CONSTRUCTION NOTICE

CARDINGTON-GALION 138 kV
TRANSMISSION LINE RAISING PROJECT

OPSBCASE NO.: 18-0864-EL-BNR

MAY 29, 2018

American Transmission Systems, Incorporated
76 South Main Street
Akron, Ohio 44308
CONSTRUCTION NOTICE
CARDINGTON-GALION 138 kV TRANSMISSION LINE RAISING PROJECT

The following information is being provided in accordance with 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 (“OPSB”) as a Construction Notice application.

4906-6-05: ACCELERATED APPLICATION REQUIREMENTS

4906-6-05: Name and Reference Number

Name of Project: Cardington-Galion 138 kV Transmission Line Raising Project (“Project”).

4906-6-05 (B)(1): Brief Description of the Project

American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, proposes to replace four (4) existing single pole wood transmission structures on the Cardington-Galion 138 kV Transmission Line with taller single pole wood structures. The Project is required to raise the Cardington-Galion 138 kV Transmission Line to provide clearance for a new 69 kV transmission line tap that will cross underneath the Cardington-Galion 138 kV Transmission Line to a new customer (American Lumber) substation.

The general location of the Project is shown in Exhibits 1 and 2. Exhibit 1 is a partial copy of the United States Geologic Survey, Morrow County, OH Quad Map. Exhibit 2 provides a partial copy of ESRI aerial imagery. The general layout of the proposed Project is shown in Exhibit 3. The Project is located in Washington Township, Morrow County, Ohio.

4906-6-05 (B)(1): Construction Notice Requirement

The Project meets the requirements for a Construction Notice application based on Item (2)(a) of the Application Requirement Matrix for Electric Power Transmission Lines Appendix A of OAC Rule 4906-1-01, which states:
(2) **Adding new circuits on existing structures designed for multiple circuit use, replacing conductors on existing structures with larger or bundled conductors, adding structures to an existing transmission line, or replacing structures with a different type of structures, for a distance of:**

(a) **Two miles of less**

The proposed Project involves replacing four (4) existing single wood pole transmission structures that serve the Cardington-Galion 138 kV Transmission Line with taller single pole wood structures. The new structures will be placed within the existing right-of-way. No new right-of-way is required for this Project.

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

The Project is required to raise the Cardington-Galion 138 kV Transmission Line to provide clearance for a new 69 kV transmission line tap to cross underneath to a new customer substation.

**4609-6-05 (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. 2015 Long-Term Forecast Report. This map was submitted to the PUCO in Case No. 18-0449-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 Cardington-Galion 138 kV Transmission Line. The Project area is located approximately 5 3/8 inches (11” x 17” printed version) from the left edge of the map and 5 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 Exhibits 1 through 3.

**4609-6-05 (B)(4): Alternatives Considered**

No alternatives were considered for this Project.
4906-6-05 (B)(5): Public Information Program
ATSI’s manager of External Affairs will advise local officials of the proposed Transmission Line Project as necessary. ATSI will maintain a copy of this Construction Notice application on FirstEnergy’s website.

4609-6-05 (B)(6): Construction Schedule
The construction schedule for this Project is expected to begin as early as September 1, 2018 and be completed by November 16, 2018.

4609-6-05 (B)(7): Area Map
Exhibits 1 and 2 depict the general location of the Project. Exhibit 1 provides a partial copy of the United States Geologic Survey, Morrow County, OH Quad Map. Exhibit 2 provides a partial copy of ESRI aerial imagery.

4906-6-05 (B)(8): Property Owner List
The Project is located on existing right-of-way owned by ATSI. No new easements or right-of-way for the transmission structures will need to be acquired. The property information for this Project is listed below and was obtained through the Morrow County Auditor’s website.

<table>
<thead>
<tr>
<th>Parcel Number</th>
<th>Property Owner</th>
<th>Property Address</th>
<th>Easement Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR ROW</td>
<td>CSX Transportation</td>
<td>R. 17 East: NE Quarter 22</td>
<td>Previously Obtained</td>
</tr>
</tbody>
</table>

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

4906-6-05 (B)(9)(a): Operating Characteristic
The transmission line construction will have the following characteristics:

- **Voltage:** 138 kV
- **Conductors:** 605 kcmil 24/7 ACSR
- **Static Wire:** 3#6 alumoweld
Insulators:  138 kV Polymer Jumper Post Insulators  
           138 kV Porcelain Strain Insulators  
           138 kV Polymer Post Insulators  

ROW Width:  100 feet  
Structure Type:  138 kV Single Circuit Wood Pole Deadend Structure (Exhibit 4)  
                138 kV Single Circuit Wood Pole Tangent Structure (Exhibit 5)  
                138 kV Single Circuit Wood Pole Deadend Structure (Exhibit 6)  

4906-6-05 (B)(9)(b): Calculated Electric and Magnetic Field

The closest occupied residence or institution is approximately 200 feet from the transmission line centerline. As this distance is greater than 100 feet, Electric and Magnetic Field (“EMF”) calculations have not been estimated.

