AMERICAN TRANSMISSION SYSTEMS,
INCORPORATED
A FIRSTENERGY COMPANY

CONSTRUCTION NOTICE
WEST FREMONT SUBSTATION EXPANSION PROJECT
OPSBI CASE NO.: 17-1904-EL-BNR

September 20, 2017
CONSTRUCTION NOTICE
WEST FREMONT SUBSTATION EXPANSION PROJECT

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

4906-6-05: ACCELERATED APPLICATION REQUIREMENTS

4906-6-05: Name
Name of Project: West Fremont Substation Expansion Project (“Project”).

4906-6-05 (B)(1): Brief Description of the Project
In this Project, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, is proposing to expand the existing West Fremont Substation fenced area by 19.8% (approximately 18,632 square feet) to allow for the addition of new breakers and buses to support the new Groton-West Fremont & Hayes-West Fremont 138 kV Transmission Lines, which were previously approved by the Board in Cases 12-1636-EL-BTX and 16-1593-EL-BTA.

The general location of the Project is shown in Exhibit 1, a partial copy of the United States Geologic Survey, Sandusky County OH, Quad Map, ID number o41083d2. Exhibit 2 is a partial copy of Bing aerial imagery. The Project is located at 1275 Miarer Rd., Fremont, OH 43420. The general layout is shown in Exhibit 3. The Project will be located in the City of Fremont, Sandusky County Ohio.

4906-6-05 (B)(1): Construction Notice Requirement
The Project meets the requirements for a Construction Notice because the Project is within the types of projects defined by Item (4)(a) of the Application Requirement Matrix
for Electric Power Transmission Lines, Appendix A of OAC Rule 4906-1-01. This item states:

(4) Constructing additions to existing electric power transmission stations or converting distribution stations to transmission stations where:

(a) There is a twenty percent or less expansion of the fenced area.

The proposed Project is within the requirements of Item (4)(a) as it involves expanding the fenced in area by approximately 18,632 square feet (19.8%), which is less than 20% of the existing fenced in area of 93,708 square feet.

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

The Project is needed to accommodate the installation of the new Groton-West Fremont & Hayes-West Fremont 138 kV Transmission Lines which were previously approved by the Board in Cases 12-1636-EL-BTX and 16-1593-EL-BTA.

Specially, the Groton-West Fremont 138 kV Transmission Line, approved by the Board in Case 12-1636-EL-BTX, addresses thermal overloads on the Lakeview-Ottawa and Greenfield-Lakeview 138 kV Transmission Lines. The project was also needed to address retirement of coal generation plants around Lake Erie in 2012-2015 and the addition of the 799 MW Clean Energy Oregon natural gas generator in 2016. PJM Interconnection Inc. ("PJM") has assigned this project the RTEP #b1959. For further details on this project see Case 12-1636-EL-BTX.

Hayes-West Fremont 138 kV Transmission Line, approved by the Board in Case 16-1593-EL-BTA, addresses thermal overloads on the Lakeview-Ottawa and Greenfield-Lakeview 138 kV Transmission Lines. PJM has assigned this project the RTEP #b2560. For further details on this project see Case 16-1593-EL-BTA.
**4906-6-05 (B)(3): Location of the Project Relative to Existing or Proposed Lines**

The location of the Project relative to existing or proposed lines is shown in the ATSI Transmission Network Map, included as part of the confidential portion of the FirstEnergy Corp. 2017 Long-Term Forecast Report. This map was submitted to the PUCO in Case No. 17-0913-EL-FOR under Rule 4901:5-5:04 (C)(2)(b) of the Ohio Administrative Code. The map is incorporated by reference only. This map shows ATSI’s 345 kV and 138 kV transmission lines and transmission substations including the West Fremont Substation. The project area is located approximately 4 4/10 inches (11” x 17” printed version) from the left edge of the map and 2 ½ inches (11” x 17” printed version) from the top of the map. The general location and layout of the project area is shown in Exhibit 1 and 2.

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

The general area of the Project was carefully considered to identify potential alternatives for the Project that are constructible, minimize potential impacts to the extent practical, and meet the needs of the Project. No alternatives to the Project were identified that had fewer impacts than the expansion of the existing substation.

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

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

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

The construction schedule for this Project is expected to begin as early as January 4, 2018 and completed by May 29, 2018.
4906-6-05 (B)(7): Area Map

Exhibit 1 depicts the general location of the Project. This Exhibit provides a partial copy of the United States Geological Survey, Sandusky County OH, quadrangle map (Quad Order ID o41083d2). Exhibit 2 provides a partial copy of Bing aerial imagery of the Project area.

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

The Project is located on new and existing property and new property is required for the Project. Table 1 contains a list of property owners effected by the project.

