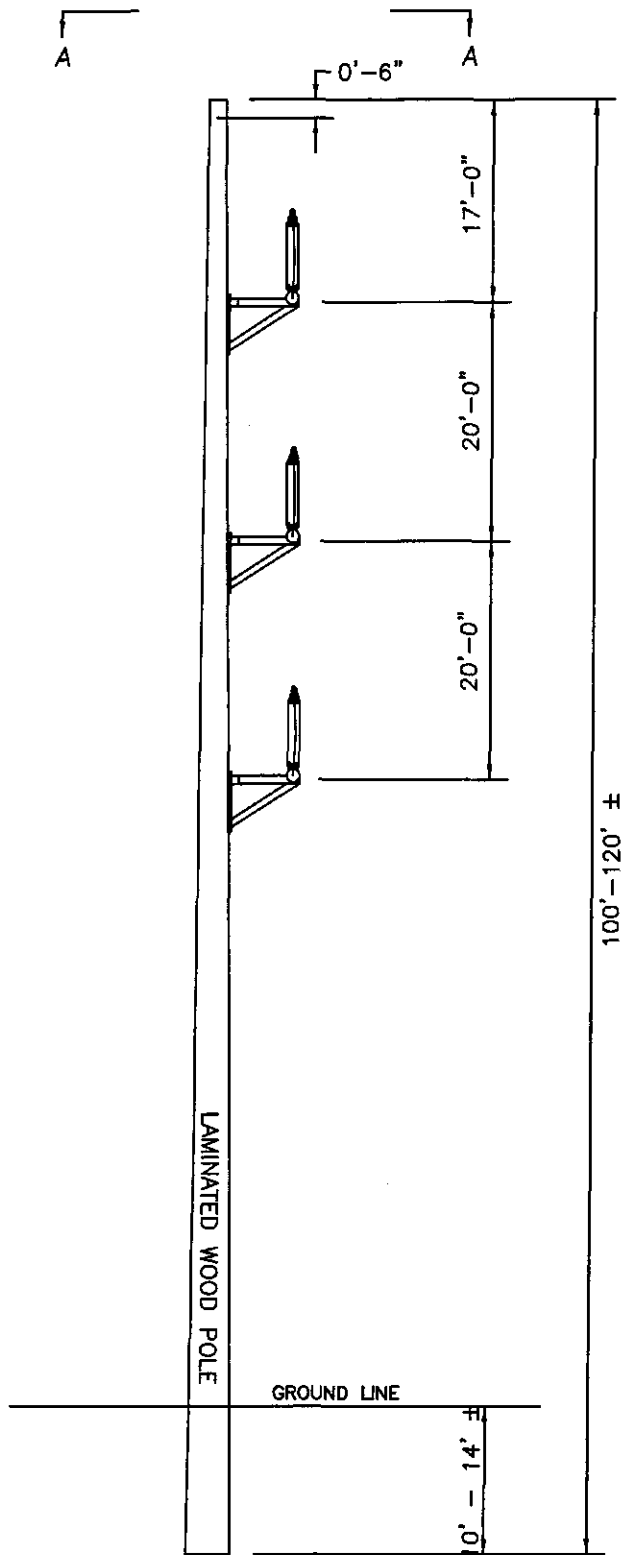
ASHTABULA-PITTSCONN DOCKS 138 kV  
TRANSMISSION LINE TAP TO MILLENNIUM  
INORGANIC CHEMICALS

