GEAUGA COUNTY 138 KV TRANSMISSION LINE SUPPLY PROJECT

APPENDIX H – WETLAND & STREAM PRESERVATION PLAN

OPSB CASE NO. 07-0171-EL-BTX

Prepared for:

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FirstEnergy Corp. 76 South Main Street Akron, Ohio 44308





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Prepared by:



36 East Seventh Street, Suite 2300 Cincinnati, Ohio 45202

Project #: 14947866

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1.0 Introduction

The following Wetland and Stream Preservation Plan addresses regulatory requirements for mitigation of wetland and stream impacts associated with American Transmission Systems, Incorporated ("ATSI") and The Cleveland Electric Illuminating Company's ("CEI") (the "Companies") construction of the Geauga County 138 kV Transmission Line Supply Project ("Project") along the OPSB Approved Route (Figure 1.) The plan addresses applicable requirements of Condition 41 of the November 24, 2008 OPSB Certificate for the Project, as well as requirements of a Clean Water Act Section 404 Permit from United States Army Corps of Engineers ("USACE") (Nationwide 12 Permit) and Ohio Environmental Protection Agency ("OEPA") Section 401 Water Quality Certification.

The OPSB Conditions that require mitigation/preservation are:

41(A): "Propose preservation easements for the portion of two Applicant-owned properties along the Preferred Route. For the Applicant-owned property at the site of the Stacy substation, Parcel 16-011052, the area of the preservation easements shall generally include the area of the property between the northern boundary of the property and approximately 25 feet south of stream Pr-s001, excluding the area of the r-o-w and associated danger trees of the transmission line, and any access route to or through the transmission line r-o-w. For the Applicant-owned property located on the south side of Burrows Road, Parcel 20-070824, the area of the preservation shall generally include all of the parcel, except for the area of the r-o-w and associated danger trees of the transmission line, and associated danger trees of the transmission line r-o-w,"

41(B): "Along, or in proximity to, the Preferred Route obtain rights to real property that includes not less than 6.7 acres of existing wetland, excluding wetland that is within the *r*-o-w for the project, that can be enhanced through appropriate replanting and/or deed restriction to a forested wetland;"

41(C): "To the extent reasonably possible, acquire 2,500 linear feet of conservation easements (as measured in the bed of the stream) for a higher quality stream with a minimum easement width of 25 feet on each side, including the upper limits of a stream bank along or in proximity to the Preferred Route. The Applicants shall document all efforts to accomplish the above mitigation to Staff upon request."



2.0 Wetland and Stream Preservation Implementation Plan

OPSB Condition 41 (A), (B), and (C) seek wetland and stream mitigation and or preservation that exceeds the applicable requirements of Clean Water Act Section 404 Permit from USACE (Nationwide 12 Permit) and OEPA 401 Water Quality Certification. Therefore, this Wetland and Stream Preservation Plan seeks first to meet or exceed the applicable requirements of the OPSB Certificate and thereby meets and exceeds the applicable requirements of Clean Water Act Section 404 Permit from USACE (Nationwide 12 Permit) and OEPA 401 Water Quality Certification.¹

To address the requirements of the OPSB Conditions and in particular Condition 41 (A), (B) and (C), the Companies developed a strategy to identify and utilize existing ecological systems in the immediate area of the Project to the extent practical. This strategy focused on finding preservation sites that offer wetland and stream complexes adjacent to upland forest to provide a more coherent and viable mitigation option, rather than multiple isolated wetland mitigation sites. As suitable preservation areas are located in the immediate area of the Project, utilizing these sites is preferred as it keeps disturbed areas and their related mitigation locations in close proximity.

A variety of scenarios for wetland and stream mitigation and preservation were considered and evaluated based on their location, existing ecology, future potential availability (landowner permission), and agency approval. This approach was discussed initially with OPSB and OEPA Staff and subsequently with OEPA 401 Section staff, and included further refinement following field visits to evaluate line adjustments (especially at stream crossings, woodlots, and wetlands), access routes, and agency approval of proposed mitigation/preservation sites.

