AMERICAN TRANSMISSION SYSTEMS, INCORPORATED A FIRSTENERGY COMPANY

LETTER OF NOTIFICATION

KIRBY-ROBERTS 138 kV TRANSMISSION LINE LOOP TO CRISSINGER SUBSTATION

OPSB CASE NO.: 19-0803-EL-BLN

April 15, 2019

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

LETTER OF NOTIFICATION KIRBY-ROBERTS 138 kV TRANSMISSION LINE LOOP TO CRISSINGER SUBSTATION 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 Letter of Notification application.

4906-6-05: ACCELERATED APPLICATION REQUIREMENTS

4906-6-05: Name

Name of Project: Kirby-Roberts 138 kV Transmission Line Loop to

Crissinger Substation 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 construct approximately 6,900 feet (1.31 miles) of new transmission line to loop the existing Kirby-Roberts 138 kV Transmission Line into the existing Crissinger Substation. In addition, the Project will expand the Crissinger Substation from a four (4) breaker ringbus configuration to a six (6) breaker ringbus configuration requiring an approximately 11.8% expansion of the substation.

The existing Kirby-Roberts 138 kV Transmission Line will be looped into the Crissinger Substation creating two new transmission lines, the Crissinger-Kirby 138 kV Transmission Line and the Crissinger-Roberts #2 138 kV Transmission Line. The new transmission line will begin at existing Structure 3014. The existing Kirby-Roberts 138 kV Transmission Line attaches to this structure along with the existing Crissinger-Tangy 138 kV Transmission Line. This Project will remove the existing spans on the Kirby-Roberts 138 kV Transmission Line between existing Structure 11732 and Structure 5031. Once removed, a new mid-span structure and conductor will be placed between the

existing structure 11732 and proposed structure 11734, and new conductor will be placed between proposed structure 11734 and existing structure 5031.

The new Crissinger-Kirby 138 kV Transmission Line will connect from Structure 11732, which is to be reinforced with new guying, to a new single circuit wood pole Structure 11733. This transmission line will then join the new Crissinger-Roberts #2 138 kV Transmission Line on a double circuit wood pole Structure 11734 and continue east for approximately 5,490 feet (1.04 miles) to Structure 11755 where the Crissinger-Roberts #2 138 kV Transmission Line crosses underneath the Crissinger-Kirby 138 kV Transmission Line. From here the Crissinger-Roberts #2 138 kV Transmission Line continues east for an additional 440 feet (0.08 miles) until it reaches Crissinger Substation. The Crissinger-Kirby 138 kV Transmission Line continues northeast and then south for approximately 610 feet (0.12 miles) until it reaches Crissinger Substation.

Crissinger Substation will be expanded by approximately 11.8% of the existing area to accommodate the expansion of the ring bus. The existing fenced area is approximately 74,860 square feet. Approximately 8,861 square feet of new fenced area will be added to the substation. Approximately 78 linear feet of new fence will be added.

The general location of the Project is shown in Exhibit 1, a partial copy of the United States Geologic Survey, Marion County OH, Quad Map, ID number 40083-E2. Exhibit 2 is a partial copy of Bing aerial imagery. The Project is located near Crissinger Substation at 1734 Crissinger Rd, Marion, OH 43302. The general layout is shown in Exhibit 3. The Project is located in Pleasant Township, Green Camp Township, and Marion Township, Marion County, Ohio.

4906-6-05 (B)(1): Letter of Notification Requirement

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

(1) New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution line(s) for operating at a higher transmission voltage, as follows:

(b) Line(s) greater than 0.2 miles in length but not greater than two miles in length.

The proposed Project is within the requirements of Item (1)(b) as it involves constructing approximately 1.31 miles of new transmission line. The substation expansion is jurisdictional under Item (4)(a) which 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 of the fenced area.

The Proposed substation expansion will require an expansion of approximately 11.8% of the fenced area. This meets the requirements of a Construction Notice filing if it were to be filed separately. It is included with the transmission line portion of the work here since the two projects have the same need and will begin construction at approximately the same time.

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

The proposed Project includes the expansion of the Crissinger 138 kV Substation in Marion, Ohio to allow for the utilization of existing open bay positions to add two breakers to expand the substation from a four-breaker ring bus to a six-breaker ring bus. The Project also includes the looping of the existing Kirby – Roberts 138 kV Line into Crissinger substation by adding approximately 1.2 miles of double circuit from the existing Kirby – Roberts 138 kV Line to Crissinger Substation. Currently the Kirby-

Roberts 138kV Transmission Line bypasses the Crissinger Substation. After the Project is complete, the 138 kV line exits out of the Crissinger substation will be:

- Crissinger Roberts #1
- Crissinger Roberts #2
- Crissinger Tangy
- Crissinger Kirby
- Crissinger Transformer #1
- Crissinger Transformer #2.

The expansion of the Crissinger Substation will provide an additional 138 kV source to the planning area and provide additional reliability and improved operational flexibility under system restoration and maintenance conditions. It will reduce the amount of local load loss in the area (approximately 99 MWs and 5,000 customers) and mitigate the potential local voltage collapse on the 34.5 kV sub-transmission system for the loss of the Crissinger-Roberts 138 kV line followed by the loss of the Crissinger-Tangy 138 kV line followed by the loss of the Crissinger-Roberts 138 kV line.

The loss of two 138 kV transmission lines, which is a defined as a NERC P6 (N-1-1) system contingency, can happen with the scheduled or unscheduled outage of the Crissinger-Roberts 138 kV line followed by an unforeseen or unplanned outage of the Crissinger-Tangy 138 kV line due to a storm or other unplanned event. This system contingency is also valid for the scheduled or unscheduled outage of the Crissinger-Tangy 138 kV line followed by the unforeseen or unplanned outage of the Crissinger-Roberts 138 kV line. The Project is designed to mitigate the impact of these defined system contingencies by providing an additional 138 kV source into the planning area and maintaining service to the 5,000 customers and approximately 99 MWs of load in the event of these contingences.

Over the past five years, the Crissinger-Roberts 138 kV line has experienced one sustained outage (1h 37m) and three momentary outages, and the Crissinger-Tangy 138 kV line has experienced two sustained outages (average duration 4.5m) and one momentary outage.

The alternative considered for this Project was to add another capacitor bank at Crissinger 138 kV substation. It was not selected because it was not a strong enough source to support the potential voltage drop and local voltage collapse on the 34.5 kV sub-transmission system under contingency conditions.

The Crissinger 138 kV Ring Bus Expansion Project was presented to PJM during the western sub-regional TEAC meeting on 08/31/2018 and was assigned the Supplemental RTEP number s1696. The slide from the PJM meeting this was presented at is included as Exhibit 4. The scheduled in-service date is 12/31/2019. This Project will be included in the 2019 Long Term Forecast Report.

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. 2018 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)(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 Kirby-Roberts 138 kV Transmission Line and Crissinger Substation. The project area is located approximately 4 ³/₁₀ inches (11" x 17" printed version) from the left edge of the map and approximately 6 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

Alternatives to the proposed Project included the following:

No Action – Continued operation of the system as currently configured does not reduce the risk of the loss of approximately 99 MW of load and corresponding loss of service to approximately 5,000 customers of FirstEnergy under contingency scenarios.

- Alterative to the ring bus expansion An alternative to the ring bus expansion considered for the project was to add another capacitor bank at Crissinger 138 kV substation. It was not selected because it was not a strong enough source to support the potential voltage drop and local voltage collapse on the 34.5 kV subtransmission system.
- Alternative transmission line design:

One alternative design of the transmission line extension that was considered was the conversion of the existing 6-wire configuration on the Crissinger-Tangy 138 kV Transmission Line to a 3-wire configuration to accommodate the new Crissinger-Kirby 138 kV Transmission Line. Under this alternative, the new Crissinger-Kirby 138 kV Transmission Line would have been on the north side of the existing towers and the Crissinger-Tangy 138 kV Transmission Line would have been on the south side of the towers. The new Crissinger-Roberts No. 2 138 kV Transmission Line would have followed the proposed double circuit path north of the existing centerline in a single circuit configuration.

This design was determined to be infeasible given the proposed configuration of Crissinger Substation for the Kirby and Tangy 138 kV Transmission Lines, which could not be switched without causing both proposed 138 kV circuits to cross outside of Crissinger Substation. To achieve this, two 3-pole structures with guying would be required in a span of approximately 480 feet. Furthermore, by converting the existing towers to double circuit operation with two 3-wire configurations, larger conductor would be required to satisfy current FirstEnergy protection specifications. A reconductor may have also resulted in the further need to reinforce or replace several, if not all, of the towers to account for any additional loading. Given the complications associated with this alternative, coupled with the need for and availability of the expanded right-of way to install the new line extension, the proposed solution is considered the best available option for the Project.