<table>
<thead>
<tr>
<th>Parcel Number</th>
<th>Property Owner</th>
<th>Property Address</th>
<th>Ownership Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>346000042201</td>
<td>ATSI</td>
<td>Miarer Rd.,</td>
<td>Owned in Fee</td>
</tr>
<tr>
<td>346000042200</td>
<td>American Municipal Power Inc. &amp; Michigan Public Power Agency</td>
<td>1275 Miarer Rd., Fremont, OH 43420</td>
<td>Part of the Property Will Be Purchased</td>
</tr>
</tbody>
</table>

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

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

The transmission line construction will have the following characteristics:

Voltage: 138 kV
Bus Conductor: 4” AL Bus/336.4 KCMIL ACSR
795 KCMIL AAC
Insulators: Porcelain
Breakers: Three (3) 145 kV 3000 A 40 kA Siemens SPS2S Breaker.
CVT’s: Six (6) 138 kV Single Phase Capacitor Voltage Transformers.
Arresters: Six (6) 108 kV Arresters
Structures: Six (6) 138 kV Bus Support Structures
Two (2) 138 kV Take-off Structures
Fence: Approximately 410 feet (0.08 miles) of new fence.

Land Requirements: 21,712 square feet of additional property is needed including area outside of the fenceline for grading.

4906-6-05 (B)(9)(b): Electric and Magnetic Fields
The closest occupied residence or institution is approximately 160 feet from the proposed substation fenceline and therefore no Electric and Magnetic Field (“EMF”) calculations are required.

4906-6-05 (B)(9)(c): Estimated Cost
The estimated capital cost for the proposed project is approximately $1,689,300.

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

4906-6-05 (B)(10)(a): Land Uses
The Project is located in the City of Fremont, Sandusky County Ohio. The main land use around the Project is zoned as industrial. The main industrial use around the Project area is natural gas electric generation and transmission.

4906-6-05 (B)(10)(b): Agricultural Land
Agricultural land does not exist within the Project’s disturbance area.

4906-6-05 (B)(10)(c): Archaeological or Cultural Resources
As part of the investigation, a search of Ohio Historic Preservation Office (“OHPO”) online database was conducted to identify the existence of any significant archeological or cultural resource sites within 0.5 miles of the Project Area. The results of the search are shown in Exhibit 4. The specific location of any archeological resources are excluded from the map and are instead listed in Table 2.

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

The OHPO database also includes listing of the Ohio Archaeological Inventory (“OAI”), the Ohio Historic Inventory (“OHI”), previous cultural resource surveys, and the Ohio Genealogical Society (“OGS”) cemetery inventory. Two (2) OAI listed archeological resource has been previously inventoried within 0.5 miles of the Project area and is shown in Table 2. No listed structural resource is located within 0.5 miles of the Project area. Six (6) previous historical cultural resource surveys was conducted within 0.5 miles of the Project area and is provided in Table 3. No OSG cemeteries are located within 0.5 miles of the Project area.

### Table 2. List of OAI Listed Archeological Resources

<table>
<thead>
<tr>
<th>OAI Number</th>
<th>Affiliation</th>
<th>Description</th>
<th>County</th>
<th>Quad Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA0388</td>
<td>Prehistoric</td>
<td>Unknown Prehistoric</td>
<td>Sandusky</td>
<td>Lindsey</td>
</tr>
<tr>
<td>SA0389</td>
<td>Prehistoric</td>
<td>Unknown Prehistoric</td>
<td>Sandusky</td>
<td>Lindsey</td>
</tr>
</tbody>
</table>

### Table 3. List of Previous Cultural & Historic Resource Survey

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>County</th>
<th>Municipality</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>A Phase I Archaeological Survey of Two Proposed Alternatives for the Fremont Energy Project, Sandusky County, Ohio</td>
<td>Sandusky</td>
<td>City of Fremont/ Fremont Township</td>
</tr>
<tr>
<td>2000</td>
<td>A Phase I Archaeological Survey of a 60-acre Tract within the Preferred Site for the Fremont Energy Center Project, Sandusky County, Ohio</td>
<td>Sandusky</td>
<td>City of Fremont/ Fremont Township</td>
</tr>
<tr>
<td>2001</td>
<td>A Phase I Cultural Resources Survey for Fremont Energy Gas Pipeline, Sandusky Township, Sandusky County, Ohio</td>
<td>Sandusky</td>
<td>City of Fremont/ Fremont Township</td>
</tr>
</tbody>
</table>
Based upon the results of the OHPO online database search the closest OAI listed archeological resource is approximately 0.43 miles from the Project Area. Additionally, five (5) Phase I archeological resource surveys and one (1) historical resource survey was conducted within the Project area without finding any archeological or historic resources that could be impacted. Therefore, the Project is not anticipated to have any impacts to any archeological or historic resources.

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

There are no other government agency requirements for this Project that had been identified at the time of filing.