The main elements of the Wetland and Stream Preservation Plan include:

- Preservation of ecological resources on two ATSI owned properties; Stacy Substation Property and Burrows Road Property.
- Preservation of at least 6.7 acres of wetland on property currently owned by ATSI and property under an ATSI option to purchase; The Ticel South Property and a portion of the Ticel North Property will be utilized for this requirement.

¹ Throughout this Plan, the use of "preservation" and "preservation easement" is interchangeable with "conservation" and "conservation easement."

• To the extent reasonably possible acquire 2,500 linear feet of conservation easement of a high quality stream in the area of the Project

Table 1 provides a breakdown of all four preservation properties and acreages of current land use within each site. The table also identifies the acreage of wetland on each site and linear feet of streams if present.

2.1 ATSI Stacy and Burrows Road Owned Properties

ATSI currently owns two properties along the OPSB Approved Route at the Stacy Substation site and property located on the south side of Burrows Road. Both properties are the subject of OPSB Condition 41(A). As required by this Condition, portions of both the Stacy Substation and the Burrows Road Properties that lie outside of the areas necessary for construction and future access and maintenance of the Project will be preserved from future development. In the event ATSI transfers ownership of these properties to another entity, a deed restriction will be employed to maintain the preservation practice subject to provisions of applicable state and federal laws. Both properties are discussed in more detail below.

2.1.1 Stacy Substation Property

The Stacy Substation Property, parcel 16-011052, is located at the southern terminus of the Project along Mayfield Road (U.S. 322), approximately 1,600 feet east of the intersection with Madison Road (SR. 528), and can be found on Figure 2. The 25.04-acre Substation Property includes the following land uses: wetlands/streams, residential yard, old field, mature deciduous forest, young deciduous forest, and various developed areas. A breakdown of the current land uses and their acreage is below:

- Wetlands: 4.87 acres
- Streams: 3,184 linear feet
- Residential yard: 0.61 acres
- Old field: 6.85 acres
- Mature deciduous forest: 10.03 acres
- Young deciduous forest: 2.13 acres
- Road ROW or other developed areas: 0.55 acres



The Companies are proposing that the preservation area (18.16-acres) on the Substation Property will extend across the full width of the property from the northern boundary to 25 feet south of stream Pr-s001, except for the areas within the transmission line ROW, location of priority trees adjacent to the ROW, and along the access route located outside of the ROW. A breakdown of the current land uses in the area to be preserved and their acreage is provided below, followed by their description:

- Wetlands: 4.23 acres
- Streams: 2,977 linear feet
- Residential yard: 0.61 acres
- Old field: 2.54 acres
- Mature deciduous forest: 9.59 acres
- Young deciduous forest: 1.19 acres

The 4.23 acres of wetland within the preserved area includes four delineated wetlands, Pr-w002, Pr-w003, Pr-w004a, and Pr-w004b.

- Pr-w002 is a Category II PSS/PFO wetland that extends along the southern edge of perennial stream Pr-s001. The Companies will preserve 0.02 acres of Pr-w002 that is within 25 feet of the stream and outside the maintained ROW, in accordance with OPSB Condition 41(A).
- Pr-w003 is a Category II PFO/PSS wetland that extends along the northern edge of perennial stream Pr-s001. The Companies will preserve all of the 0.50 acres of wetland Pr-w003 outside of the ROW.
- Wetland Pr-w004a is a large Category II wetland complex that extends beyond the ATSI property, both to the north and east. The on-site portion includes PEM/PSS/PFO wetland and contains meandering perennial stream Pr-s003. The Companies will preserve 2.18 acres of wetland Pr-w004a that is within the property, and outside of the ROW.
- Pr-w004b is a Category II PEM/PSS/PFO wetland that contains meandering perennial stream Pr-s002, which connects to perennial stream Pr-s003. The Companies will preserve the 1.53 acres of wetland Pr-w004b that is within their property.