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 Letter of Notification 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.

ATSI will publish notice of the Project in the Marion Star. Additionally, letters will be sent to affected property owners when this Letter of Notification application is submitted to the Board informing them of the Project.

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

The construction schedule for this Project is expected to begin as early as May 13, 2019 and completed by December 31, 2019.

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, Marion County OH, quadrangle map (Quad Order ID 40083-E2). 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 right-of-way and new right-of-way is required for the Project. The existing right-of-way is 100 feet wide. The new right-of-way will include an expansion of the existing right-of-way by 30 feet to the north. Table 1 contains a list of property owners effected by the project.

Table 1: Property Owner List

Parcel Number	Property Owner	Property Address	Easement Status
100040000400	Ohio Department of Natural Resources	2045 Morse Rd, Bldg C4, Columbus, OH 43229	New Easement Being Obtained
250110000400	Ohio Department of Natural Resources	2045 Morse Rd, Bldg C4, Columbus, OH 43229	Easement Obtained
250110000100	Pheasants Forever Inc.	1783 Buerkle Circle, St Paul, MN 55110	New Easement Being Obtained
250830600300	Ohio Edison	800 Cabin Hill Dr, Greensburg, PA 15601	Easement Obtained
250830600200	Ohio Edison	800 Cabin Hill Dr, Greensburg, PA 15601	Easement Obtained
170080004700	Beaver David D Etal	359 W Newmans Cardington Rd, Prospect, OH 43342	Easement Obtained
170080004600	Pheasants Forever Inc.	1783 Buerkle Circle, St Paul, MN 55110	Easement Obtained
170080004500	Clabaugh Lynn M Etal	Marion Green Camp Rd, Marion, OH 43302	Easement Obtained

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:

Transmission Line: Crissinger-Tangy

Voltage: 138 kV

Conductors: 6-Wire 336 kcmil 26/7 ACSR

Static Wire: 7#8 Alumoweld

Insulators: Polymer

Transmission Line: Crissinger-Kirby

Voltage: 138 kV

Conductors: 795 kcmil 26/7 ACSR

Static Wire: 3#6 Alumoweld

Insulators: Polymer

Transmission Line: Crissinger-Roberts #2

Voltage: 138 kV

Conductors: 795 kcmil 26/7 ACSR

Static Wire: 3#6 Alumoweld

Insulators: Polymer

ROW Width: 100 feet of existing

30 feet of new

Land Requirements: N/A

Structure Types: Exhibit 5: Vertical Double Circuit Horizontal Post Wood Pole

Structure. Nineteen (19) structures are needed.

Exhibit 6: Vertical Stacked Double Circuit Horizontal Post Wood

Pole Structure. One (1) structure is needed.

Exhibit 7: Deadend Vertical Single Circuit Wood Pole Structure.

One (1) structure is needed.

Exhibit 8: Custom Double Circuit Tangent Wood Pole Crossing

Structure. One (1) structure is needed.

Exhibit 9: Custom Double Circuit Tangent Wood Pole Crossing

Structure. One (1) structure is needed.

Exhibit 10: Single Circuit Suspension Wood Pole Structure. One

(1) structure is needed.

Exhibit 11: Single Circuit Braced Post Steel Pole Structure. Two

(2) structures are needed.

Exhibit 12: Single Circuit Wood Pole Structure Horizontal Post

Delta Single Pole. One (1) structure is needed.

The substation expansion construction will have the following characteristics:

Bus work: 100 feet of new aluminum bus added

200 feet of existing aluminum bus is removed

Breakers: 4 138 kV, 3000 A SF6 Breakers

Switches: 9 138 kV, 2000A Disconnect Switches

Wave Trap: 2 138 kV, 2000A CCVTs: 6 138 kV CCVTs

Fence: 78 linear feet of fence is added

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

The closest occupied residence or institution is approximately 115 feet from the proposed transmission line centerline therefore no Electric and Magnetic Field ("EMF") calculations are required by this code provision.

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

The total estimated capital cost for the proposed project is approximately \$7,647,700. This includes approximately \$2,801,100 for transmission line portion and approximately \$4,846,600 for the substation portion.

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

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

The Project is located in Pleasant Township, Green Camp Township, and Marion Township, Marion County, Ohio. The main land use around the Project is agricultural.

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

Agricultural land does exist within the Project's disturbance area. Most of the agricultural land is in row crops located within the right-of-way. Three (3) of the four (4) parcels are rented fields and the proposed Project will not conflict with their continued use. A list of all agricultural land and acreage including agricultural district land is given in Table 2.

Table 2: Agricultural Lands within the Project's Disturbance Area

Parcel Number	Property Owner	Acreage	Agricultural District	Agricultural District Expiration
250110000100	Pheasants Forever Inc.	9	No	N/A
250830600300	Ohio Edison	24.8	No	N/A
250830600200	Ohio Edison	18.6	No	N/A
170080004500	Clabaugh Lynn M Etal	55.6	Yes	2024

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 13. The specific location of any archeological resource is excluded from the map and are instead listed in Table 3.

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. Three (3) OAI listed archeological resources have been previously inventoried within 0.5 miles of the Project area and are shown in Table 3. No OHI listed structural resources are located within 0.5 miles of the Project area. Four (4) previous cultural resource surveys were conducted within 0.5

miles of the Project area and are listed in Table 4. One (1) OSG cemetery is located within 0.5 miles of the Project area and is identified in Table 5.

Table 3. List of OAI Listed Archeological Resources

OAI Number	Affiliation	Description	County	Quad Name
MN0061	Prehistoric	Unknown Prehistoric	Marion	Marion West
MN0062	Prehistoric	Unknown Prehistoric	Marion	Marion West
MN0063	Prehistoric	Unknown Prehistoric	Marion	Marion West

Table 4. List of Previous Cultural & Historic Resource Survey

Year	Name	County	Municipality
1995	Phase I Archaeological Survey for Ohio Edison Company's Proposed Kirby-Roberts 138 kV Transmission Line in Marion and Union Counties, Ohio	Marion	Pleasant Township
2012	Phase I Cultural Resource Management Survey of a Proposed 9 ha (22.4a.) Wetland Restoration Project in Green Camp and Pleasant Townships, Marion County, Ohio	Marion	Green Camp Township & Pleasant Township
2018	Additional Phase I Archaeological Investigations for the Approximately 39.9 km (24.8 mi) Harpster-South Morral 69 kV Rebuild Project in Pitt Township, Wyandot County and Waldo/Pleasant/Big Island/Salt Rock Townships, Marion County, Ohio	Marion	Pleasant Township
2018	Additional Phase I Archaeological Investigations for the Approximately 39.9 km (24.8 mi) Harpster-South Morral 69 kV Rebuild Project in Pitt Township, Wyandot County and Waldo/Pleasant/Big Island/Salt Rock Townships, Marion County, Ohio	Marion	Pleasant Township

Table 5. List of OGS cemeteries

OGS ID	Name	County	Location
7384	Cusick	Marion	Not Confident

The closest OAI is located approximately 0.20 miles away. The closest Phase 1 survey is located along the new transmission line centerline near Crissinger Substation and near the existing Kirby-Roberts 138 kV Transmission Line. Based upon the results of the OHPO online database there are no cultural resources within the Project's area and no impacts are expected.

Although, the OSG cemetery location is rated "not confident", notes in the OHPO database indicate that is located within 400 feet of the intersection of Crissinger Road and Bellefontaine Avenue. This would place the cemetery approximately 0.45 miles away from the Project area. Consequently, no impacts are expected.

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

Table 6 shows the list of government agency requirements and the filing status at the time of filing.

Table 6. List of Government Agency Requirements to be Secured Prior to Construction

Agency	Permit Requirement	Status
Ohio EPA	General NPDES Construction Strom Water Permit	Will be Filed

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

ATSI contracted AECOM to submit a request to the Ohio Department of Natural Resources ("ODNR") Office of Real Estate to conduct an Environmental Review As part of the Environmental Review, the ODNR Office of Real Estate conducted a search of the

ODNR Division of Wildlife's Natural Heritage Database to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project area. The ODNR's Office of Real Estate's response on March 25, 2019 indicated that four (4) federally and state endangered species, one (1) federally threatened and state endangered species, one (1) federal candidate and state endangered species, two (2) state endangered species, and one (1) state threatened species are within the range of the identified Project area. The ODNR also indicated there are records of the Bald Eagle (*Haliaeetus leucocephalus*) within the one mile of the Project area. A copy of ODNR's Office of Real Estate's response is included as Exhibit 14.

