

1.0 INTRODUCTION

The following Vegetation Clearing, Herbicide Use and Signage Plan ("Clearing Plan") addresses regulatory requirements for vegetation clearing activities, herbicide use and signage associated with American Transmission Systems, Incorporated ("ATSI") and The Cleveland Electric Illuminating Company ("CEI") (collectively the "Companies") construction of the Project. The Clearing Plan addresses applicable requirements of: 1.) Conditions of the November 24, 2008 Ohio Power Siting Board ("OPSB") Opinion, Order and Certificate for the Project, 2.) Conditions of the February 22, 2011 authorization of the U.S. Army Corps of Engineers under Application No. 2009-01427 Nationwide Permit No. 12, 3.) The April 22, 2011 Request for Modification of Department of the Army Permit No. 2009-01427 authorization of the U.S. Army Corps of Engineers, 4.) The October 14, 2011 Request for Modification of Department of the Army Permit No. 2009-01427, and 5.) The August 4, 2011 Ohio Environmental Protection Agency Grant of Section 401 Water Quality Certification ID No. 093580.

ATSI's transmission lines provide power to thousands of customers in northern and central Ohio and western Pennsylvania. These transmission lines connect customers to generation sources and are a vital reliability link with other utilities. ATSI is charged by state and federal regulatory agencies with the responsibility for providing safe, reliable electric service to its customers. Providing clearances between vegetation and the transmission line structures and conductors is an important aspect of providing safe, reliable electric service. Trees and incompatible vegetation can cause interruptions of service by growing into, or falling through power lines. Vegetation management involves establishing the necessary vegetation clearances during the construction of the transmission line and maintaining them approximately every five years thereafter.

Establishing vegetation clearances involves removing incompatible vegetation located within the right-of-way ("ROW") (referred to as the clearing zone) and trees located adjacent to the ROW called "priority trees" that potentially interfere with the construction and safe operation of transmission facilities. In some cases, cutting most of the vegetation within the clearing zone during the initial construction process promotes efficient future growth of low growing vegetation that will be more compatible with the transmission line, while in other cases, selective vegetation removal is appropriate due to the nature of the area being crossed by the ROW. Established

transmission line ROWs typically contain an ecologically diverse mixture of low growing vegetation shrubs and ground cover that provide the vegetation clearances required for safe operation of the transmission line, while also establishing a compatible low maintenance vegetation environment.

Vegetation removal to establish the clearing zone is usually one of the initial tasks in the transmission line construction process and usually follows or coincides with installation of erosion controls and establishing access routes. Vegetation removal may be accomplished by using power saws and similar hand tools or by using motorized equipment. Bulldozers and similar equipment with earth moving blades will not be used to remove vegetation for construction of the Project. Trained and experienced forestry personnel, on a case-by-case basis, will determine if the vegetation within the clearing zone should be removed and determine if trees adjacent to the ROW are priority trees that should be removed or trimmed. Priority trees are defined as "Tree(s) located adjacent to the clearing zone corridor that are either dead, diseased, declining, severely leaning, located in site conditions prone to failure or significantly encroaching the clearing zone." Disturbance to compatible trees, shrubs and other vegetation that do not interfere with construction or operation of the transmission facilities is minimized. In some areas, it may also be necessary to apply herbicides, which will only be applied in accordance with this Clearing Plan.

A ROW is a general term used to describe the strip of land over which electric lines or similar linear facilities, such as a railroad, are built. It is necessary to obtain specific legal property rights to construct, operate and maintain a transmission line. This may be accomplished by purchasing the land or obtaining easements. For the Project at the time of issuing the first, as well as the second revision of the Clearing Plan, some of the necessary property rights have been obtained, some property rights are still under negotiation and other property rights are likely to be obtained through appropriation – Project construction activities will only occur on properties after the necessary property rights have been obtained. The ROW of the Project will consist of property either owned in fee by the Companies, easement rights granted to the Companies, or crossing of public road ROW. The easement rights typically provide for the removal of trees and vegetation within the ROW as well as the pruning and or removal of priority trees outside the ROW. Vegetation removal activities will be conducted in conformance with the Clearing Plan and granted easement rights. Where the Project crosses property owned by the Companies, specific easements are not necessary for the planned vegetation removal. In these

locations, the ROW width typically used for an easement (based on the design voltage of the transmission line) is identified as an assumed ROW width in the Clearing Plan and is used for determining the limits of the clearing activities.

