AMERICAN TRANSMISSION SYSTEMS, INCORPORATED A SUBSIDIARY OF FIRSTENERGY CORP.

LETTER OF NOTIFICATION

LIME CITY SUBSTATION CAPACITOR BANK ADDITION PROJECT

OPSB CASE NO.: 11-<u>5836</u>-EL-BLN

November 29, 2011

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

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LETTER OF NOTIFICATION LIME CITY SUBSTATION CAPACITOR BANK ADDITION PROJECT

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): Need Statement

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

Name of Project:

Lime City Substation Capacitor Bank Addition 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"), a FirstEnergy Corp. subsidiary, is proposing to install a capacitor bank addition at the existing Lime City Substation. To connect the proposed capacitor bank addition to the existing Lime City Substation, two (2) wood pole structures will be installed. Two (2) additional structures are proposed to be installed in order to hang static wires over the proposed capacitor bank addition.

The Project is located in the Perrysburg Township, Wood County, Ohio. The new intermediate structure will be owned and operated by ATSI.

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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 project defined by Item (4) (a) of the Application Requirement Matrix for Electric Power Transmission Lines in Appendix A of 4906-1-01 of the Ohio Administrative Code. Appendix A provides:

- (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 adds a total of four (4) structures within the existing property of Lime City Substation.

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

During a NERC category B contingency, the existing transmission line delivers voltage at 89.6% of the nominal voltage at the 138 kV bus at Walbridge Coatings Substation. The FirstEnergy planning criteria requires that the voltage does not drop below 90% for a 138 kV radial feed. Separately, during Summer 2011, the voltage level at the Lime City Substation was 94.8%. FirstEnergy planning criteria requires the voltage does not drop below 95% at substations that are supplied with 138 kV. After the project is complete, the voltage at Walbridge Coatings Substation will be 94.8%; and 98.4% at Lime City Substation, which satisfies the FirstEnergy planning criteria.

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. This map was submitted to the PUCO in Case No. 11-1435-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 Lime City Substation. The project area is located approximately 4 ¼ inches (11 by 17 inch printed version) from the left edge of the map box and 3 ¼ inches (11 by 17 inch printed version) from the top of the map box. The general location of the Project is shown on Exhibit 1. The general layout of the Project is shown in Exhibit 2.

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

One alternative considered was to install a capacitor bank at Levis Park Substation, but the placement there would not supply the needed voltage support. Other alternatives included building new transmission lines in the area. These options were found to be unnecessary or insufficient at this time.

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

Construction on the project is expected to begin as early as February 1, 2012 and be completed by June 1, 2012.

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

Exhibit No. 1 depicts the General Project Location. To locate and view the project site from the Columbus, Ohio area, travel north on OH-315 approximately 22 miles. Turn left onto US-23 N/Columbus Pike and follow US-23 N for approximately 48 miles. Take a slight right onto US-23 N and follow for approximately 7.5 miles. Continue onto OH-15 W for approximately 17 miles. Take the I-75N/OH-15 N exit towards Toledo and then merge onto I-75 N/OH-15 W and continue to follow I-75 N for approximately 36.5 miles. Take exit 193 for US-20/US-23 toward Fremont/Perrysburg for approximately 0.5 miles. Turn right onto US-20 E/US-23 S/Fremont Pike and follow for approximately 2 miles. Turn left onto Lime City Road. The existing Lime City Substation is located adjacent to the project location and is located at 26410 Lime City Rd., Perrysburg, OH 43551.

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

The Project will be located on existing right of way and property owned by Toledo Edison, a FirstEnergy Corp. subsidiary.

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

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

The Transmission Line will have the following characteristics:

Voltage: 138 kV

Conductors: 336.4 kcmil 26/7 ACSR

Static wire: 3#6 Alumoweld

Insulators: 138 kV Polymer Horizontal Post Insulators

New Structures: Exhibit 3 - Single Tap Structure
Exhibit 4 - Single Tap Structure

Exhibit 5 - Single Static Wire Structure

ated on the existing transmission line right-of-way

The proposed Project will be located on the existing transmission line right-of-way with no new right-of-way to be acquired.

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

The following table itemizes the tap of the Chrysler-Levis Park 138 kV transmission line to the existing Lime City Substation. The normal line loading represents FirstEnergy's peak system load for the transmission lines. The emergency line loading represent the maximum line loading under contingency operation. The winter rating is based on the continuous maximum conductor ratings (MCR) of the circuits 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 Emergency Loading Amps Amps		Winter Rating Amps	
Chrysler-Levis Park 138 kV Transmission Line	105	146	754	

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 circuit.