ATSI contracted AECOM to submit a request to the US Fish and Wildlife Service ("USFWS") for an Ecological Review, to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project area. A copy of USFWS's Ecological Review response is included as Exhibit 15. The USFW's response on March 1, 2019 indicated that they have records of one (1) federally endangered and (1) federally threatened species. A list of all endangered, threatened, and rare species, as identified by ODNR and USFWS, is provided in Table 7.

Table 7: List of Endangered, Threatened, and Rare Species				
Common Name	Scientific Name	Federal Listed Status	State Listed Status	Affected Habitat
Indiana Bat	Myotis sodalis	Endangered	Endangered	Trees & Forest
Northern Long-Ear Bat	Myotis septentrionalis	Threatened	Threatened	Trees & Forest
Clubshell	Pleurobema clava	Endangered	Endangered	In-Water, Streams
Rayed Bean	Villosa fabalis	Endangered	Endangered	In-Water, Streams
Snuffbox	Epioblasma triquetra	Endangered	Endangered	In-Water, Streams

Table 7: List of Endangered, Threatened, and Rare Species				
Common Name	Scientific Name	Federal Listed Status	State Listed Status	Affected Habitat
Rabbitsfoot	Quadrula cylindrica cylindrica	Candidate	Endangered	In-Water, Streams
Pondhorn	Uniomerus tetralasmus	N/A	Threatened	In-Water, Streams
Eastern Massasauga	Sistrurus catenatus	Threatened	Endangered	Wetlands
American Bittern	Botaurus lentiginosus	N/A	Endangered	Wetlands
King Rail	Rallus elegans	N/A	Endangered	Grass & Marsh
Bald Eagle	Haliaeetus leucocephalus	Protected	Protected	Trees

The response from ODNR and USFWS indicated Project is within the range of the federally and state endangered Indiana Bat (Myotis sodalis) and the federally threatened Northern Long-Eared Bat (Myotis septentrionalis). Tree clearing is needed along a portion of the right-of-way. Tree clearing will be completed between October 1st and March 31st to avoid affecting any potential bat habitat. If this schedule cannot be achieved and the clearing of trees outside of this window is deemed necessary, ATSI will conduct a bat survey this summer and subsequent consultation with ODNR and USFWS will be completed prior to clearing.

The response from ODNR indicated that the mussel species listed in the Project area include clubshell (*Pleurobema clava*), rayed bean (*Villosa fabalis*), snuffbox (*Epioblasma triquertra*), rabbitsfoot (*Quadrula cylindrical cylindrical*), and pondhorn (*Uniomerus tetralasmus*) and the ODNR recommend that no in-water work should occur in perennial streams from April 15 to June 30. Based on the recent wetland delineation and stream assessment, only one perennial stream (Stream CK-03) was identified within the Project area. ATSI is not planning on crossing this stream and therefore no adverse affects to these species are anticipated.

The response from ODNR indicated that the Project is within the range of the American bittern (*Botaurus lentiginosus*). This species requires large undisturbed wetlands with small pools and dense vegetation including bogs, large wet meadows, and dense shrubby swamps. ODNR recommends avoiding impacts to this species habitat during the period of May 1 to July 31. The results of the wetland delineation and stream assessment identified a total of six wetland habitats including four palustrine emergent wetland (PEM), one palustrine scrub-shrub wetland (PSS), and one PSS/palustrine forested wetland (PFO) complex. The three of the four PEM wetlands are recently or previously disturbed by agricultural activities and would likely not be able to support a population of these species. The remaining PEM wetland is a small wetland area located along the edge of the survey area that will not be impacted by the Project. Even though, the PSS and PSS/PFO wetland complexes have dense woody vegetation, the hydrologic component of these wetlands are not inundated and would unlikely be able to provide the necessary habitat components for this species.

The response from ODNR indicated that the Project is within the range of the King Rail (Rallus elegans). This species nest in deep bowls constructed of grass within marshes dominated by cattails and other tall emergent vegetation, preferably in wetlands larger than 50 acres. However, this species has also nested in buttonbush swamps, wet meadows, marshy pools in swamp forest, and brushy tangles in swamp meadows. The king rail prefers permanently flooded wetlands where water depths are less than six inches. The ODNR recommends avoiding impacts to this species habitat between May 1 to August 1. The results of the wetland delineation and stream assessment report did not identify any inundated wetland areas or wetlands greater than 50 acres in size that would be able to provide the necessary habitat components for this species.

The response from ODNR indicated that the Project is within the range of the Bald Eagle (*Haliaeetus leucocephalus*). This species nest in trees close to large bodies of water. The closest recorded sighting of an eagle to the Project was in 2017, approximately 0.6 miles to the west in the Big Island Wildlife Area. No large bodies of water are located closer to

the Project area, and no eagles or potential nests were observed during the March 18, 2019 wetland and stream delineation survey. Therefore, no adverse effect to this species is anticipated.

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

ATSI contracted AECOM to submit to the Ohio Department of Natural Resources ("ODNR") Office of Real Estate to conduct an Environmental Review. The ODNR Office of Real Estate researched the presence of any unique ecological sites, geological features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forest, national wildlife refuges, or other protected natural areas within one (1) mile of the project area. The ODNR's Office of Real Estate's response on March 25, 2019 indicated that they have two (2) records of these types of areas within one (1) mile of the identified Project area. These areas are the Big Island Wildlife Area and the Trella Romine Prairie Area

The Big Island Wildlife Area at its closest point is located approximately 1000 feet away from the Project. The Trella Romine Prairie at its closest point is located approximately 0.7 miles away from the Project. Due to the distance away from the Project area there are no anticipated impacts to either of these Wildlife areas

ATSI contracted AECOM to conduct a wetland and stream assessment of the Project area. The AECOM investigation focused on an approximately 8-acre study area around the proposed Project centerline, access roads, and additional workspace areas. During the study, AECOM identified seven (7) wetland areas totaling 1.15 acres, two (2) intermittent streams totaling 968 linear feet, and one (1) perennial stream totaling 269 linear feet. No Ponds were located within the surveyed area. A copy of the wetland and stream assessment report is provided in Exhibit 16.

No impacts to wetlands or streams will be necessary to complete the Project. All proposed access roads for Project are planned to utilize construction matting or other best

management practices to minimize temporary earth disturbance. A map of the proposed

access roads is provided in Exhibit 17.

The Project work limits do encroach on a regulated flood plain based on a review of

online FEMA Flood Insurance Rate Mapping. The Project will not fill any area within the

floodplain but will install 3 wood pole structures. Exhibit 17 depicts the location of the

regulated flood plains in relation to the Project Area.

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 Letter of Notification Transmittal and Availability for

Public Review

This Letter of Notification is being provided concurrently with its docketing with the

Board to the following officials in Pleasant Township, Green Camp Township, and

Marion Township, Marion County, Ohio.

Marion County

Commissioner Kerr Murray Marion County Commissioners 222 West Center Street

Marion, OH 43302

Commissioner Andy Appelfeller Marion County Commissioners 222 West Center Street

Marion, OH 43302

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American Transmission Systems, Incorporated Kirby-Roberts 138 kV Transmission Line Loop to Crissinger Substation Project

Commissioner Ken Stiverson Marion County Commissioners 222 West Center Street Marion, OH 43302

Mr. Bradley K. Irons, P.E., P.S. Marion County Engineer 222 West Center Street Marion, OH 43302 Ms. Evelyn Warr-Cummings, Director Marion County Planning Commission 222 West Center Street, 2nd Floor Marion, OH 43302

Pleasant Township

Mr. David Schrote Pleasant Township Trustee 1252 E Marion-Cardington Rd. Marion, OH 43302

Mr. Steve Lust Pleasant Township Trustee 2650 W Newsman Cardington Rd. Prospect, OH 43342 Mr. Wayne Creasap Pleasant Township Trustee 2876 Smeltzer Rd. Marion, OH 43302

Mr. Lavon Verity Pleasant Township Fiscal Officer 1035 Owens Road West Marion, OH 43302

Green Camp Township

Mr. Steve Ruth Green Camp Township Trustee 4245 Berry Rd Marion, OH 43302

Ms. Virginia Ralph Green Camp Township Trustee P.O. Box 114 Green Camp, OH 43322 Mr. Thomas McBeth Green Camp Township Trustee P.O. Box 219 Green Camp, OH 43322

Ms. Mary McBeth Green Camp Township Fiscal Officer P. O. Box 219 Green Camp, OH 43322