Within the Substation Property, approximately 2,977 linear feet of three (Pr-s001, Pr-s002, and Pr-s003) perennial streams will be preserved outside the ROW and access road. Streams Pr-



s001 (496 linear feet) and Pr-s003 (1,097 linear feet) are Modified Class II streams, and stream Pr-s002 (1,384 linear feet) is a Modified Class I stream. Preservation will allow the riparian corridors along the streams to grow and function through natural succession.

2.1.2 Burrows Road Property

The Burrows Road Property, parcel 20-070824, is owned by ATSI. The Burrows Road Property is located near the middle of the Project along the south side of Burrows Road, approximately 1,200 feet east of the intersection with Madison Road (State Route 528), and is shown on Figure 3. The 3.16-acre Burrows Road Property is predominantly a mixture of wetlands, old field, and mature deciduous forest. A breakdown of the current land uses and their acreage is below:

- Wetlands: 0.93 acres
- Old field: 1.0 acres
- Mature deciduous forest: 1.07 acres
- Road ROW or other developed areas: 0.16

The entire Burrows Road Property is included within the preservation easement, except for the areas incorporated within the transmission line ROW, and priority trees adjacent to the ROW. Access routes on this property will be located entirely within the ROW. A breakdown of the current land use in the area to be preserved is as follows:

- Wetlands: 0.77 acres
- Old field: 0.75 acres
- Mature deciduous forest: 0.73 acres

The 0.77 acres of wetland within the preserved area includes three delineated PFO wetlands, Pr-w070a, Pr-w070b, and Pr-w070c.

2.2 Additional Preservation Properties

In addition to the two ATSI owned properties, OPSB Condition 41 (B) requires the Companies to obtain property rights to property that contains not less than 6.7 acres of wetland along, or in proximity to the OPSB Approved Route. ATSI has purchased one property and negotiated an





option to purchase a portion of a second property located on the north side of Burrows Road. These parcels are described as Ticel South and Ticel North Properties. ATSI purchased the Ticel South property, and will exercise the option to purchase the Ticel North Property once all permits and plan approvals have been received. Wetlands on the Ticel South and a portion of the Ticel North Properties, located outside of the areas within the transmission line ROW, location of priority trees adjacent to the ROW, and along the access route located outside of the ROW, will be utilized to meet the balance of the wetland preservation requirements. Both properties are discussed in more detail below.

2.2.1 Ticel South Property

The Ticel South Property, parcel 30-080300, is located near the middle of the Project, along the north side of Burrows Road, approximately 1,200 feet east of the intersection with Madison Road (SR. 528), and is also shown on Figure 3. The 12.03-acre Ticel South Property includes a mixture of wetlands/streams, scrub/shrub, young deciduous forest, and various developed areas. A breakdown of the current land uses is as follows:

- Wetlands: 6.67 acres
- Streams: 564 linear feet
- Scrub/shrub: 3.63 acres
- Young deciduous forest: 1.41 acres
- Road ROW or other developed areas: 0.32 acres

The Companies are proposing to preserve the entire Ticel South Property except for the areas within the transmission line ROW, location of priority trees adjacent to the ROW, and along the access route located outside of the ROW. A breakdown of the current land uses in the area to be preserved is as follows:

- Wetlands: 6.13 acres
- Streams: 504 linear feet
- Scrub/shrub: 3.11 acres
- Young deciduous forest: 1.41 acres

The 6.13 acres of wetland within the Ticel South Property includes two delineated wetlands, Pr-w071 and Pr-w072.



- Pr-w071 is a Category II PSS/PFO wetland that extends between perennial stream Prs043 and Burrows Road. Wetland Pr-w071 extends beyond the optioned property boundary to the east and west. The Companies will preserve 5.35 acres of this wetland within the property boundary, but outside the ROW, priority tree locations and access route.
- Pr-w072 is a 0.78 acre, Category II PSS wetland that will be preserved outside the ROW.

