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FirstEnergy

76 South Main Street
Akron, Ohio 44308

FILE

1-800-646-0400

October 24, 2014

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

Construction Notice
Lakeshore-Lakeshore SVC 138 kV Transmission Line Project
Case No. 14-1512-EL-BNR

Dear Ms. McNeal:

In accordance with Administrative Code Rule 4906-1-11, American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy Company, transmits one (1) original and eleven (11) copies of the enclosed Construction Notice for the above captioned Project. In this Project, ATSI is proposing to construct a new 138 kilovolt ("kV") transmission line connecting the existing Lakeshore Substation with a new Static Var Compensator ("SVC") facility, a length of approximately 450 feet, on existing Lakeshore Power Plant property. The Project will be located in the City of Cleveland, Ohio.

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:

Lakeshore-Lakeshore SVC 138 kV Transmission Line Project

c) Location of proposed facilities:

The Project is located on existing Lakeshore Power Plant property owned by the Cleveland Electric Illuminating Company, a FirstEnergy company, at 6800 South Marginal Road within Cleveland, Ohio.

d) Description of proposed facilities:

The Project involves construction of approximately 450 feet of new 138 kV transmission line to connect the existing Lakeshore Substation to the new Lakeshore SVC facility.

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2014 OCT 27 PM 2:16
PUCO

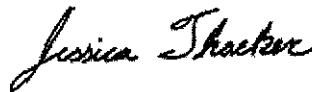
e) Applicant's representative:

Jessica Thacker
Supervisor, Transmission Siting
Energy Delivery Transmission and Substation Design
FirstEnergy Service Company
76 South Main Street
Akron, OH 44308-1890

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 the attached Exhibit 1. Copies of the transmittal letters addressed to the local government representatives of the City of Cleveland and Cuyahoga County are enclosed for your file.

After docketing this filing, please return one time-stamped copy of the Construction Notice 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) 384-5955.

Sincerely,



Jessica Thacker
Supervisor, Transmission Siting
Energy Delivery Transmission and Substation Design
FirstEnergy Service Company

Attachments

October 24, 2014

The Honorable Frank G. Jackson, Mayor
City of Cleveland
601 Lakeside Avenue
Cleveland, OH 44114

Construction Notice
Lakeshore-Lakeshore SVC 138 kV Transmission Line Project
Case No. 14-1512-EL-BNR

RECEIVED-DOCKETING DIV
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Dear Mayor Jackson,

American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to construct a new 138 kV transmission line to connect the new Lakeshore Static Var Compensator ("SVC") facility to the existing Lakeshore Substation. The new transmission line will be approximately 450 feet long and will be located entirely on Lakeshore Power Plant property owned by the Cleveland Electric Illuminating Company, also a FirstEnergy company. The Project is located in the City of Cleveland.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this Project falls within the Ohio Power Siting Board's requirements for a Construction Notice ("CN"). Therefore, in compliance with OAC 4906-11-01, we have prepared and filed the attached CN with the OPSB for their review and approval. The CN 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) 384-5955.

Sincerely,



Jessica Thacker
Supervisor, Transmission Siting
Energy Delivery
Transmission & Substation Design
FirstEnergy Service Company

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2014 OCT 27 PM 2:17 October 24, 2014

1-800-646-0400

PUCO

Kevin Keeley,
City Council President
City of Cleveland
601 Lakeside Avenue
Cleveland, OH 44114

Construction Notice
Lakeshore-Lakeshore SVC 138 kV Transmission Line Project
Case No. 14-1512-EL-BNR

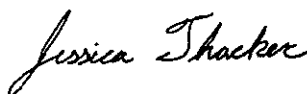
Dear Mr. Keeley,

American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to construct a new 138 kV transmission line to connect the new Lakeshore Static Var Compensator ("SVC") facility to the existing Lakeshore Substation. The new transmission line will be approximately 450 feet long and will be located entirely on Lakeshore Power Plant property owned by the Cleveland Electric Illuminating Company, also a FirstEnergy company. The Project is located in the City of Cleveland.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this transmission line Project falls within the Ohio Power Siting Board's requirements for a Construction Notice ("CN"). Therefore, in compliance with OAC 4906-11-01, we have prepared and filed the attached CN with the OPSB for their review and approval. The CN 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) 384-5955.