Marion Township

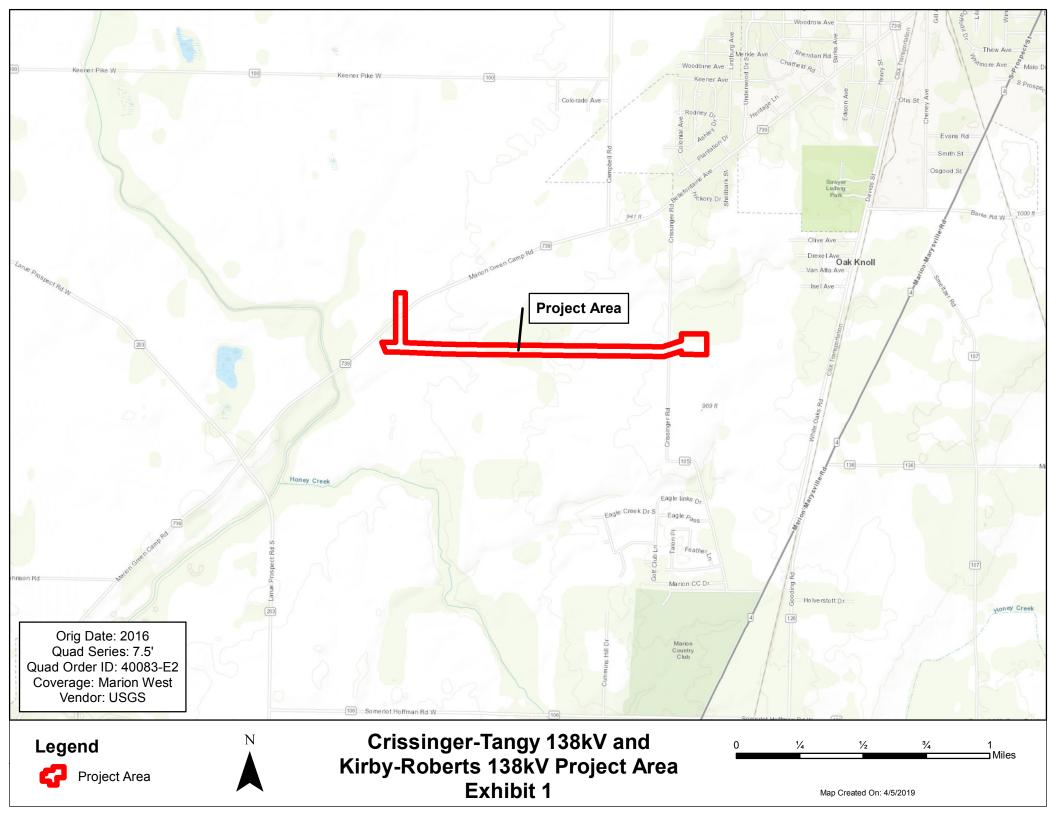
Mr. Larry Ballinger Marion Township Trustee 1228 E. Fairground St Marion, OH 43302 Ms. Karen McCleary Marion Township Trustee 1228 E. Fairground St Marion, OH 43302 Mr. Lynn Thomas Marion Township Trustee 1228 E. Fairground St Marion, OH 43302 Ms. Sheila Perin Marion Township Fiscal Officer 1228 E. Fairground St Marion, OH 43302

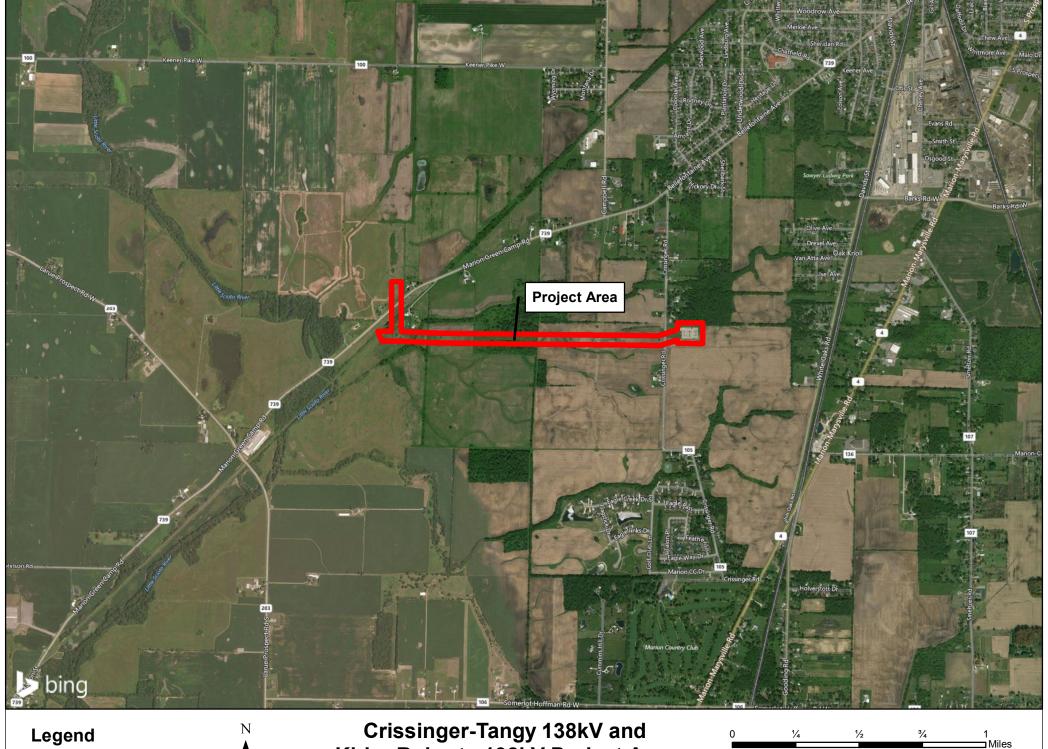
Library

Mr. Gary Branson Marion Public Library 445 E Church St Marion, OH 43302

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 on how to request an electronic or paper copy of this Letter of Notification 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).