4906-6-05 (B)(9)(c): Estimated Cost

The estimated capital cost for the proposed Project is approximately $366,000.

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

4906-6-05 (B)(10)(a): Land Uses

The Project is located in Washington Township, Morrow County, Ohio. Based on the US Bureau of Census estimates the 2010 population of Washington Township was 1,300. The 2010 population of Morrow County was 34,827.

The Project area is in industrial zoned land. As the proposed Project involves replacement of the existing structures within the existing corridor, no significant changes or impacts to the current land use is anticipated.

4906-6-05 (B)(10)(b): Agricultural Land

Agricultural land use does not exist within the Project limits.

4906-6-05 (B)(10)(c): Archaeological or Cultural Resources

A search of Ohio Historic Preservation Office’s (“OHPO”) National Register of Historic Places (“NRHP”) online database was conducted to identify the existence of any significant
archaeological or cultural resource sites within 0.5 miles of the Project area. A map of the results of the search is shown in Exhibit 7. The OHPO database includes all Ohio listings on the NRHP, including districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. The results of the search indicate that there are no Listed NRHP properties and no OHPO eligible properties identified within 0.5 miles of the Project’s 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. The results of the search indicate that no OAI listed archaeological resources or OHI listed structural resources were identified within 0.5 miles of the Project work limits.

Two (2) previous archaeological resource surveys were conducted within 0.5 miles of the Project area. The previous cultural resources surveys are identified in Table 2.

**Table 2. Previous Cultural Resource Surveys**

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>County</th>
<th>Municipality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>Phase I Cultural Resources Investigations for the Proposed Cardington-Galion Transmission Line, Morrow County, Ohio</td>
<td>Morrow, Ohio</td>
<td>Washington Township</td>
</tr>
<tr>
<td>1998</td>
<td>A Phase I Archaeological Survey of the Proposed Waterlines for the MCO Water Company in Marion and Morrow Counties, Ohio</td>
<td>Morrow, Ohio</td>
<td>Washington Township</td>
</tr>
</tbody>
</table>

One (1) OSG cemetery is located within 0.5 miles of the Project area and is identified in Table 3.

**Table 3. List of Ohio Genealogical Society Cemeteries**

<table>
<thead>
<tr>
<th>Object ID</th>
<th>Name</th>
<th>OGS ID</th>
<th>County</th>
<th>Municipality</th>
</tr>
</thead>
<tbody>
<tr>
<td>12350</td>
<td>Blaney</td>
<td>8720</td>
<td>Morrow</td>
<td>Washington Township</td>
</tr>
</tbody>
</table>

There are no OAI sites located within 0.5 miles of the Project’s potential disturbance area. As the proposed Project involves replacing four (4) existing transmission structures in approximately the same locations as the existing structures, the project is not expected to have any additional impacts to archaeological and cultural resources.
**4906-6-05 (B)(10)(d): Local, State, and Federal Requirements**

No additional government agency requirements are needed for this Project at the time of filing.

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

The Project work limits associated with the structure additions will be limited to the existing maintained transmission line corridor. The construction site will be accessible via existing roads, along the existing transmission line corridor, or via a mowed hay field. The threatened and endangered species listed for Morrow County, Ohio are included in Table 4.

Table 4. State and Federally Listed Species with a Potential Range that Includes Morrow County, OH