Sincerely,



Jessica Thacker
Supervisor, Transmission Siting
Energy Delivery
Transmission & Substation Design
FirstEnergy Service Company

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October 24, 2014

PUCO

Jeffrey Johnson,
City Councilman Ward 10
City of Cleveland
601 Lakeside Avenue
Cleveland, OH 44114

Construction Notice
Lakeshore-Lakeshore SVC 138 kV Transmission Line Project
Case No. 14-1512-EL-BNR

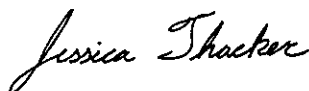
Dear Mr. Johnson,

American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to construct a new 138 kV transmission line to connect the new Lakeshore Static Var Compensator ("SVC") facility to the existing Lakeshore Substation. The new transmission line will be approximately 450 feet long and will be located entirely on Lakeshore Power Plant property owned by the Cleveland Electric Illuminating Company, also a FirstEnergy company. The Project is located in the City of Cleveland.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this transmission line Project falls within the Ohio Power Siting Board's requirements for a Construction Notice ("CN"). Therefore, in compliance with OAC 4906-11-01, we have prepared and filed the attached CN with the OPSB for their review and approval. The CN 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) 384-5955.

Sincerely,



Jessica Thacker
Supervisor, Transmission Siting
Energy Delivery
Transmission & Substation Design
FirstEnergy Service Company

Attachment

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2014 OCT 27 PM 2:17

1-800-646-0400

October 24, 2014

Mr. Edward W. Rybka, Director
Department of Building and Housing
City of Cleveland
601 Lakeside Avenue
Cleveland, OH 44114

PUCO

Construction Notice
Lakeshore-Lakeshore SVC 138 kV Transmission Line Project
Case No. 14-1512-EL-BNR

Dear Mr. Rybka,

American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to construct a new 138 kV transmission line to connect the new Lakeshore Static Var Compensator ("SVC") to the existing Lakeshore Substation. The new transmission line will be approximately 450 feet long and will be located entirely on Lakeshore Power Plant property owned by the Cleveland Electric Illuminating Company, also a FirstEnergy company. The Project is located in the City of Cleveland.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this transmission line Project falls within the Ohio Power Siting Board's requirements for a Construction Notice ("CN"). Therefore, in compliance with OAC 4906-11-01, we have prepared and filed the attached CN with the OPSB for their review and approval. The CN contains a description of the Project, and is provided for your information.

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Supervisor, Transmission Siting
Energy Delivery
Transmission & Substation Design
FirstEnergy Service Company

Attachment

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1-800-646-0400

October 24, 2014

Mr. Robert N. Brown, Director
Planning Commission
City of Cleveland
601 Lakeside Avenue
Cleveland, OH 44114

PUCO

Construction Notice
Lakeshore-Lakeshore SVC 138 kV Transmission Line Project
Case No. 14-1512-EL-BNR

Dear Mr. Brown,

American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to construct a new 138 kV transmission line to connect the new Lakeshore Static Var Compensator ("SVC") to the existing Lakeshore Substation. The new transmission line will be approximately 450 feet long and will be located entirely on Lakeshore Power Plant property owned by the Cleveland Electric Illuminating Company, also a FirstEnergy company. The Project is located in the City of Cleveland.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this transmission line Project falls within the Ohio Power Siting Board's requirements for a Construction Notice ("CN"). Therefore, in compliance with OAC 4906-11-01, we have prepared and filed the attached CN with the OPSB for their review and approval. The CN contains a description of the Project, and is provided for your information.