SINGLE CIRCUIT  
TANGENT STRUCTURE

EXHIBIT 3



SECTION A-A

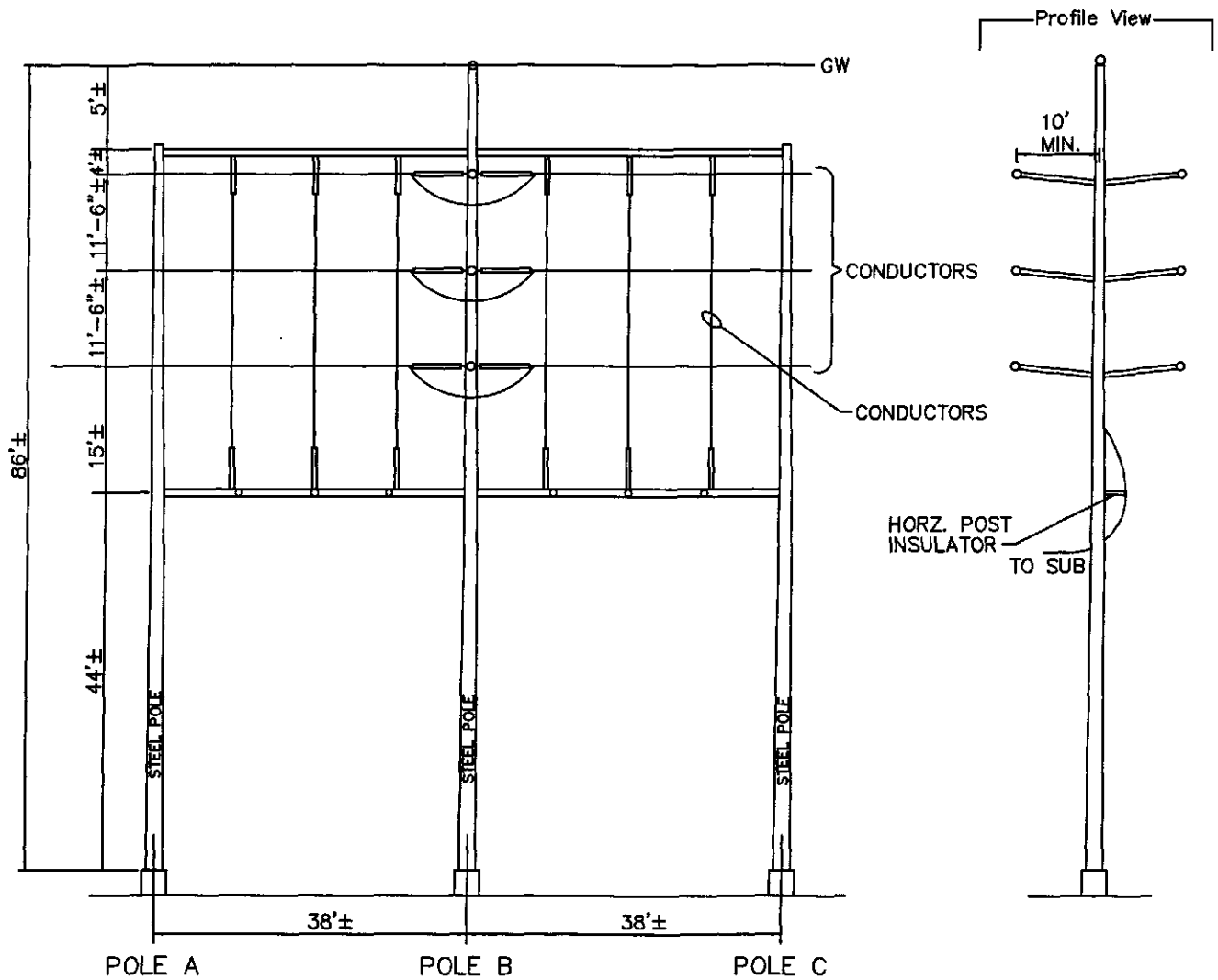
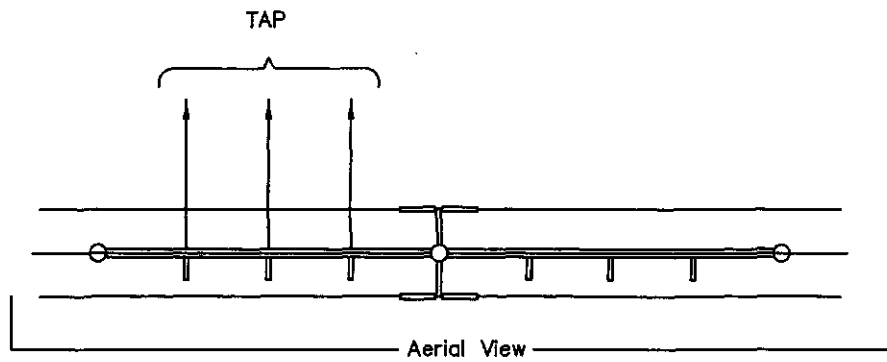


**the Illuminating Company**  
A FisEnergy Company

ASHTABULA-PITTSCONN DOCKS 138 kV  
 TRANSMISSION LINE TAP TO MILLENNIUM  
 INORGANIC CHEMICALS

SINGLE CIRCUIT  
 SWITCH STRUCTURE

EXHIBIT 4



**the Illuminating Company**  
A FirstEnergy Company

ASHTABULA-PITTSCONN DOCKS 138 kV  
TRANSMISSION LINE TAP TO MILLENNIUM  
INORGANIC CHEMICALS

EXISTING TAP STRUCTURE

EXHIBIT 5





# Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

## EXHIBIT 6

Ohio Division of Wildlife  
David B. Lane, Chief  
2045 Morse Rd., Bldg. G  
Columbus, OH 43229-6693  
Phone: (614) 265-6300

November 16, 2011

Travis Turner  
First Energy Service Co.  
5001 NASA Blvd.  
Fairmont, WV 26554

Dear Mr. Turner:

After reviewing the Biodiversity Database, I find the Division of Wildlife has no records of rare or endangered species in the Millennium Inorganic Chemicals transmission line tap project area, including a one mile radius, at 2700 Middle Rd., in Ashtabula Township, Ashtabula County, Ohio, and on the Ashtabula North Quad. 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, parks or forests or other protected natural areas within a one mile radius of the project area.

Our inventory program has not completely surveyed Ohio 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. Although we inventory all types of plant communities, we only maintain records on the highest quality areas.

Please contact me at 614-265-6818 if I can be of further assistance.

Sincerely,

Debbie Woischke, Ecological Analyst  
Ohio Biodiversity Database Program