This property appears to have been logged within the last six years. Preserving the existing wetlands outside the ROW will allow them to revert back to PFO wetlands through natural succession. Both wetland Pr-w071 and Pr-w072 have shown signs of succession since the initial field assessment in 2007. When that assessment was conducted, there was very little ground cover or shrub layer. Since the initial field assessment, various herbaceous, shrub, and tree species have established throughout the wetland. In 2010 it was noted that herbaceous vegetation has established in concentrated pockets that are surrounded by approximately 6 - 10 feet tall shrubs and saplings.

Approximately 504 linear feet of Modified Class II, perennial stream Pr-s043 will be preserved outside the ROW within the Ticel South Property.

During the logging operation that occurred within the last six years, the riparian corridor was also cut down, but has already begun to improve through establishment of herbaceous ground cover and the growth of various shrub and tree species. The riparian corridor outside of the ROW along the stream will be allowed to continue to grow and function through natural succession.

2.2.2 Ticel North Property

The Ticel North Property, parcel 30-080600, abuts the northern boundary of the Ticel South Property. The Ticel North Property is located near the middle of the Project, north of Burrows Road, approximately 1,200 feet east of the intersection with Madison Road (State Route 528), and is shown on Figure 3. The 4.92-acre Ticel North Property is predominantly a mixture of wetlands, mature deciduous forest, and scrub/shrub. A breakdown of the current land uses is as follows:

• Wetlands: 2.13 acres

- Mature deciduous forest: 1.60
- Scrub/shrub: 1.19 acres

The Companies will preserve the 4.92-acre Ticel North Property except for the areas within the transmission line ROW, locations of priority trees adjacent to the ROW, and along the access route located outside of the ROW. A breakdown of the current land uses in the area to be preserved is as follows:

- Wetlands: 1.98 acres
- Mature deciduous forest: 0.79
- Scrub/shrub: 1.06 acres

The 1.98 acres of wetland within the Ticel North Property includes two delineated wetlands, Pr-w102 and Pr-w104.

- Pr-w102 was originally defined as a Category II PEM wetland during the initial field assessment conducted in 2007. This wetland extends north beyond the Ticel North Property limits and has been previously logged. Since 2007 beavers have modified the area to create an expanded wetland and stream complex, that was re-defined during a 2010 field review with OEPA as a high Category II PEM wetland. The Companies will preserve the 0.54 acres of wetland Pr-w102 that is within the Ticel North Property, but located outside the ROW.
- Pr-w104 is currently a Category II PSS wetland that extends north and west of the area within the Ticel North Property. The Companies propose to preserve the 1.44 acres of wetland Pr-w104 that is outside the ROW, but within property.

The Ticel North Property also appears to have been logged within the last six years, therefore preserving the wetlands outside the ROW will allow them to revert back to PFO wetlands through natural succession.

When the initial field assessment was conducted in 2007, very little herbaceous growth was noted, and the shrub layer was short, approximately 2 - 3 feet tall. Since that assessment, various herbaceous, shrub, and tree species have expanded throughout the wetland. Wetland Pr-w102 has shown signs of improvement through increased herbaceous vegetation growth and an expansion of open water as a result of the beavers, as noted during a 2010 field survey.



2.3 Stream Preservation

Stream Pr-s049 was observed to be the highest quality stream along the Project and was discussed during field visits with OPSB and OEPA staff as a possibility for stream preservation to meet the requirements of OPSB Condition 41(C). Stream Pr-s049, the location of the OPSB Approved Route and property parcels are shown in Figure 4. Stream Pr-s049 is located along the northern end of the alignment, approximately 2,350 feet southwest of the intersection of Thompson Road and Sidley Road. Acquiring stream Pr-s049 conservation easement will depend on landowner willingness to grant the easement. The Companies have pursued good faith negotiations with landowners along stream Pr-s049 to secure a conservation easement of up to 2,500 linear feet.