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Jessica Thacker
Supervisor, Transmission Siting
Energy Delivery
Transmission & Substation Design
FirstEnergy Service Company

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1-800-646-0400

October 24, 2014

Ed FitzGerald, County Executive
Cuyahoga County
301 West Lakeside Avenue, Suite 700
Cleveland, Ohio 44113

PUCO

Construction Notice
Lakeshore-Lakeshore SVC 138 kV Transmission Line Project
Case No. 14-1512-EL-BNR

Dear Mr. FitzGerald,

American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to construct a new 138 kV transmission line to connect the new Lakeshore Static Var Compensator ("SVC") to the existing Lakeshore Substation. The new transmission line will be approximately 450 feet long and will be located entirely on Lakeshore Power Plant property owned by the Cleveland Electric Illuminating Company, also a FirstEnergy company. The Project is located in the City of Cleveland.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this transmission line Project falls within the Ohio Power Siting Board's requirements for a Construction Notice ("CN"). Therefore, in compliance with OAC 4906-11-01, we have prepared and filed the attached CN with the OPSB for their review and approval. The CN 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) 384-5955.

Sincerely,



Jessica Thacker
Supervisor, Transmission Siting
Energy Delivery
Transmission & Substation Design
FirstEnergy Service Company

Attachment

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1-800-646-0400

October 24, 2014

Yvonne Conwell, Councilwoman
District 7, Cuyahoga County
2079 East 9th Street
Cleveland, Ohio 44115

PUCO

Construction Notice
Lakeshore-Lakeshore SVC 138 kV Transmission Line Project
Case No. 14-1512-EL-BNR

Dear Ms. Conwell,

American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to construct a new 138 kV transmission line to connect the new Lakeshore Static Var Compensator ("SVC") to the existing Lakeshore Substation. The new transmission line will be approximately 450 feet long and will be located entirely on Lakeshore Power Plant property owned by the Cleveland Electric Illuminating Company, also a FirstEnergy company. The Project is located in the City of Cleveland.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this transmission line Project falls within the Ohio Power Siting Board's requirements for a Construction Notice ("CN"). Therefore, in compliance with OAC 4906-11-01, we have prepared and filed the attached CN with the OPSB for their review and approval. The CN contains a description of the Project, and is provided for your information.

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Sincerely,



Jessica Thacker
Supervisor, Transmission Siting
Energy Delivery
Transmission & Substation Design
FirstEnergy Service Company

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RECEIVED-DOCKETING DIV

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1-800-646-0400

October 24, 2014

Glenn Coyne, FAICP, Executive Director
Cuyahoga County Planning Commission
2079 East 9th Street
Cleveland, Ohio 44115

PUCO

Construction Notice
Lakeshore-Lakeshore SVC 138 kV Transmission Line Project
Case No. 14-1512-EL-BNR

Dear Mr. Coyne,

American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to construct a new 138 kV transmission line to connect the new Lakeshore Static Var Compensator ("SVC") to the existing Lakeshore Substation. The new transmission line will be approximately 450 feet long and will be located entirely on Lakeshore Power Plant property owned by the Cleveland Electric Illuminating Company, also a FirstEnergy company. The Project is located in the City of Cleveland.

In accordance with Ohio Administrative Code ("OAC") Rule 4906-1-01, this transmission line Project falls within the Ohio Power Siting Board's requirements for a Construction Notice ("CN"). Therefore, in compliance with OAC 4906-11-01, we have prepared and filed the attached CN with the OPSB for their review and approval. The CN contains a description of the Project, and is provided for your information.

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Jessica Thacker
Supervisor, Transmission Siting
Energy Delivery
Transmission & Substation Design
FirstEnergy Service Company

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2014 OCT 27 PM 2:17
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**AMERICAN TRANSMISSION SYSTEMS, INCORPORATED
A FIRSTENERGY COMPANY**

CONSTRUCTION NOTICE

**LAKESHORE-LAKESHORE SVC 138 kV TRANSMISSION
LINE PROJECT**

OPSB CASE NO. 14-1512-EL-BNR

October 24, 2014

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

**CONSTRUCTION NOTICE
LAKESHORE-LAKESHORE SVC
138 kV TRANSMISSION LINE
PROJECT**

The following information is being provided in accordance with the procedures in Ohio Administrative Code Rule 4906-11-02: Construction Notice Requirements of the Rules of the Ohio Power Siting Board.