1.1 APPLICABLE OPSB CONDITIONS

Sections of OPSB Conditions 4, 5, 6, 7, 8, 9, 12, 13(a), 13(b), 17, 20, 22, 28, 29, 30, 35, and 36 may be applicable to vegetative clearing and herbicide use issues. These conditions are as follows:

- 4) *"That the Applicants shall properly install and maintain erosion and sedimentation control measures at the Project site in accordance with the following requirements:*
 - (a) *During construction of the facility, seed all disturbed soil, except within cultivated agricultural fields, within seven days of final grading with a seed mixture acceptable to the appropriate County Cooperative Extension Service. Denuded areas, including spoils piles, shall be seeded and stabilized within seven days, if they will be undisturbed for more than 21 days. Reseeding shall be done within seven days of emergence of seedlings as necessary until sufficient vegetation in all areas has been established.*
 - (b) *Inspect and repair all erosion control measures after each rainfall event of one-half of an inch or greater over a 24-hour period, and maintain controls until permanent vegetative cover has been established on disturbed areas.*
 - (c) *Obtain National Pollution Discharge Elimination System (NPDES) permits for storm water discharges during construction of the facility. A copy of each permit or authorization, including terms and conditions, shall be provided to the Staff within seven days of receipt. Prior to construction, the construction Storm Water Pollution Prevention Plan shall be submitted to the Staff for review and acceptance.*
 - (d) *Utilize "best management practices" (BMPs) when working in the vicinity of environmentally sensitive areas. This includes, but is not limited to, the installation of silt fencing (or similarly effective tool) prior to initiating construction near streams and wetlands. The installation shall be done in accordance with generally accepted construction methods and shall be inspected regularly."*

- 5) *"That the Applicants shall have an environmental specialist on site at all times that construction (including vegetation clearing) is being performed in or near a sensitive area such as a designated wetland, stream, river, or in the vicinity of identified threatened/endangered species or their identified habitat."*
- 6) *"That the Applicants shall employ construction methods as specified in paragraphs 7, 8, 9 and 10 in proximity to any watercourses and/or wetlands."*
- 7) *"That all watercourses and/or wetlands shall be delineated by fencing, flagging, or other prominent means."*
- 8) *"That all construction equipment shall avoid watercourses and/or wetlands, except at specific locations where Board Staff has approved access."*
- 9) *"That storage, stockpiling and/or disposal of equipment and materials in watercourses and/or wetlands shall be prohibited."*
- 12) *"That, for construction and for the period of two years of initial operation, the Applicants shall limit, to the greatest extent possible, the use of herbicides in proximity to surface waters, including wetlands along the right-of-way ("r-o-w"). Individual treatment is preferred, while general, widespread use of herbicides is strongly discouraged. Prior to initiation of construction, the Applicants shall submit a plan describing the planned herbicide use throughout the project corridor, for review and approval by the Staff. After the two year period of initial operation, Applicants shall comply with all federal and state laws, rules and regulations governing the application of herbicides in the r-o-w."*
- 13) (a) *"If tree clearing must be conducted outside of the October through March period, Applicants shall, prior to tree clearing, conduct Indiana bat surveys in areas identified as suitable habitat in coordination with Staff, including the following specific locations: (a) forest stand including woodlots 8, 9, 10 and 11; (b) forest stand including woodlots 20, 21, 22, 23, and 24; (c) forest stand including woodlots 36, 37, and 38. The results of this study shall be forwarded to Staff for review and approval prior to any clearing or construction in the areas of concern."*
- 13) (b) *"Prior to any tree clearing, Applicants shall conduct yellow-bellied sapsucker surveys in areas identified as suitable habitat for these birds in coordination with Staff and the Ohio Department of Natural Resources, Division of Wildlife (ODNR-DOW). If*

the results of the study identify the presence of the nesting/breeding yellow-bellied sapsuckers, then the tree clearing in that area shall be limited to that period of time when the yellowed-bellied sapsuckers are not present. The results of this study, together with a tree clearing plan, shall be forwarded to Staff for review and approval prior to any clearing or construction in the areas of concern."