EMF CALCULATIONS		Electric Field kV/meter	Magnet Field mGauss	
Normal	Under Lowest Conductors	0.84	7.3	
Loading	At Right-of-Way Edges	.19	3.26	
Emergency Loading	Under Lowest Conductors	0.84	10.17	
	At Right-of-Way Edges	.19	4.54	
Winter Rating	Under Lowest Conductors	0.84	52.49	
	At Right-of-Way Edges	.19	23.46	

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 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/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.	\$	33,000
355	Poles and Fixtures	\$	40,000
<u>356</u>	Overhead Conductors & Devices	\$	<u>15,000</u>
	Total	\$	88,000

4906-11-01 D: Socioeconomic Data

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

The proposed project is located in the Perrysburg Township, Wood County, Ohio. Land use in the area is dominated by agricultural production.

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

Agricultural and commercial land exists adjacent to the area of the project. Because overhead electric transmission lines largely pass above agricultural land use, they are generally compatible with agricultural land use. All proposed structures will be on Toledo Edison property. No significant changes or impacts to the agricultural land use are anticipated.

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

The existing transmission line is located in an existing transmission line corridor in close proximity to preexisting transmission line structures. Given the nature of the project, it is unlikely that any archaeological or cultural resources would be disturbed by the limited nature of reconductoring the transmission line.

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. The search of the OHPO database 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.

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 Perrysburg Township, Wood County, Ohio.

Perrysburg Township

Mr. Gary R. Britten
Perrysburg Township Trustee, Chair
10960 Roachton Rd.
Perrysburg, OH 43551

Mr. Robert P. Mack Perrysburg Township Trustee, Vice Chair 30195 Morningside Dr. Perrysburg, OH 43551 Mr. Craig A. LaHote Perrysburg Township Trustee 9742 Roachton Rd Perrysburg, OH 43551

Ms. Shirley A. Haar Perrysburg Township Fiscal Officer 27696 Oregon Rd. Perrysburg, Ohio 43551

Wood County

The Honorable James F. Carter President, Wood County Commissioners One Courthouse Sq., Fl. 4 Bowling Green, Ohio 43402

The Honorable Tim W. Brown Vice President, Wood County Commissioners One Courthouse Sq., Fl. 4 Bowling Green, Ohio 43402 The Honorable Alvin L. Perkins Wood County Commissioner One Courthouse Sq., Fl. 4 Bowling Green, Ohio 43402

Mr. Raymond Huber, P.E., P.S. Lucas County Engineer One Courthouse Sq., Fl. 3 Bowling Green, Ohio 43402

Mr. Dave Steiner Director, Wood County Planning Commission One Courthouse Square, Floor 5 Bowling Green, OH 43402

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

Toledo Edison's Manager of External Affairs will advise local officials of features and the status of the proposed Transmission Line 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 other 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