4906-11-02 (B): Information Requirements

4906-11-02 (B) (1): Name of the Project

Name of Project: Lakeshore-Lakeshore SVC 138 kV Transmission Line
Project ("Project").

4906-11-02 (B) (2) (a): Brief Description of Project

In this Project, American Transmission Systems, Incorporated ("ATSI"), a FirstEnergy company, is proposing to construct a new 138 kV transmission line to serve its new Lakeshore Static Var Compensator ("SVC") facility. The line would extend approximately 450 feet from the existing Lakeshore Substation to the SVC facility. The SVC facility is proposed to be constructed on the site of an existing coal storage area at the Lakeshore Power Plant in Cleveland, Cuyahoga County, Ohio. With the proposed closing of the Lakeshore Power Plant in 2015, new electrical equipment needs to be added to the transmission system in the area to stabilize the electric grid. The addition of an SVC to the existing substation will mitigate voltage fluctuations in the area. Exhibit 1 is a vicinity map for the Project, while Exhibit 2 illustrates the location of the 138 kV transmission line Project between the existing Lakeshore Substation and SVC facility. All activities will take place on the existing Lakeshore Power Plant property that is owned by the Cleveland Electric Illuminating Company, a FirstEnergy company, located at 6800 South Marginal Road, Cleveland, Ohio. The coordinates of the proposed Project are latitude 41°31'58" N, longitude 81°38'31" W.

4906-11-02 (B) (2) (b): Construction Notice Requirements

The Project meets the requirements for a Construction Notice because the Project is within the types of project defined by Item (1) of the Interim Application Requirement Matrix for Electric Power Transmission Lines in the Finding and Order issued on September 4, 2012, in Case No. 12-1981-GE-BRO, which modified Appendix A of Rule 4906-1-01 of the Ohio Administrative Code. This item states:

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

The proposed 138 kV Project is approximately 450 feet (0.09 mile) in length, thus meeting this criteria.

4906-11-02 (B) (3): Need for the Project

The Project is being constructed to maintain reliable electric service as a result of the shut-down of electric generating facilities in Ohio. The transmission system currently faces significant operating limitations including capacity shortage, the existence of thermal ratings constraints,¹ and low voltages on the electric transmission system. These issues will be exacerbated by the retirement of coal-fired generation around Lake Erie including the Lakeshore Power Plant. This Project, in conjunction with others identified and directed by PJM Interconnection ("PJM"), the regional transmission operator responsible for bulk electricity transmission, is designed to correct these operating limitations and to ensure reliable energy delivery. The Regional Transmission Expansion Plan ("RTEP") number for this project is b2459.

This Project would reinforce ATSI's Bulk Electric System ("BES") in the Akron, Cleveland, and Youngstown areas ("Project Study Area"). ATSI's 345 kV and 138 kV

¹ Exceeding thermal ratings results in wire overheating to the point that the electric system is damaged.

transmission systems in the Project Study Area currently face significant operating limitations, which include the existence of thermal constraints and low voltage conditions. Deactivation of generation in and around the Project Study Area will exacerbate voltage limitations, and will create additional thermal loading limitations on the 345 kV and 138 kV systems as additional power is transmitted into the Project Study Area to compensate for retired generation. This Project, in conjunction with others identified and directed by PJM, is designed to correct these operating limitations and to ensure reliable energy delivery in the Project Study Area.

Under normal conditions, the transmission system within the Project Study Area supplies power to more than 1,700,000 distribution and customer substations. The 345 kV and 138 kV transmission system within the Project Study Area was expanded over time to both accommodate growth in the Project Study Area, and to better integrate the Cleveland Electric Illuminating Company ("CEI"), Ohio Edison, and Penn Power systems into the larger interconnected transmission grid system. However, as currently configured, the transmission system relies on generating units located inside the load center to both meet local electrical demand and provide voltage stability through dynamic reactive power response. The amount of dynamic reactive power available in any area is defined as the difference between the actual reactive output of dynamic reactive devices (i.e. generating units, synchronous condensers, SVC, etc.) and the maximum capability of the dynamic reactive devices, which is commonly referred to as dynamic reactive reserve. When dynamic reactive reserve is exhausted, the transmission system becomes at risk for low voltage and voltage collapse.