- 15) *"That the Applicants shall flag endangered plant species locations within the r-o-w and prevent vehicle access to these areas. Use of herbicides within 50 feet of these flagged areas during construction and maintenance activities shall be prohibited, unless otherwise approved as part of Applicants' herbicide use plan. Prior to construction, the Applicants shall provide for Staff review and approval a threatened and endangered species protection plan. For plants, this should include specific r-o-w clearing/avoidance recommendations, herbicide restrictions, and potential monitoring procedures, while for animal species it should also include construction timing limitations related to breeding activities and the potential impacts of long-term r-o-w maintenance work."*
- 16) *"That Staff, the ODNR-DOW, and the United States Fish and Wildlife Service (USFWS) shall be immediately contacted if the presence of threatened or endangered species is confirmed during construction activities. Activities that could adversely impact the identified plants or animals will be halted until an appropriate course of action has been agreed upon by the Applicants and Staff."*
- 17) *"That the Applicants, to the extent practicable, shall retain all tree snags within the r-o-w that do not present a safety or reliability concern for the construction and operation of the new electric transmission line."*
- 18) *"That, prior to finalizing engineering plans for the Project, the Applicants shall identify the area known to support snowshoe hare. The Applicants shall submit a plan for this area to the Staff and the ODNR-DOW for review and Staff's approval. The Applicants shall not employ clear-cutting or generalized broadcasting of herbicide for vegetation maintenance and, to the maximum extent possible, shall leave shrub and scrub woody vegetation within this identified area of the r-o-w."*
- 20) *"That the Applicants shall not dispose of gravel or any other construction material during or following construction of the facility by spreading such material on agricultural land. All construction debris shall be promptly removed and properly disposed of."*

- 22) *"That the Applicants shall dispose of all contaminated soil and all construction debris in approved landfills in accordance with Ohio EPA regulations."*
- 27) *"That the Applicants shall assure compliance with fugitive dust rules by the use of water spray, or other appropriate dust suppressant, whenever necessary."*
- 28) *"That the Applicants shall prepare a detailed tree clearing plan describing how compatible trees and shrubs along the proposed alignment will be protected from damage during construction, and, where clearing cannot be avoided, how such clearing work will be done so as to minimize removal of compatible woody vegetation. Priority should be given to protecting all woody vegetation in wetlands, to the extent practicable. This tree clearing plan shall be submitted to Staff for review and approval prior to initiation of construction."*
- 29) *"That the Applicants shall limit clearing in all riparian areas and within at least 25 feet from the top of the bank on each side on all streams during construction and operation of the facility; provided, however, that Applicants may selectively hand clear taller-growing trees that are incompatible with the operation and maintenance of the transmission line, leaving all low-growing plant species, including other trees and other woody vegetation, undisturbed unless otherwise directed by Staff. All stumps shall be left in place."*
- 30) *"That, prior to construction, the Applicants shall develop and submit to Staff for review and approval a long-term plan, consistent with federal and state laws, rules and regulations, to be implemented by the Applicants, that will require, among other things, the installation and maintenance of signs, written in both English and Spanish, that identify the boundary of all "no clear-cut" areas for all identified wetlands and riparian areas within the Project r-o-w. These "no clear" areas shall also be identified on the engineering drawings for the Project as well as noted on future maintenance plans and protected from clear cutting and generalized broadcasting of herbicides during all future r-o-w maintenance, unless otherwise approved by Staff. This plan as approved by Staff shall be integrated into the Applicants' long-term maintenance practices for this transmission line."*
- 35) *"That at least 30 days prior to the first pre-construction conference, the Applicants shall submit a detailed construction and restoration plan for all stream and wetland*

crossings for Staff's review and approval. The plan shall include sufficiently detailed information to address the following:

- (a) Construction methods to be used at each location, including site-specific access and equipment crossing proposals. Construction methods and equipment movement during both dry and wet conditions should be included.*
 - (b) Storm water erosion control practices to be used during construction work in and around each crossing location.*
 - (c) Any and all stream stabilization and wetland, stream, and riparian area restoration practices to be used.*
 - (d) Applicants shall use all necessary means to ensure that, to the extent practicable, no trees, limbs, branches, or other clearing residue is placed or disposed of in any stream, wetland, or other water body, except in accordance with the approved tree clearing plan.*
 - (e) Applicants shall use all practicable means to ensure that no fill, topsoil, stone, or other construction-related material is placed or disposed of in any stream, wetland, or other water body, except for the short-term placement of stone, culvert pipe, timber mats, or other temporary stream crossing materials, as pre-approved by Staff.*
 - (f) To the extent practicable, crossings of ephemeral streams should occur during no flow periods."*
- 36) "That removal of mature screening trees adjacent to residential properties should be avoided if possible. If such removal is necessary for the safe construction and the safe and reliable operation of the transmission line, then the Applicants shall consult with affected property owners and develop a residential landscape planting plan to be submitted to Staff for review and approval prior to the commencement of construction."*
- 37) "That the Applicants will coordinate with the appropriate authority any vehicular lane closures due to the construction of the transmission line along either route."*

1.2 APPLICABLE U.S. ARMY CORPS OF ENGINEERS SPECIAL CONDITIONS

Special Conditions 3 and 4 of the U. S. Army Corps of General Permit may be applicable to vegetative clearing and herbicide use issues. These conditions are as follows:

- 3) *"The disposal of trees, brush, construction debris, and other debris in any stream corridor, wetland or surface water is prohibited. This prohibition does not apply to incidental fallback of vegetation being cut during mowing activities; nor does it apply to cut brush and trees that may be left in place to support Snowshoe Hare habitat enhancement requested by the Ohio Department of Natural Resources."*
- 4) *"All equipment required to traverse wetland areas shall be supported on construction matting where necessary to minimize ground disturbance. The matting shall be constructed of structural material such as: timber, steel sheeting, or plastic. The more flexible materials such as plastic will be limited to where field conditions warrant. Low ground pressure vehicles may also be used in lieu of matting, provided ground disturbance can be sufficiently minimized. The movement of equipment within wetlands shall be limited to the minimum necessary to accomplish the work authorized herein."*

1.3 APPLICABLE OHIO EPA CONDITIONS

OEPA Conditions G, M, N, O, P, Q1, Q8, G1, G2, G3, and G4 may be applicable to vegetative clearing and herbicide use issues. These conditions are as follows:

- G) *"Pesticide application(s) for the control of plants and animals shall be applied in accordance with rule 2745-1-01 of the Ohio Administrative Code, and may require a site specific application permit from the Ohio EPA. Such a permit may be obtained by calling 614-644-2001 and speaking with the Toxicology Specialist. The applicant must follow the requirements / conditions from the Department of Agriculture, and all regulated agencies having jurisdiction, for use and application of herbicides / pesticides."*
- M) *"Any stream that may encounter a temporary impact must be photographed and identified prior to disturbance. The temporary impacted streams must be restored to original conditions including grades, elevations, and planting native vegetation compatible with the project that is similar to pre-existing conditions."*