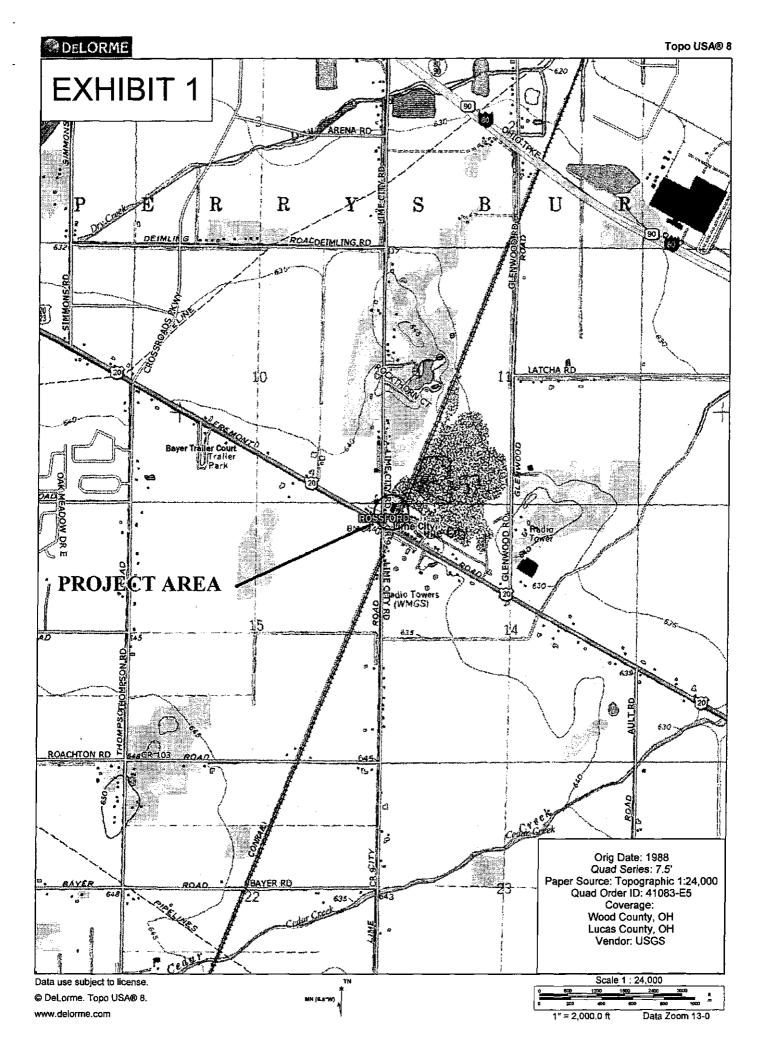
As part of our investigation, a request was submitted to the Ohio Department of Natural Resources (ODNR) on November 10, 2011 to research the presence of any endangered, threatened, or rare species within the project area. The ODNR's October 14, 2011 response, attached as Exhibit No. 6, indicates that the ODNR has no record of rare or endangered species in the Project area.

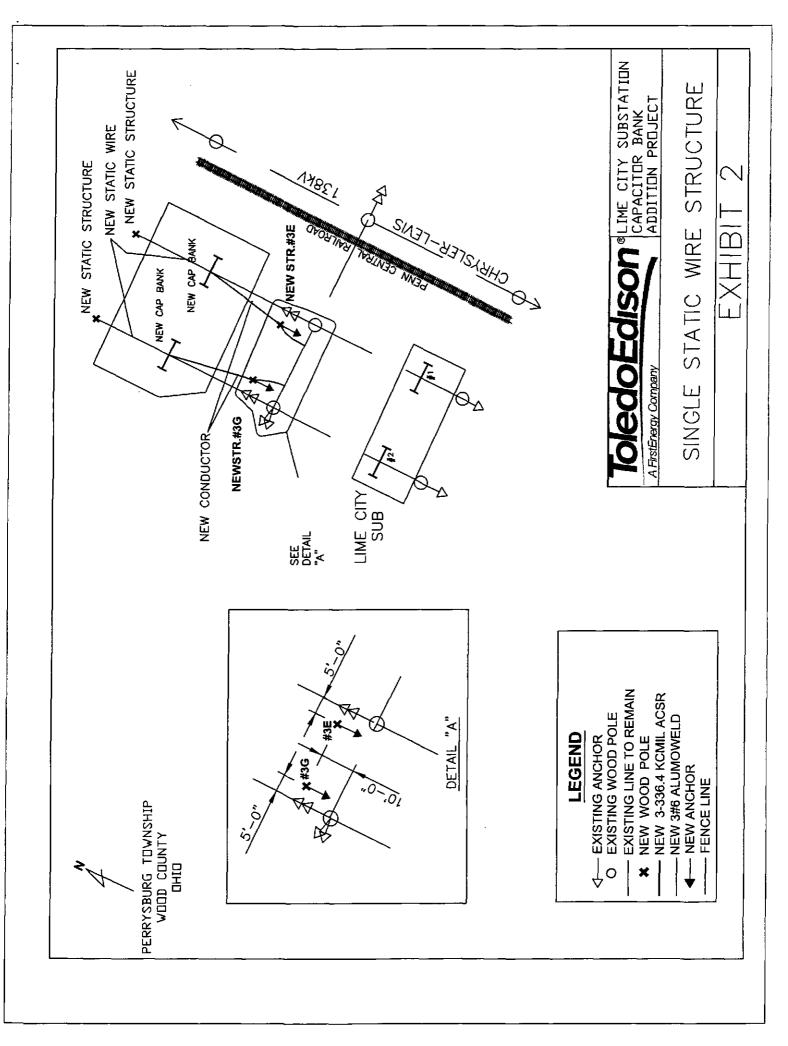
4906-11-01 (E) (2): Areas of Ecological Concern