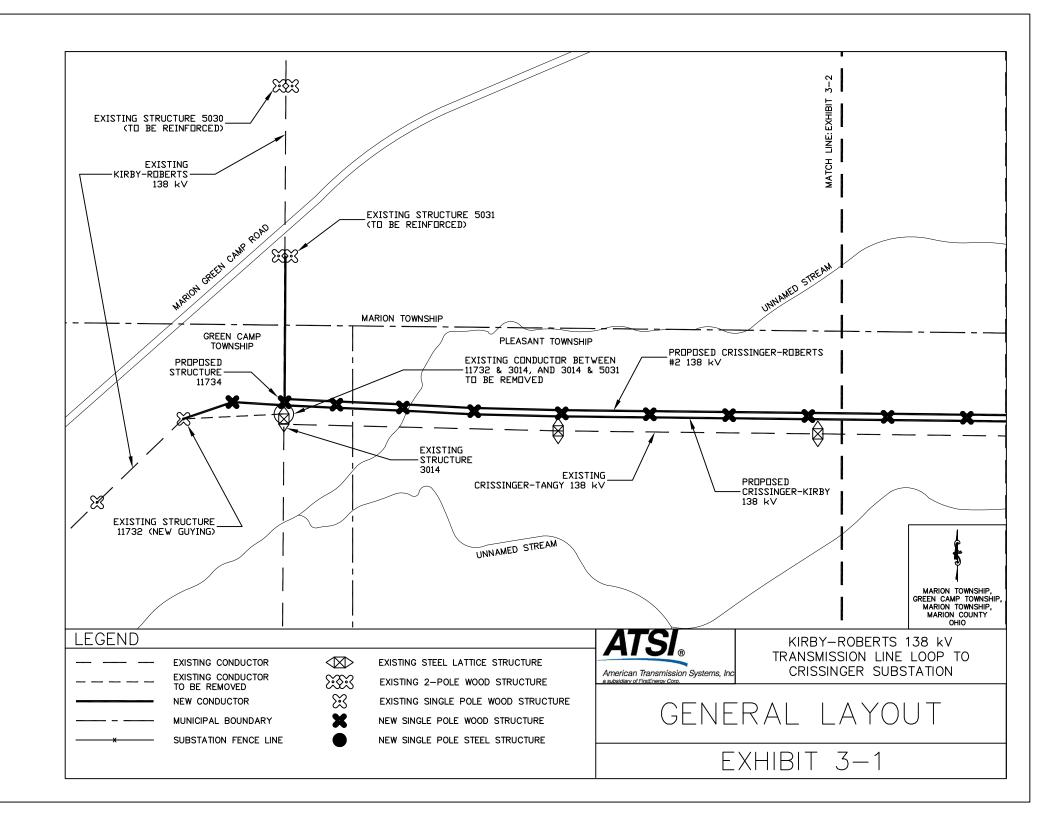


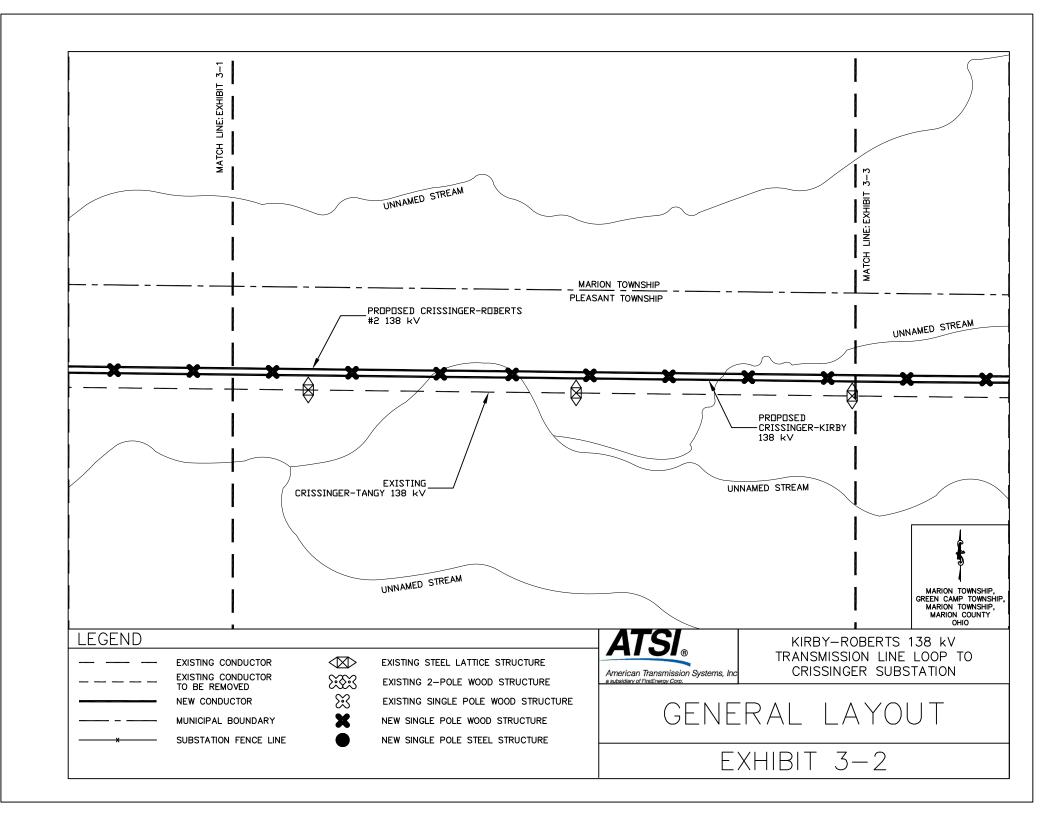


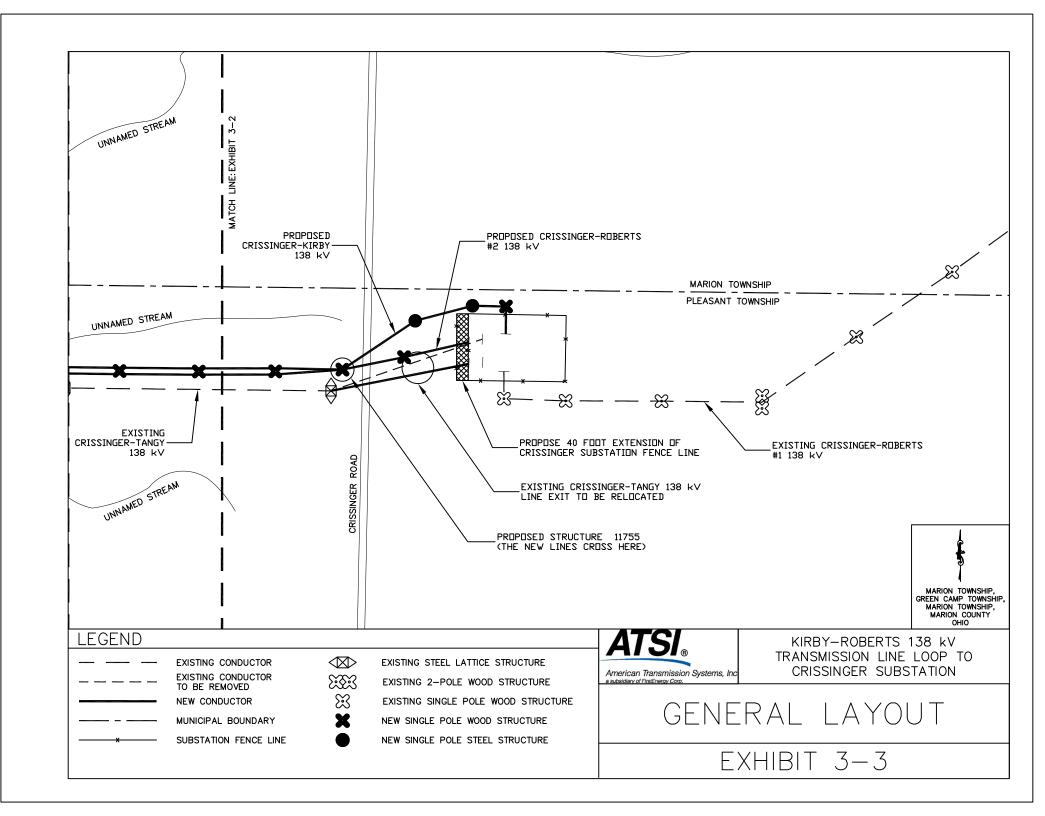
Project Area



Crissinger-Tangy 138kV and Kirby-Roberts 138kV Project Area Exhibit 2









Previously Presented: 8/31/2018 SRRTEP

Problem Statement (Scope and Need/Drivers):

Operational Flexibility and Efficiency

- Improve operational flexibility during maintenance and restoration efforts
- Reduce amount of potential local load loss (Approximately 99 MWs) under contingency conditions
- Mitigate non-planning criteria voltage concerns on the < 100 kV system under contingency (P6) conditions.
- Loss of Crissinger-Roberts 138 kV and Crissinger-Tangy 138 kV Lines
- Results in potential local voltage collapse on the 34.5 kV sub-transmission system.

Selected Solution:

Crissinger 138 kV Ring Bus Expansion (S1696)

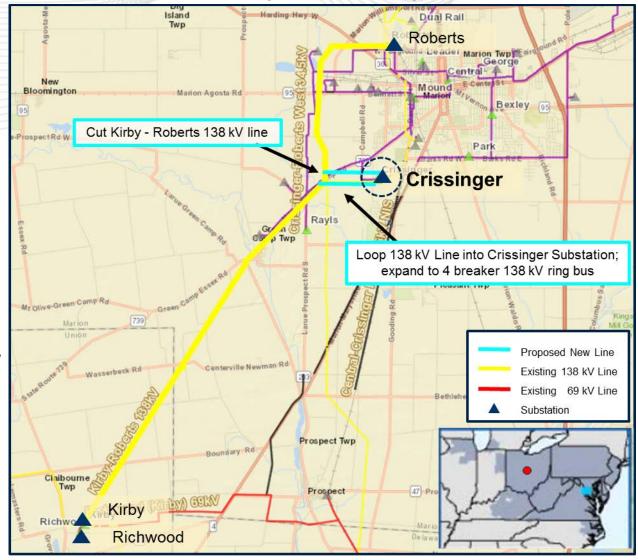
- Expand existing Crissinger substation from a four (4) breaker to a six (6) breaker 138 kV ring bus.
- Cut and extend the Kirby-Roberts 138 kV line to Crissinger substation. (Approximately 1.0 mile)
- Reconfigure Crissinger substation to include terminals for:
 Crissinger Kirby 138 kV Line and Crissinger Roberts #1 138 kV Line
 Crissinger Roberts #2 138 kV Line and Crissinger Tangy 138 kV Line