- N) *"In order to minimize impacts to stream banks, tree clearing within 25 feet of the bank will be done using hand-clearing methods only, with low growing trees and shrubs to be left undisturbed. All stumps must be left in place. In areas where tress providing a canopy over stream are removed (except culverted streams), native shrubs must be planted to maintain shade to those streams in areas not supporting shrub vegetation from existing seed banks within one year of disturbance."*
- O) *"Construction matting must be placed prior to crossing wetlands. Any wetland that may encounter a temporary impact must be photographed and identified prior to the impact. The temporary impacted wetland must be restored to original condition including grades, elevations, and planting native vegetation similar to pre-existing conditions, with the within the 60 ft. corridor."*
- P) *"The applicant shall have an environmental specialist on site at all times during construction and vegetation clearing in or near a sensitive area such as a designated wetland or stream."*
- Q1) *"All water resources and their buffers that are within active work areas, and which are to be avoided, shall be clearly indicated on site drawings, demarcated in the field and protected with suitable materials (e.g., silt fencing) prior to site disturbance. The installation shall be done in accordance with generally accepted construction methods and shall be inspected regularly in accordance with the National Pollutant Discharge Elimination System (NPDES) general permit for storm water discharges associated with construction activities (construction general permit) These materials shall remain in place and be maintained within the construction phase."*
- Q8) *"Trees removed from temporary impact areas to facilitate construction outside of the project right-of-way shall be replaced with appropriate tree species native to Ohio."*
- R1) *"In order to protect the Indiana bat during this development, bat habitat trees shall not be cut down between April 1st to September 30th, unless specifically approved by the U.S. Fish and Wildlife Service."*
- R2) *"In the event that an eastern massasauga rattlesnake (Sistrurus catenatus catenatus) is encountered during construction of the project, work should immediately be stopped and the Ohio Department of Natural Resources, Division of Wildlife should be contacted. Caution should be employed during construction and during the snakes' active season (March 15 – November 15)."*

R3) *"In order to prevent adverse impacts to the bald eagle (*Haliaeetus leucocephalus*) from disturbances during egg laying period to nest sites identified within ½ miles of the proposed project site, work within ½ miles of a nest is restricted from January 1 through July 15. The Permittee shall contact the U.S. Fish and Wildlife Service's Columbus, Ohio office at (614) 416-8993 to ensure that the fledgling eagles have left the nest prior to construction start."*

R4) *"If native mussels and/or mussel beds, not previously identified, are encountered at any time during construction or dredging activities, work must cease immediately and the Ohio Department of Natural Resources' Division of Wildlife must be contacted for further evaluation."*

2.0 CLEARING PLAN

The Clearing Plan addresses requirements for general ROW clearing, tree clearing restrictions and requirements, wetland and riparian vegetation removal requirements, herbicide use, and the identification of stream, wetlands, water bodies, and locations of threatened and endangered species along the Project ROW, construction lay-down areas and construction access routes located outside the ROW.

The Companies will staff the Project with an Environmental Specialist to assist the Companies' Project oversight staff and labor as well as Project contractors in accommodation of the various environmental constraints and commitments. The Companies' Project oversight staff and supervisors of all Project labor will be responsible for understanding the various Project Plans and underlying requirements of the respective governmental agencies and the implications of how these conditions must be adhered to during construction of the Project.

As a part of implementing the Clearing Plan and other associated plans of the Project, construction supervisors involved in the Project and the Environmental Specialist will attend pre-construction meetings to review the vegetation clearing requirements and other applicable Project requirements. This meeting will provide information on the procedures described in this plan document and the importance of their implementation. Additionally, attendees will be given a chance to comment on these procedures and discuss clarifications.

2.1 General ROW Clearing

Within the ROW corridor, all vegetation that interferes with construction of the transmission line and that has the potential to interfere with the safe construction and/or operation of the transmission line will be removed. The Companies' clearing and maintenance practice also requires that trees outside the 60-foot ROW that have the potential to interfere with the operation of the transmission line be pruned or removed. In addition to the restrictions on vegetation clearing activities described below, vegetation clearing will only take place after the easements for the ROW and removal of trees adjacent to the ROW, or comparable agreements, have been obtained. To the extent practical, in order to minimize equipment crossings of streams and wetlands, it is desirable to conduct initial clearing activities for the 60-foot ROW in one pass through of the ROW between access locations. As all of the ROW easements between each set of access locations may not be obtained at the same time, vegetation clearing in parts of the ROW between access locations will be reviewed and presented for approval to the OPSB Staff on a case-by-case basis at the pre-construction conferences.

The Companies will employ a contractor for clearing activities. It is expected that the contractor will use rubber tire or tracked hydro-axes, tree shears and chippers for the clearing activities, and in all cases will utilize non-mechanized clearing techniques. Mechanized clearing, as defined by the US Army Corps of Engineers, involves using bladed equipment such as the blade of a bulldozer to remove trees and stumps.