The retirement of the majority of Cleveland Area coal-fired generating plants means that the transmission system within the Project Study Area must import more power from outside the local load center, and rely on some retired units being converted from generating units to synchronous condensers, to maintain an effective level of dynamic reactive power response.

In summary, the transmission system within Project Study Area has been evaluated using the PJM 2013 and 2015 Load Forecasts from the forecast report dated January 26, 2012 taking into account a series of generation unit retirements inside the Project Study Area. The evaluations demonstrate the transmission system will experience thermal overloads under various planning scenarios, including single and multiple contingency conditions (i.e. the loss of two or more facilities), upon the deactivation of these facilities without upgrades to the BES, including this Project.

4906-11-02 (B) (4): Construction Schedule

Construction of the Project is expected to begin as early as February 2, 2015, and is expected to be completed and placed in-service by June 1, 2015.

4906-11-02 (B) (5): Estimated Costs

The following is the estimated capital cost for the Project:

Estimated Cost	\$138,432
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4906-11-02 (B) (6): Operating Characteristics

The Project will have the following characteristics:

Voltage:	138 kV
Conductors:	795 kcmil 26/7 ACSR
Static wire:	7 #8 Alumoweld Shield Wire
Insulators:	Polymer
Structure Types:	Exhibit 3: Single circuit wood pole guyed deadend structures

4906-11-02 (B) (7): Area Map

Exhibit 1 depicts the general location of the Project. This exhibit provides a partial copy of the United States Geologic Survey, Cleveland North (Map ID 4667 II SW), Ohio Quad. To locate and view the Project site from Columbus, take I-71 north for 140 miles, then continue onto I-90 east for 3.4 miles. Keep left to stay on I-90 east for 2.1 miles and then take Exit 176 to merge onto East 72nd Street (State Route 283) for

0.2 miles. Turn right onto East 70th Street for 0.3 miles and Lakeshore Substation should be on the right.

4906-11-02 (B) (8): Properties List

The Project is located on existing property owned by Cleveland Electric Illuminating Company, a FirstEnergy company. No new right-of-way or easements for transmission structures are needed for the Project.

4906-11-02 (C): Documentation of Construction Notice Transmittal

This Construction Notice is being provided concurrently with filing to the following officials of the City of Cleveland and Cuyahoga County.

City of Cleveland

Frank G. Jackson, Mayor
601 Lakeside Avenue
Cleveland, Ohio 44114

Edward W. Rybka, Director
Department of Building and Housing
601 Lakeside Avenue
Cleveland, Ohio 44114

Kevin Keeley, City Council President
601 Lakeside Avenue
Cleveland, Ohio 44114

Mr. Robert N. Brown, Director
Planning Commission City of Cleveland
601 Lakeside Avenue
Cleveland, OH 44114

Jeffrey Johnson
City Councilman, Ward 10
601 Lakeside Avenue
Cleveland, Ohio 44114