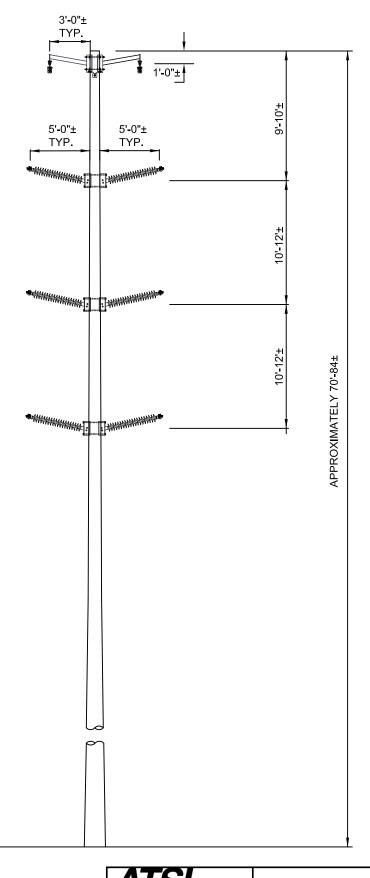
Estimated Project Cost: \$5.8 M

Projected IS Date: 12/31/2019

Status: Engineering

ATSI Transmission Zone: Supplemental Crissinger 138 kV Ring Bus Expansion





GROUND LINE

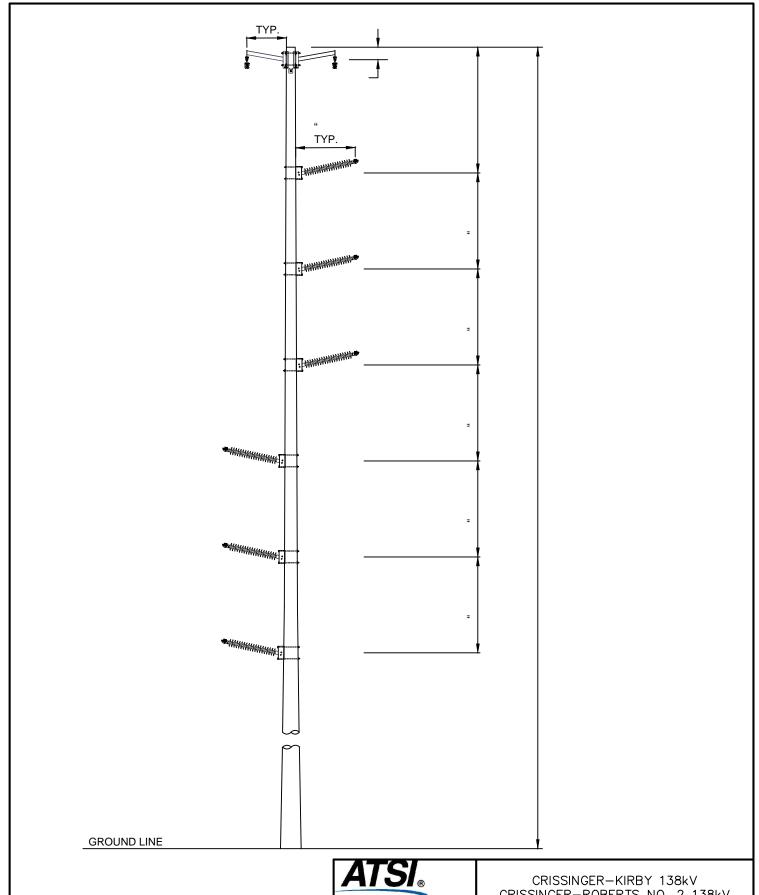
ATSI®

CRISSINGER-KIRBY 138kV CRISSINGER-ROBERTS NO. 2 138kV

VERTICAL DOUBLE CIRCUIT HORIZONTAL POST WOOD POLE STRUCTURE

FXHIBIT 5

REV. B

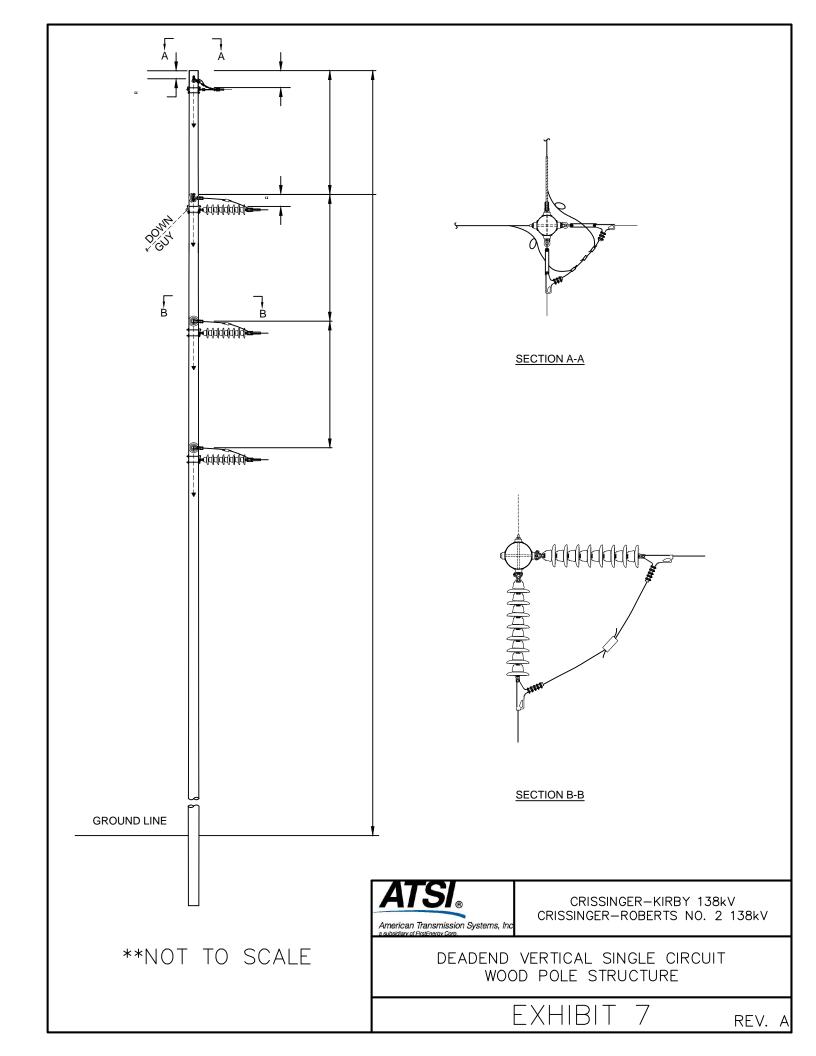


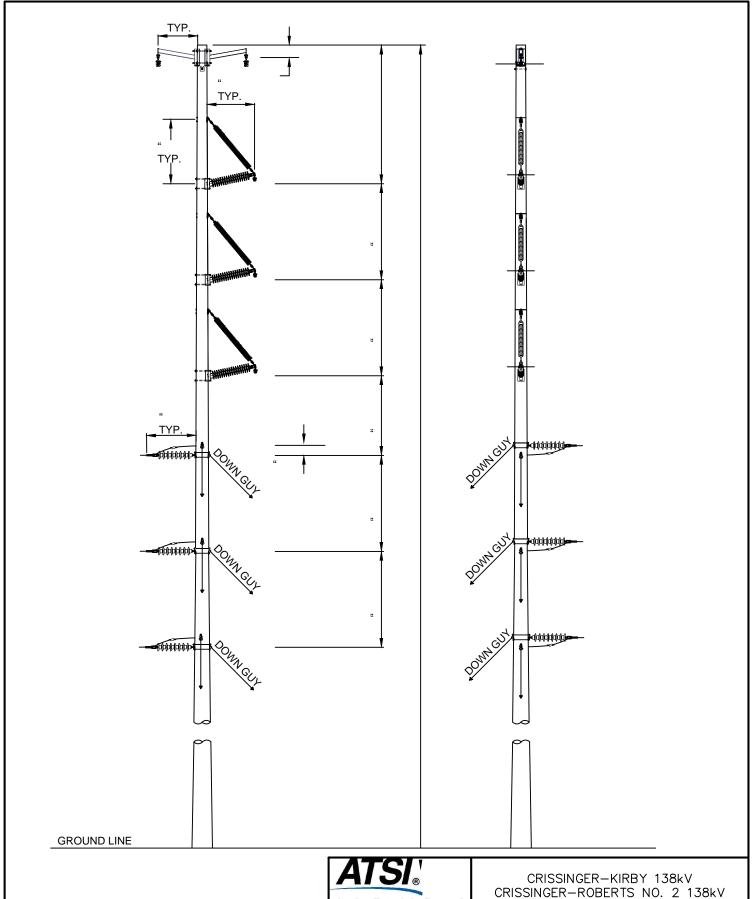
American Transmission Systems, Inc.