To date, two landowners have agreed to the conservation easement with approximately 535 linear feet, and 924 linear feet of stream Pr-s049, respectively. Although the Companies have not ended their negotiation efforts, based on the current response, it appears that a conservation easement will not be granted by three of the six landowners – these landowners have approximately 2,183; 746; and 687 linear feet of stream Pr-s049 on their property. The landowner of one of these parcels has not been located and the property is anticipated to be sold at a future Geauga County Sheriff Administered auction, therefore no negotiations have occurred for this parcel at this time. This parcel has approximately 1,698 linear feet of stream Pr-s049 and of the six parcels it contains the least desirable sections of the stream from a preservation point of view. The Companies plan to continue negotiations and/or keep the offer open for settlement for the conservation easements through December 1, 2011 at which time efforts to obtain the conservation easements will cease.

When first proposed, the Companies indicated that the success of this option depended on the agreement of the affected landowners. At this stage it is likely that at least some landowners are unwilling to grant easements. While conservation easements along stream Pr-s049 remains the preferred option and efforts to obtain those easements will continue until December 1, 2011, the Companies believe they have already exceeded the objective of OPSB Condition 41(C) even if no additional conservation easements are granted. First, the Companies have pursued good faith negotiation efforts to obtaining the indentified stream conservation efforts as required by OPSB Condition 41(C). Second, and more importantly, the Companies have currently obtained and are proposing to preserve 4,940 linear feet of streams along or in proximity to the Preferred Route. Those stream locations are as follows:



- Approximately 1,459 linear feet of stream Pr-s049 will be preserved on two properties.
- Sections of three perennial streams, Pr-s001, Pr-s002, and Pr-s003, totaling approximately 2,977 linear feet, will be preserved on the Stacy Substation Property.
- A section of perennial stream, Pr-s043, totaling approximately 504 linear feet will be preserved on the Ticel South Property.

3.0 **Property Ownership and Protection**

ATSI owns the Stacy Substation Property, the Burrows Road Property, the Ticel South Property, and will exercise the option to purchase the Ticel North Property once all permits and plan approvals are received. Additionally, after all approvals are received, the properties will have deed restrictions placed on them in conformance with this plan so that they cannot be developed in the future without either applicable judicial action or the approval of the Director of the Ohio Environmental Protection Agency. The Companies are open to the concept of third-party management of the properties (park district, conservation group, etc.), however to date no discussions have taken place.

4.0 Monitoring

The Companies propose annual monitoring for each of the areas included in this plan for a period of three years. The monitoring will commence with the later occurrence of either: (1) approval of this plan, or (2) granting of the OEPA 401 Water Quality Certification. Monitoring will include observation of the success of tree growth at the PFO wetland locations, observation of invasive species occurrence (and remediate if needed), and monitoring natural succession within the riparian corridor(s). The findings of the monitoring will be communicated to OPSB and OEPA in an annual letter report with appropriate photo documentation.

5.0 Summary

The Companies fulfill the OPSB Conditions 41 (A) and (B) for wetland mitigation/preservation by obtaining greater than 6.7 acres of existing wetland on property owned or optioned. Additionally, upland areas adjacent to these wetlands have also been secured for preservation which will function as protective buffers, and allow for a more diverse habitat than wetland preservation alone. A summary of the total areas to be preserved is as follows:





- Wetlands: 13.11 acres
- Residential yard: 0.61 acres
- Old field: 3.29 acres
- Mature deciduous forest: 11.11 acres
- Young deciduous forest: 2.60 acres
- Scrub/shrub: 4.17 acres

The Companies fulfill the OPSB Conditions 41 (C) for stream preservation as follows:

When first proposed, the Companies indicated that the success of the stream preservation option at stream Pr-s049 would depend on the willingness of landowners to sign the conservation easements. The Companies have pursued good faith negotiations to achieve this, but at this stage it is likely that at least some landowners are unwilling to grant easements. While Pr-s049 remains the preferred option, the Companies believe they have exceeded the goal of Condition 41(C) in that the currently obtained and proposed stream preservation streams along or in proximity to the Preferred Route includes preserving approximately 1,459 linear feet of stream Pr-s049, and 3,481 combined linear feet of four perennial streams located on the properties to be preserved.