Cuyahoga County

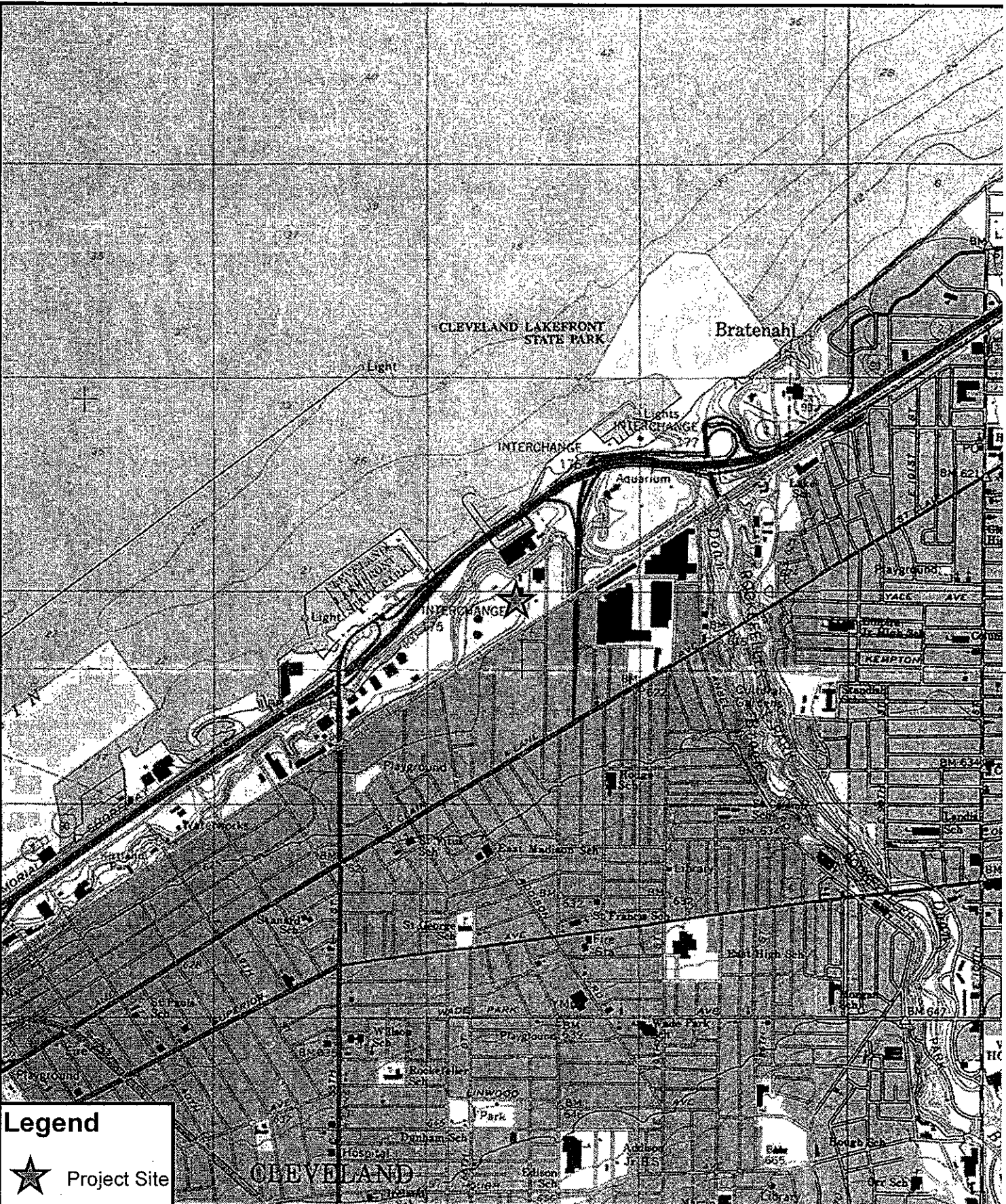
Ed FitzGerald, County Executive
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301 West Lakeside Avenue, Suite 700
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Glenn Coyne, FAICP, Executive Director
Cuyahoga County Planning Commission
2079 East 9th Street
Cleveland, Ohio 44115

Yvonne Conwell, Councilwoman
District 7, Cuyahoga County
2079 East 9th Street
Cleveland, Ohio 44115

Copies of the transmittal letters to these officials are included with this Construction Notice.