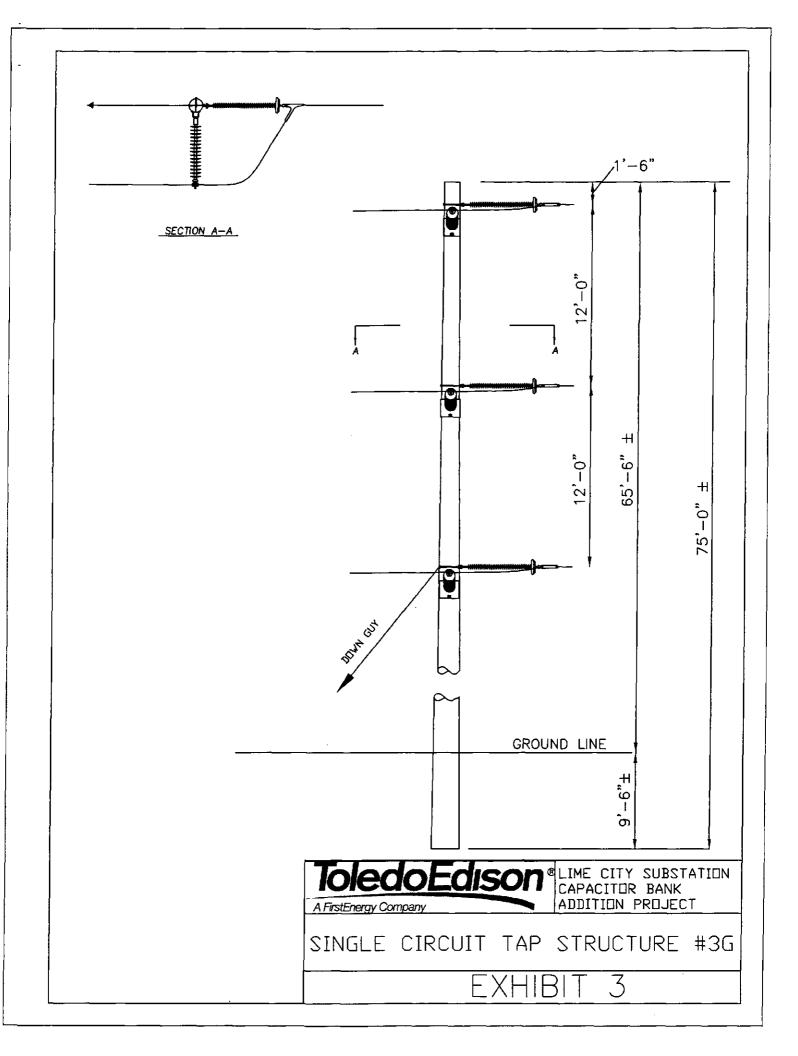
The new transmission line structures are located in an existing transmission line corridor in close proximity to existing transmission line structures. Given the nature of the project, and its close proximity to existing similar construction, it is unlikely that any areas of ecological concern will be disturbed by the limited nature of installing the new structures.