CRISSINGER-ROBERTS NO. 2 138kV

VERTICAL STACKED DOUBLE CIRCUIT HORIZONTAL POST WOOD POLE STRUCTURE

REV. A

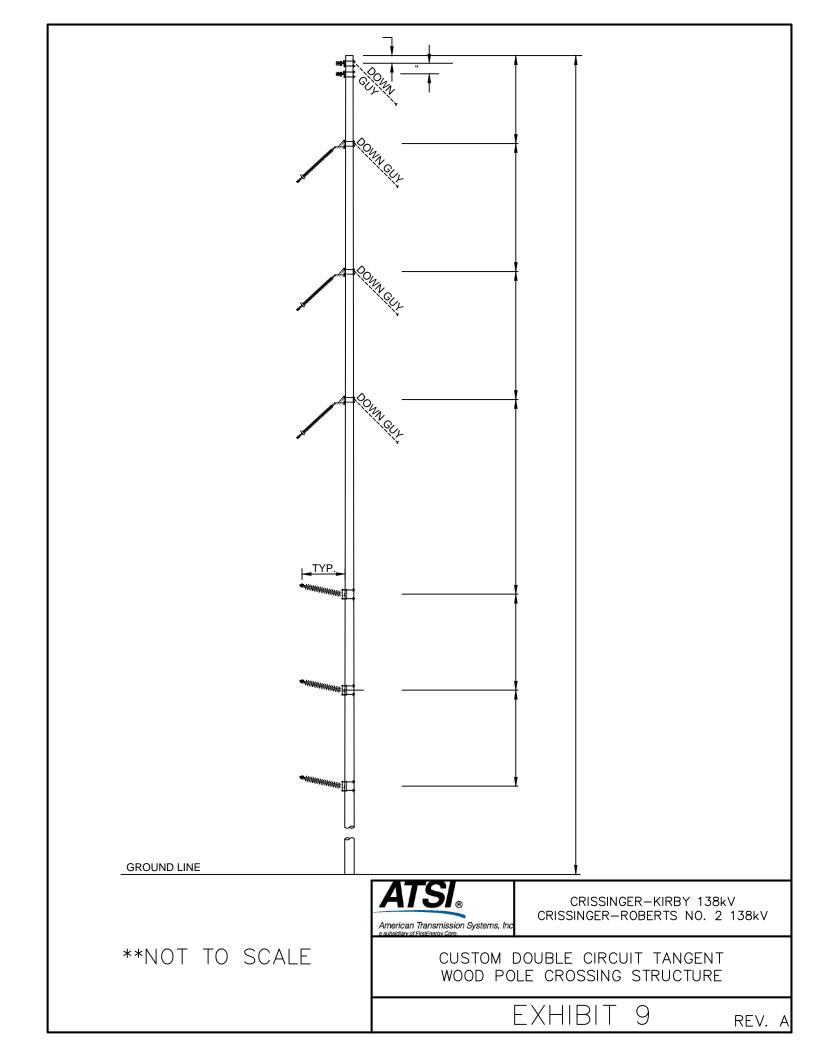


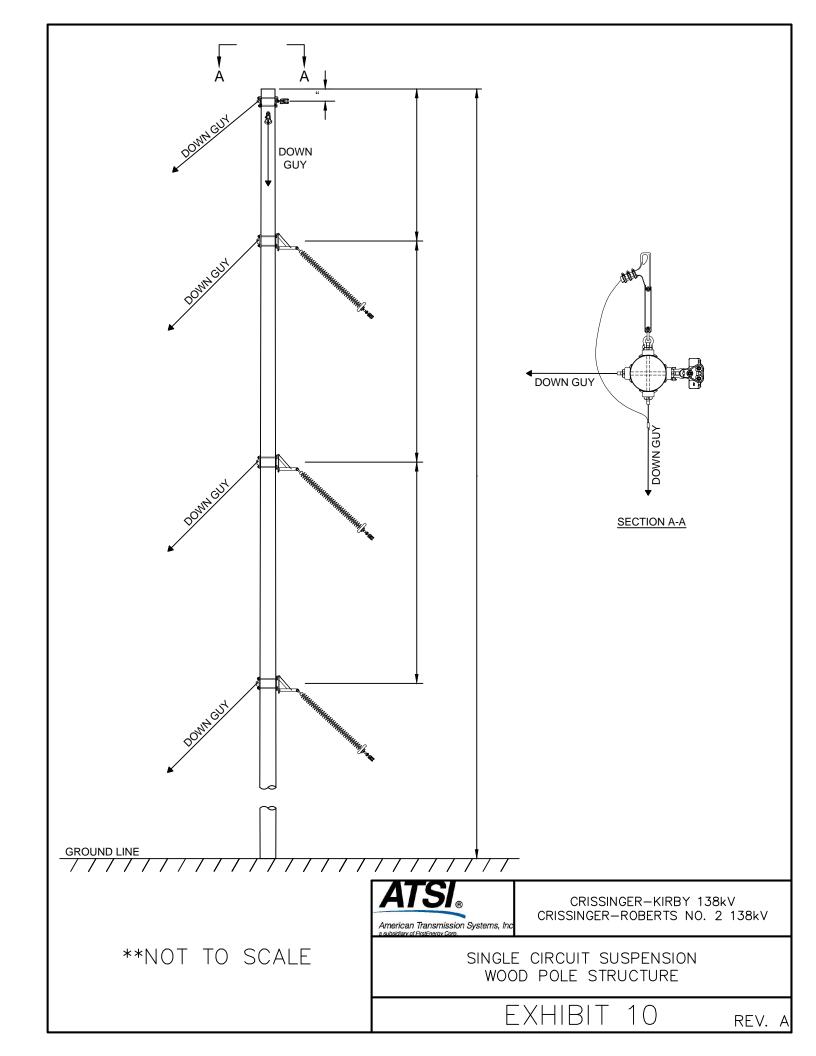


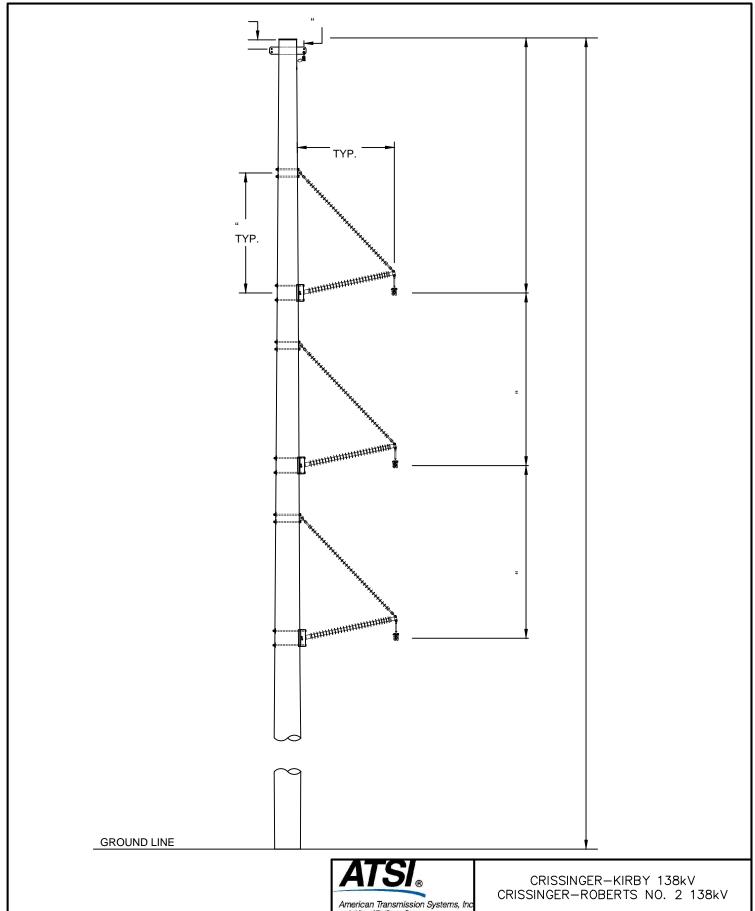
American Transmission Systems, Inc.