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GEAUGA COUNTY 138 KV TRANSMISSION LINE PROJECT SUMMARY OF LAND USE AND PRESERVATION ON PROPOSED MITIGATION PROPERTIES

Preservation Property Stacy Substation.		Stacy Substat	tion. 24 20 20 20 20 20 20 20 20 20 20 20 20 20		Couth of Burrows R	urrows Road ->>>		 Ticel South (Parcel ID 30-080300) 			 Ticel North* *** (Parcel ID 30-080600) 			Total	Acreage
Current Land Use	Acreage Acreage Within to be	Acreage to be Preserved	Acreage Acreage Acreage Acreage Acreage Acreage Acreage Within to be Preservation Property Preserved Easement	Acreage Acrea Within to be Property Preserv	Acreage to be - Preserved	Acreage Outside of Preservation Easement	Acreage Within Properfy	Acreage to be Preserved	Acreage Outside of Preservation Easement	Acreage Within Property	Acreage to be Preserved	Acreage Outside of Preservation Easement	Acreate	.	Dutside of Preservation Easement1
Parcel Acreage	25.04	18.16	6.88	3.16	2.25	0.91	12.03	10.65	1.38	4.92	3.83	1.09	45.15	34.89	10.26
Wetlands	4.87	4.23	0.64	0.93	0.77	0.16	6.67	6.13	0.54	2.13	1.98	0.15	14.60	13.11	1.49
Residential yard	0.61	0.61	0.00	0.00	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.61	0.00
Old field	6.85	2.54	4.31	1.8	0.75	0.25	0.00	0.00	00.0	0.00	0.00	0.00	7.85	3.29	4.56
Mature deciduous forest	10.03	9.59	0.44	1.07	0.73	0.34	0:00	00.0	00.00	1.60	0.79	0.81	12.70	11.11	1.59
Young deciduous forest	2.13	1.19	0.94	0.00	0.00	0.00	1.41	1.41	00.0	0.00	00.0	0.00	3.54	2.60	0.94
Scrub/shrub	00.0	0.00	0.00	0.00	0.00	0.00	3.63	3.11	0.52	1.19	1.06	0.13	4.82	4.17	0.65
Road ROW or other developed areas	0.55	0.00	0.55	0.16	0.00	0.16	0.32	0.00	0.32	0.00	00.0	0.00	1.03	0.00	1.03
State (1990) Current Land Use			Linear Feet / Outside of Preservation Easement	Linear Feet Feet Feet to Within Freserv Property	Feet to be Preserved	Linear Feet Outside of Preservation Easement?	Linear Feet Within Property	Linear Feet to be Preserved	Linear Feet Outside of Preservation Easement?	Linear Feet Within Property	Feet to be Preserved	Linear Feet Outside of Preservation Easement ²	K Total	Total Linear Feet to be Preserved	Linear Feet Outside of Preservation Easement?
Stream(s) Channel Length	3,184	2,977	207	Q	ΑN	NA	564	504	09	0	NA	AN	3,748	3,481	267
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*Acreages based on likely engineering route adjustment to move comer pole outside of wetland boundary.

¹ Acreages of land use that are within the project 60 foot corridor, access road, substation, or other areas that will be maintained, and not preserved.
² Linear feet of stream(s) that are within the project 60 foot corridor, access road, substation, or other areas that will be maintained, and not preserved.
Note: "Current Land Use" refers to latest observed land use. Vegetation in the preserved areas will be allowed to naturally succeed. No development or clearing will be permitted in these areas.