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

The Project lies within the Project area that was covered by the projects previously approved by the Board in Cases 12-1636-EL-BTX and 16-1593-EL-BTA. As such, the Project area was extensively evaluated during the preparation and review of those applications by both the Ohio Department of Natural Resources ("ODNR") and the US Fish and Wildlife Service ("USFWS") for the presence of any endangered, threatened, or rare species within one (1) mile of the Project area. Based on this review, the Groton-West Fremont & Hayes-West Fremont 138 kV Transmission Lines Project area was found to be in the range of twenty-three (23) species as either state or federally listed as rare, threatened, or endangered.
Of the twenty-three (23) species identified, the state and federally listed species identified by ODNR and the USFWS comments for the Groton-West Fremont & Hayes-West Fremont 138 kV Transmission Lines projects, nine (9) were potentially affected. Additionally, the Northern long-eared bat (*Myotis septentrionalis*) has since been listed as threatened by the USFWS with a range that includes Sandusky County. These ten (10) species as well as their current protective status and habitat requirements are listed in Table 5.

**Table 5. Federal and State Listed Species Impacted by Groton-West Fremont & Hayes-West Fremont 138 kV Transmission Line Project (Cases 12-1636-EL-BTX and 16-1593-EL-BTA)**

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Species</th>
<th>Federal Status</th>
<th>State Status</th>
<th>Habitat Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bald Eagle</td>
<td><em>Haliaeetus leucocephalus</em></td>
<td>N/A*</td>
<td>N/A</td>
<td>Water and large trees</td>
</tr>
<tr>
<td>Common Tern</td>
<td><em>Sterna hirundo</em></td>
<td>N/A</td>
<td>Endangered</td>
<td>Water</td>
</tr>
<tr>
<td>Northern long-eared bat</td>
<td><em>Myotis septentrionalis</em></td>
<td>Threatened</td>
<td>Threatened</td>
<td>Trees</td>
</tr>
<tr>
<td>Indiana Bat</td>
<td><em>Myotis sodalis</em></td>
<td>Endangered</td>
<td>Endangered</td>
<td>Trees</td>
</tr>
<tr>
<td>King Rail</td>
<td><em>Rallus elegans</em></td>
<td>N/A</td>
<td>Endangered</td>
<td>Wetlands</td>
</tr>
<tr>
<td>Northern Harrier</td>
<td><em>Circus cyaneus</em></td>
<td>N/A</td>
<td>Endangered</td>
<td>Wetlands and grasslands</td>
</tr>
<tr>
<td>American Bitter</td>
<td><em>Botaurus lentiginosus</em></td>
<td>N/A</td>
<td>Endangered</td>
<td>Wetlands</td>
</tr>
<tr>
<td>Blanding’s Turtle</td>
<td><em>Emydoidea blandingii</em></td>
<td>N/A</td>
<td>Threatened</td>
<td>Wetlands and ponds</td>
</tr>
<tr>
<td>Eastern Prairie Fringed Orchid</td>
<td><em>Platanthera leucophaea</em></td>
<td>Threatened</td>
<td>Threatened</td>
<td>Prairie and wetlands</td>
</tr>
<tr>
<td>Eastern Massasauga</td>
<td><em>Sistrurus catenatus catenatus</em></td>
<td>Threatened</td>
<td>Endangered</td>
<td>Wetlands</td>
</tr>
</tbody>
</table>

*Although no longer listed as endangered or threatened, the Bald Eagle is protected by the Bald and Golden Eagle Protection Act.*
Habitat requirements for these species include either trees, prairies, wetlands, bodies of water, or large open areas. The Project Area consists of exclusively a mowed grassy area devoid of wetlands, open water, and woody vegetation. Therefore, no impacts are expected to any of these species.

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

The Project lies within the Groton-West Fremont & Hayes-West Fremont 138 kV Transmission Lines Project area, which was previously considered for projects approved by the Board in Cases 12-1636-EL-BTX and 16-1593-EL-BTA. As such, the Project area was surveyed for wetlands and stream by CH2M Hill during the preparation and review of the applications in those cases. No wetlands, streams, or other areas of ecological concern were found within the work limits of the Project area for this Project, therefore no impacts to any areas of ecological concern are expected.

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

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

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

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

**4906-6-07: Documentation of Construction Notice Transmittal and Availability for Public Review**

This Construction Notice is being provided concurrently with its docketing with the Board to the following officials in City of Fremont, Sandusky County, Ohio.
Copies of the transmittal letters to these officials have been included with this application as proof of compliance under OAC Rule 4906-6-07 (B) to provide the Board with proof
of notice to local officials as required by OAC Rule 4906-6-07 (A)(1) and to libraries per OAC Rule 4906-6-07 (A)(2).

Information is posted at [www.firstenergycorp.com/about/transmission_project/ohio.html](http://www.firstenergycorp.com/about/transmission_project/ohio.html) on how to request an electronic or paper copy of this Construction Notice application. The link to this website is being provided to meet the requirements of OAC Rule 4906-6-07 (B) and to provide the Board with proof of compliance with the notice requirements in OAC Rule 4906-6-07 (A)(3).
West Fremont Substation Expansion Project
Exhibit 1

USGS Quad: Lindsey
Orig. Date: 2016
USGS Quad ID: o41083d2
Ottawa County, OH
Source USGS
West Fremont Substation Expansion Project
Exhibit 2
This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Datum: [Datum]
Projection: WGS_1984_Web_Mercator_Auxiliary_Sphere