CUSTOM DOUBLE CIRCUIT TANGENT WOOD POLE CROSSING STRUCTURE

REV. A

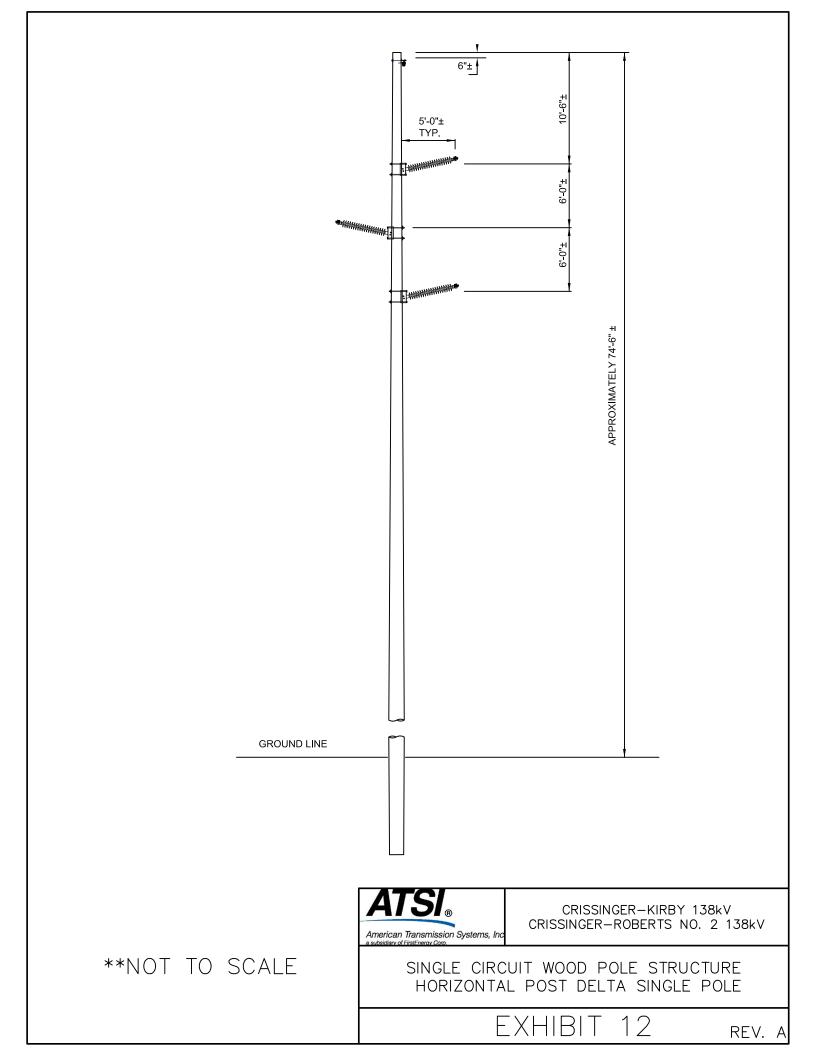






SINGLE CIRCUIT BRACED POST STEEL POLE STRUCTURE

REV.







State Historic Preservation Office

Legend

NR Listings







National Historic Landmark



- NR Determinations of Eligibi
- Historic Structures
- Historic Bridges
- Historic Tax Credit Projects

OGS Cemeteries





UTM Zone Split

NR Boundaries

Phase1

 \mathbb{Z} Phase2

Phase3

Historic Previously Surveyed

0.30 0.61 Miles

1: 24,000

Copyright/Disclaimer

This map is a user generated static output from an Internet mapping site and is for generalThis 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]

Projection: WGS_1984_Web_Mercator_Auxiliary _Sphere





Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

Office of Real Estate
Paul R. Baldridge, Chief
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
Phone: (614) 265-6649
Fax: (614) 267-4764

March 25, 2019

Brian Miller AECOM 525 Vine Street Cincinnati, Ohio 45202

Re: 19-165; Crissinger-Kirby 138 kV Loop and Crissinger Substation Expansion

Project: The proposed project consists of the installation of 1.1 miles of new 138 kV transmission loop line and the expansion of the Crissinger Substation.

Location: The proposed project is located in Green Camp Township, Marion County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following records at or within a one-mile radius of the project area:

Bald eagle (*Haliaeetus leucocephalus*), Federal species of concern Big Island Wildlife Area – ODNR Division of Wildlife Trella Romine Prairie – Appalachia Ohio Alliance

The review was performed on the project area you specified in your request as well as an additional one-mile radius. Records searched date from 1980. This information is provided to inform you of features present within your project area and vicinity.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. 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 all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

EXHIBIT 14

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that best management practices be utilized to minimize erosion and sedimentation.

The project is within the range of the Indiana bat (Myotis sodalis), a state endangered and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees to include: shagbark hickory (Carya ovata), shellbark hickory (Carya laciniosa), bitternut hickory (Carya cordiformis), black ash (Fraxinus nigra), green ash (Fraxinus pennsylvanica), white ash (Fraxinus americana), shingle oak (Quercus imbricaria), northern red oak (*Quercus rubra*), slippery elm (*Ulmus rubra*), American elm (*Ulmus* americana), eastern cottonwood (Populus deltoides), silver maple (Acer saccharinum), sassafras (Sassafras albidum), post oak (Quercus stellata), and white oak (Quercus alba). Indiana bat roost trees consists of trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. However, Indiana bats are also dependent on the forest structure surrounding roost trees. If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If suitable trees must be cut during the summer months, the DOW recommends a net survey be conducted between June 1 and August 15, prior to any cutting. Net surveys should incorporate either nine net nights per square 0.5 kilometer of project area, or four net nights per kilometer for linear projects. If no tree removal is proposed, this project is not likely to impact this species.

The DOW recommends no in-water work in perennial streams from April 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the clubshell (*Pleurobema clava*), a state endangered and federally endangered mussel, the rayed bean (*Villosa fabalis*), a state endangered and federally endangered mussel, the snuffbox (*Epioblasma triquetra*), a state endangered and federally endangered mussel, the rabbitsfoot (*Quadrula cylindrica cylindrica*), a state endangered and federal candidate mussel, and the pondhorn (*Uniomerus tetralasmus*), a state threatened mussel. Due to the location, and that there is no in-water work proposed in a stream of sufficient size, this project is not likely to impact these species.

The project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and federally threatened snake species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. Due to the location, the type of habitat present at the project site and within the vicinity of the project area, this project is not likely to impact this species.

The project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

EXHIBIT 14

The project is within the range of the king rail (*Rallus elegans*), a state endangered bird. Nests for this species are deep bowls constructed out of grass and usually hidden very well in marsh vegetation. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to August 1. If no wetland habitat will be impacted, the project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the U.S. Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

 $\frac{http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community\\ \%20Contact%20List_8_16.pdf$

ODNR appreciates the opportunity to provide these comments. Please contact Sarah Tebbe, Environmental Specialist, at (614) 265-6397 or <u>Sarah.Tebbe@dnr.state.oh.us</u> if you have questions about these comments or need additional information.

John Kessler Environmental Services Administrator

Ruggiero, Augustine (Henslee, Dianna L)

Subject:

Crissinger-Kirby 138 kV Loop and Crissinger Substation Expansion, Marion County

From: susan zimmermann@fws.gov [mailto:susan zimmermann@fws.gov] On Behalf Of Ohio, FW3

Sent: Friday, March 01, 2019 8:52 AM

To: Miller, Brian

Cc: nathan.reardon@dnr.state.oh.us; kate.parsons@dnr.state.oh.us

Subject: Crissinger-Kirby 138 kV Loop and Crissinger Substation Expansion, Marion County



UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Ecological Services Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / Fax (614) 416-8994



TAILS# 03E15000-2019-TA-0758

Dear Mr. Miller,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

The U.S. Fish and Wildlife Service (Service) recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat (e.g., forests, streams, wetlands). Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. All disturbed areas should be mulched and revegetated with native plant species. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

FEDERALLY LISTED SPECIES COMMENTS: All projects in the State of Ohio lie within the range of the federally endangered **Indiana bat** (Myotis sodalis) and the federally threatened **northern long-eared** bat (Myotis septentrionalis). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches diameter at breast height (dbh) that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

Due to your proposal to conduct summer clearing, we recommend that a summer survey be conducted to determine presence or probable absence of Indiana bats at the project site. The summer survey must be conducted by an approved surveyor (list attached) and be designed and conducted in coordination with the Endangered Species Coordinator for this office. In Ohio, summer mist net surveys must be conducted between June 1 and August 15. We recommend that any Indiana bats and northern long-eared bats captured, especially reproductively active females and juveniles, be monitored through radio-tracking to determine roost locations.

If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are also warranted. Portal surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Endangered Species Coordinator for this office.

Survey results should be coordinated with this office prior to initiation of any work. Based on the results of the survey(s), we will evaluate potential impacts to the Indiana bat from the proposed project. If a summer survey documents probable absence of Indiana bats, the 4(d) rule for the northern long-eared bat could be applied (see http://www.fws.gov/midwest/endangered/mammals/nleb/index.html).

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), no tree clearing should occur on any portion of the project area until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend that the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be initiated to assess any potential impacts.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and/or state lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at john.kessler@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.

Sincerely,

Patrice M. Ashfield Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW Kate Parsons, ODNR-DOW Attachment: Surveyors List

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

4/15/2019 1:27:12 PM

in

Case No(s). 19-0803-EL-BLN

Summary: Application for Certificate of Environmental Compatibility and Public Need (Part 2 of 4) electronically filed by Mr. Robert J Schmidt on behalf of American Transmission Systems Inc.