<table>
<thead>
<tr>
<th>Species</th>
<th>Common Name</th>
<th>Federal Status</th>
<th>State Status</th>
<th>Potential Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lanius ludovicianus</td>
<td>Loggerhead shrike</td>
<td>--</td>
<td>Endangered</td>
<td>Open pastures or grasslands</td>
</tr>
<tr>
<td>Epioblasma triquetra</td>
<td>Snuffbox</td>
<td>Endangered</td>
<td>Endangered</td>
<td>Small to medium sized streams</td>
</tr>
<tr>
<td>Villosa fabalis</td>
<td>Rayed bean</td>
<td>Endangered</td>
<td>Endangered</td>
<td>Smaller, headwater creeks</td>
</tr>
<tr>
<td>Myotis sodalis</td>
<td>Indiana bat</td>
<td>Endangered</td>
<td>Endangered</td>
<td>Trees</td>
</tr>
<tr>
<td>Myotis septentrionalis</td>
<td>Northern long-eared bat</td>
<td>Threatened</td>
<td>Species of Special Concern</td>
<td>Trees</td>
</tr>
<tr>
<td>Cardamine dissecta</td>
<td>Narrow-leaved Toothwort</td>
<td>--</td>
<td>Potentially Threatened</td>
<td>Rich to disturbed woods and wooded stream terraces</td>
</tr>
<tr>
<td>Glyceria acutiflora</td>
<td>Sharp-glumed Manna Grass</td>
<td>--</td>
<td>Threatened</td>
<td>Wet soil; shallow water of ponds and swamps</td>
</tr>
<tr>
<td>Platanthera psycodes</td>
<td>Small Purple Fringed Orchid</td>
<td>--</td>
<td>Potentially Threatened</td>
<td>Semi-shaded wetlands</td>
</tr>
<tr>
<td>Scirpus expansus</td>
<td>Woodland Bulrush</td>
<td>--</td>
<td>Potentially Threatened</td>
<td>Open to semi-shaded wetlands</td>
</tr>
</tbody>
</table>

Any existing wetlands encountered along the access routes will be crossed using timber construction matting. Permanent impacts to wetlands and stream crossings will not occur as a result of the proposed Project. Therefore, it is not anticipated that any of the listed plant or mussel species will be affected by the Project.

Although potential habitat for the Loggerhead shrike is located along the Project area, no adverse effect to this species is anticipated due the prevalence and availability of this type
of habitat throughout this portion of Ohio and the minimal disturbances associated with this Project. Any tree clearing associated with the Project will occur after September 30 and before April 1 to avoid potential adverse effects to listed bat species.

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

The entire Project is within the existing transmission line corridor. The Project area consists of open grassland. The Project Area will be investigated by a qualified consultant through the FirstEnergy Environmental Department to delineate the location and extent of wetlands within the Project Area. No permanent impacts to wetlands are necessary for the Project and wetlands will be avoided to the maximum extent possible during construction. All wetlands that cannot be avoided during construction will be protected using construction matting to support heavy equipment crossings. The location of the matting will be established once the construction access plan is developed. Storm water controls and best management practices will be implemented to avoid any secondary impacts to regulated waterbodies to the maximum extent practicable.

**4906-6-05 (B)(10)(g): 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. 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 application is being provided concurrently to the following officials in Washington Township and Morrow County Ohio.
Copies of the transmittal letters to these officials have been included with this Construction Notice application to the OPSB and are being provided to meet the requirement of OAC Rule 4906-6-07 (B) as proof of compliance with the notice requirement to local officials in OAC Rule 4906-6-07 (A)(1) and to libraries at OAC Rule 4906-6-07 (A)(2).

Information is posted on [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 the website is being provided to meet the requirement of OAC 4906-6-07 (B) and to provide the OPSB with proof of compliance with the notice requirements in OAC Rule 4906-6-07 (A)(3).
EXHIBIT 1
Cardington (Galion) 138 kV Transmission Line Raising Project

Location:
Municipality: Washington Township
County: Morrow County
State: Ohio

1 inch = 2,000 feet

Source: National Geographic Society
Scale: 1:24,000
Cardington (Galion) 138 kV Transmission Line Raising Project

Location: Municipality: Washington Township
County: Morrow County
State: Ohio

1 inch = 2,000 feet

NAD 1983 StatePlane Ohio North投影: Lambert Conformal Conic
Linear Unit: US Foot
Source: ESRI Imagery
Scale: 1:24,000
**NOT TO SCALE**

CARDINGTON–GALION 138 kV
TRANSMISSION LINE RAISING
PROJECT

138 kV SINGLE CIRCUIT WOOD POLE
DEADEND STRUCTURE

EXHIBIT 4
This map is a user generated static output from an Internet mapping site and is for general use. 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

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Legend
NR Listings
- Listed
- National Historic Landmark
- Delisted
- NR Determinations of Eligibility
Archaeological Sites
Historic Structures
Historic Bridges
Historic Tax Credit Projects
OGS Cemeteries
- Confident
- Not Confident
Dams
UTM Zone Split
NR Boundaries
OAI Site Boundaries
Phase1
Phase2

1: 24,000