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Burns & McDonnell Path: \\vespn\Data\Projects\First Energy\78055 - IREP\GIS\Data\Files\ArcDocs\SVC_Lakeshore\SVC_Lake_Vicinity.mxd



Legend

★ Project Site

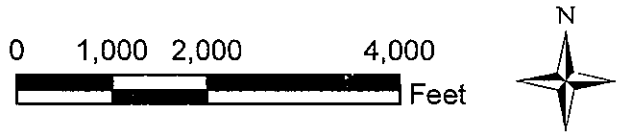
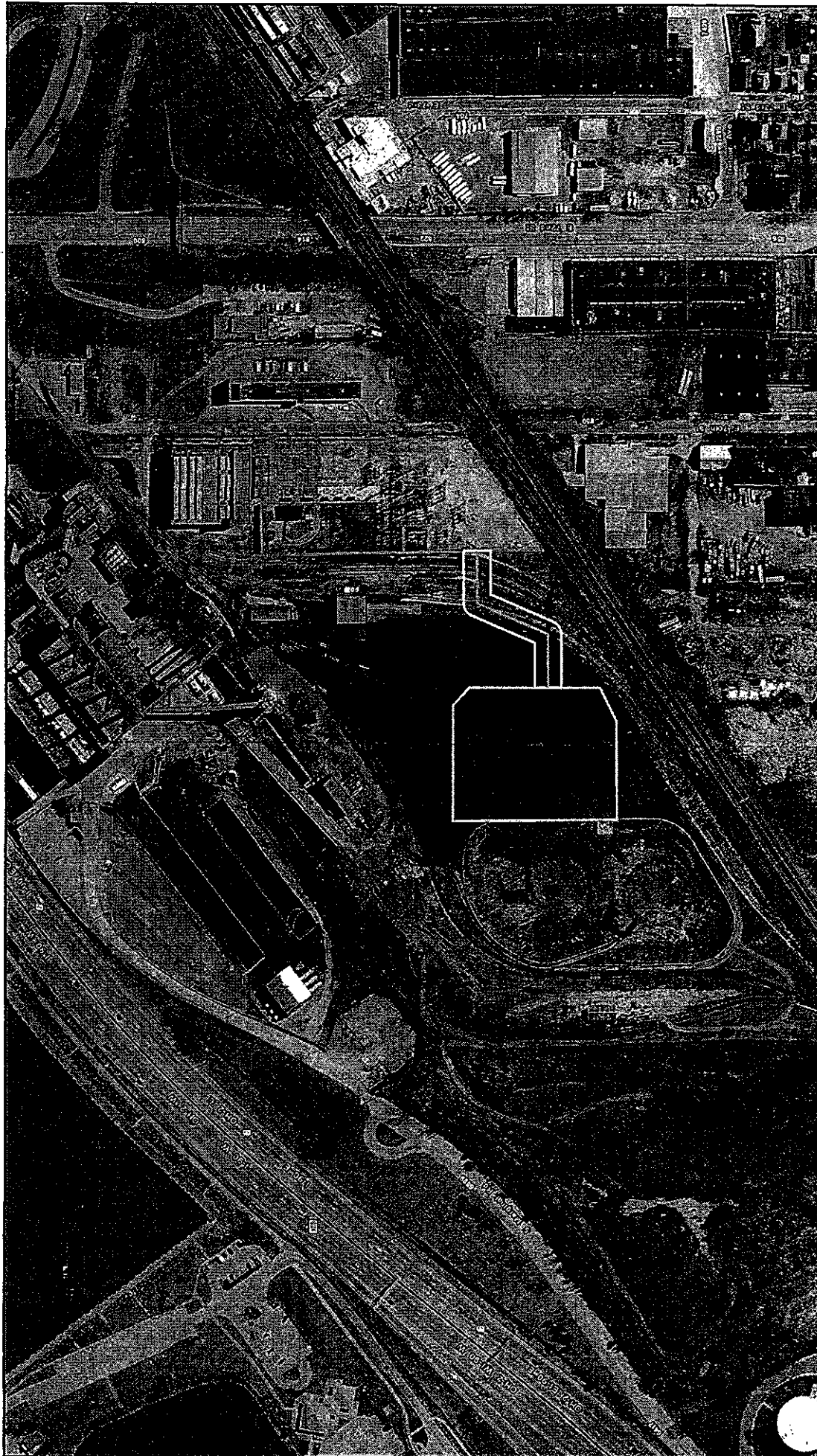


Exhibit 1
General Vicinity
Lakeshore - Lakeshore SVC 138kV
Transmission Line Project
ATSI
Cuyahoga County, Ohio