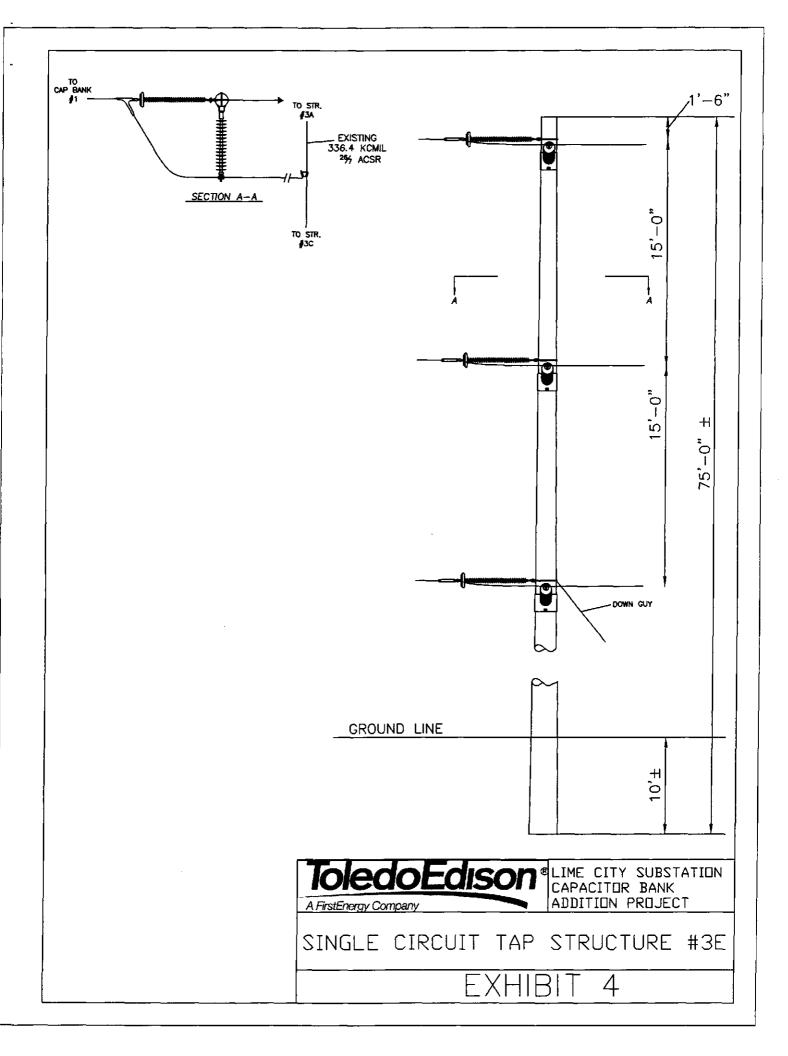
4906-11-01 (E) (3): Additional Information

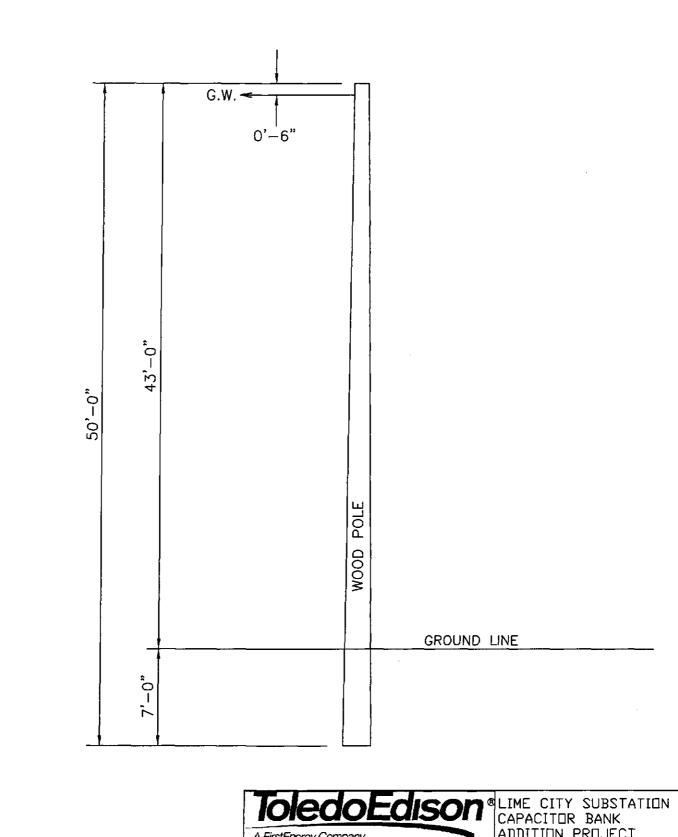
Construction and operation of the proposed Project will be in accordance with the requirements specified in the latest revision of the NESC, as adopted by the PUCO, and all applicable safety standards established by OSHA.











OECISON LIME CITY SUBSTATION CAPACITOR BANK ADDITION PROJECT

SINGLE STATIC WIRE STRUCTURE

Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

DAVID MUSTINE, DIRECTOR

Ohio Division of Wildlife

Office of the Chief 2045 Morse Rd., Bidg. G Columbus, OH 43229-6693 Phone: (614) 265-6300

November 14, 2011

Jessica Thacker First Energy Services Co. 76 S. Main St., A-GO-3 Akron, OH 44308

Dear Ms. Thacker:

After reviewing our Biodiversity Database, I find the Division of Wildlife has no records of rare or endangered species in the Lime City New Capacitor Bank project area, including a one mile radius, at 26410 Lime City Rd. in Perrysburg Township, Wood County, and on the Rossford 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

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