Legend

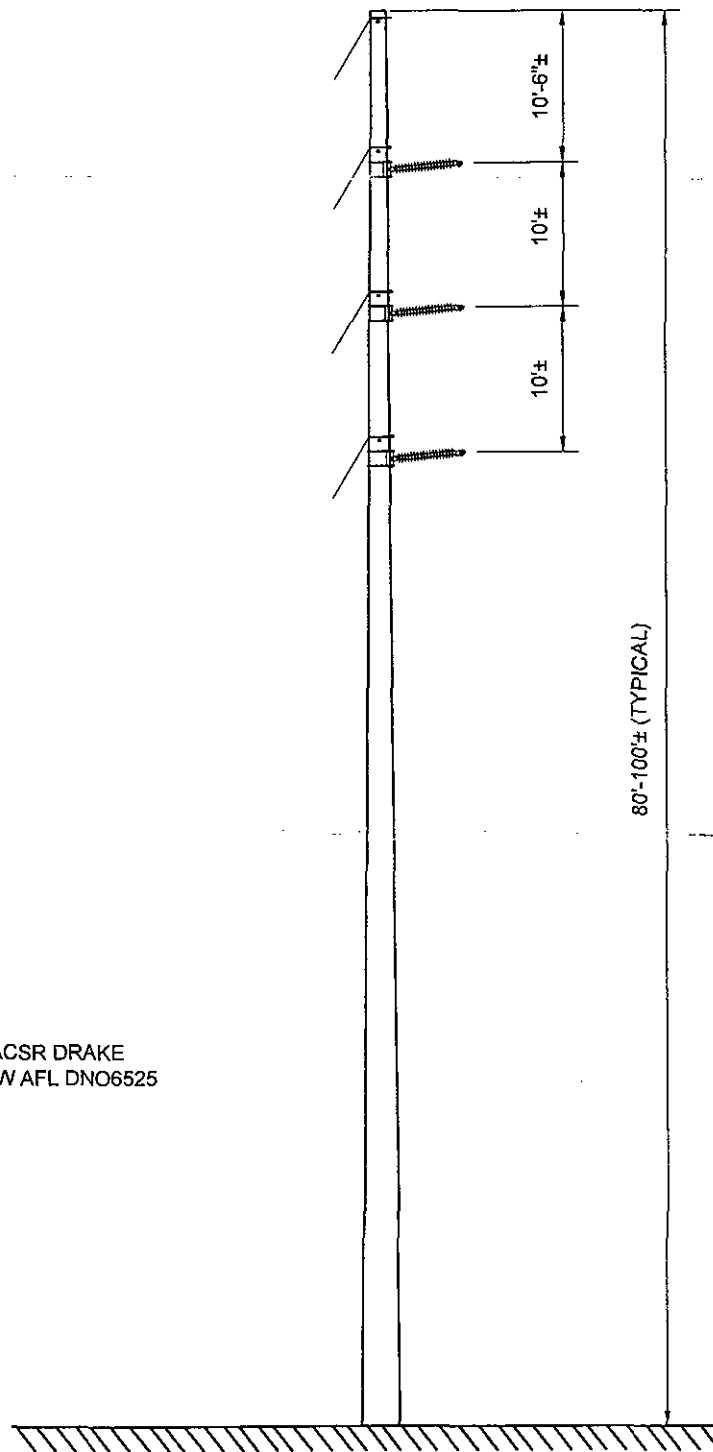
- Transmission Line
- SVC
- Existing Substation
- Transmission Corridor



FirstEnergy

Exhibit 2
Project Layout
Lakeshore - Lakeshore SVC 138kV
Transmission Line Project
ATSI
Cuyahoga County, Ohio

Revised: October 10, 2014



CONDUCTOR: 795 ACSR DRAKE
SHIELD WIRE: OPGW AFL DNO6525



date 10/06/14

designed B. FISHER

EXHIBIT 3

WOOD POLE WITH GUYS SINGLE CIRCUIT CORNER DEADEND

project
LAKESHORE SVC 138kV

contract