2.2 General ROW Restoration

All clearing and construction related activities will be performed under authorization of the Ohio EPA Construction Stormwater NPDES General Permit. Restoration, including temporary and permanent seeding will be coordinated with line construction activities and are described in detail in the Stormwater Pollution Prevention Plan (SWPPP) required under this permit. Following construction, disturbed areas at pole sites, material storage sites and temporary access routes, outside of agricultural fields, will be seeded within seven days, using a suitable grass seed mixture as recommended by Geauga and Lake County Cooperative Extension Services. Areas seeded that do not sprout, will be reseeded as required within the Erosion and Sediment Control elements of the SWPPP. The intent is to ensure the establishment and continued growth of plant material to prevent erosion and sedimentation. Until restoration activities are complete, the Companies, as required under the Ohio EPA Construction Stormwater NPDES Permit will periodically inspect the ROW for areas of erosion, sedimentation

and inadequate re-vegetation conditions. Prompt efforts will be made to correct deficiencies as soon as they are identified.

2.3 General ROW Vegetation Management

After the initial construction of the Project, vegetation management is expected to take place approximately once every five years, and will entail selective removal of vegetation that has the potential to interfere with the operation of the transmission line. The Companies utilize an integrated vegetation management approach. This approach includes inspection, tree removal, brush clearing, mowing and selective herbicide application on vegetation within the transmission line ROW. Priority trees located adjacent to the ROW may also be pruned or removed. Priority trees are defined as "Tree(s) located adjacent to the clearing zone corridor that are either dead, diseased, declining, severely leaning, located in site conditions prone to failure or significantly encroaching the clearing zone."

Herbicides are used by the Companies as an effective tool in vegetation management. Common vegetation management practices of hand cutting and mechanical methods for removing vegetation from the ROW are supplemented by the use of herbicides applied by trained and licensed personnel providing for an Integrated Vegetation Management approach.

Areas not disturbed and areas of existing vegetation compatible with the transmission line and not modified by construction of the Project, should retain its current vegetation composition and continue successional development at a normal rate. Any periodic vegetative maintenance within and adjacent to the ROW is not expected to result in significant environmental impact.

2.3.1 Clearing Plan

Clearing Requirements and Practices

Trees and other vegetation in the 60-foot ROW of the transmission line that interfere with the safe construction of the Project and operation of the transmission line will be removed and priority trees adjacent to the ROW that interfere with the safe construction of the Project and operation of the transmission line will be pruned or removed. Although line construction activities may occur first in some areas of the Project, generally, clearing activities will take place prior to starting line construction activities in many areas of the Project. Priority trees in particular may also be trimmed or removed after the transmission line conductors are installed

as this provides an opportunity to visually evaluate the trees clearance with the installed conductor.

The following general sequence of clearing practices will be employed:

1. The Companies will identify the specific Project construction areas where construction activities are planned, and coordinate a pre-construction conference with the OPSB staff to review the construction plans for those areas. At least initially, this is likely to involve smaller length sections of the Project corresponding to acquisition of the ROW. All ROW, priority tree, construction lay-down areas and access routes to be cleared shall be reviewed at a pre-construction conference prior to conducting any clearing activities at these locations.
2. Within each of these construction areas and prior to pre-construction conference, the Companies' Project oversight staff, FirstEnergy staff, the Environmental Specialist and other appropriate support staff as necessary, will identify by flagging or other appropriate means, designate the boundary of:
 - a.) Wetlands
 - b.) Boundaries of access routes that cross wetlands
 - c.) The 25-foot boundary from top of bank on each side of all streams
 - d.) Boundaries of access routes across streams
 - e.) The locations of culverts, matting or fording of streams
 - f.) Specific identified locations of threatened and endangered species
 - g.) Results of field review for threatened and endangered plant species
 - h.) The location of access routes
 - i.) The location of construction matting and similar access route and construction features in sensitive areas
 - j.) The location of any erosion control Best Management Practice as required to be installed by the SWPPP in the construction areas
 - k.) Install the signs as described in the Signage Plan
3. Within each of these construction areas and prior to pre-construction conference, the Companies' surveyors and other appropriate support staff as necessary, will identify by staking, flagging or other appropriate means, designate the location of:

- a.) Structure locations
 - b.) The centerline of the transmission line in environmentally sensitive areas
 - c.) The edge of the right-of-way in environmentally sensitive areas.
4. The Companies will hold a pre-construction conference with the OPSB staff prior to the start of any Project work in these construction areas. The Companies' Project oversight staff, the Environmental Specialist, and the supervisor of contracted labor shall attend these conferences on behalf of the Companies. Once the OPSB staff indicates that environmental concerns within these construction areas have been satisfactorily addressed, construction within these areas may begin.
 5. The initial tasks for construction will focus on: a.) Installation of erosion control Best Management Practice as required to be installed by the SWPPP in the construction areas; and b.) Installation of wetland matting, culverts, matting and/or bridging for stream crossings and similar access route improvements. These tasks will likely be closely coordinated with clearing activities as it is likely that some vegetation will need to be removed to install at least a portion of the Best Management Practices and access route improvements.
 6. During the clearing activities, trees will be felled in a manner to minimize damage to wetlands, streams, crops, fences, and other facilities to the extent practical.
 7. To the extent practical, in order to minimize equipment crossings of streams and wetlands, it is desirable to conduct initial clearing activities for the ROW in one pass through of the ROW between access locations. As all of the ROW easements between each set of access locations may not be obtained at the same time, vegetation clearing in parts of the ROW between access locations will be reviewed and presented for approval to the OPSB Staff on a case-by-case basis at the pre-construction conferences.
 8. Vegetative clearing and herbicide use will comply with the practices and restrictions that are described in the following sections of the Clearing Plan.

Vegetative Clearing and Herbicide Use Practices and Restrictions

The following vegetative clearing and herbicide use practices and restrictions will be utilized during construction of the Project. These practices and restrictions are based on the Companies' typical practices while incorporating the OPSB Conditions for the Project.

1. Erosion Control BMPs: Best Management Practice for erosion control as required to be installed by the SWPPP shall be utilized during all clearing activities.
2. Environmental Specialist: The environmental specialist will be "on site" at all times that vegetation clearing is being performed in or near a sensitive area such as a designated wetland, stream, river, or in the vicinity of identified specific location of threatened/endangered species or their identified habitat. "On site" is defined as meaning that the environmental specialist has been scheduled and is at the Project during the course of the day. (In the unusual event that the environmental specialist has an unplanned absence for a scheduled day, "on-site" would include travel time associated with a replacement environmental specialist traveling to the site.) The intent is that the environmental specialist will determine the locations and schedule that work locations and project activities are observed to independently confirm that those activities are in compliance with this plan.
3. Construction Access: All construction equipment shall follow the access plan for the project and access routes identified in the field and reviewed during the pre-construction conferences. As such, all construction equipment shall avoid watercourses and/or wetlands, except at specific locations where OPSB Staff has approved access. Line construction equipment shall follow the construction access routes shown on the Construction Staging Figures which provide access to all pole locations on the Project. Vegetation clearing equipment shall also following the construction access routes shown on the Construction Staging Figures, and as described in the Construction Access Plan, may also operate in wetlands beyond the end of the access routes (and cross streams adjacent to these wetlands) as a part of the clearing activity of these wetlands not crossed by the access route.
4. Storage: Storage, stockpiling and/or disposal of equipment and materials in watercourses and/or wetlands is prohibited.
5. Indiana bat: In order to avoid potential impact to the Indiana bat, trimming or cutting down trees on the Project will be seasonally limited to only occur between October 1 and March 31, unless specifically authorized by US Fish & Wildlife Service. Mowing, brush hog operation and processing trees previously cut is not seasonally limited.
6. Yellow-bellied Sapsucker: In order to avoid nesting/breeding yellow-bellied sapsuckers potentially within the project limits, trimming or cutting down trees on the Project will be

seasonally limited to only occur between July 2 and April 30. Mowing, brush hog operation and processing trees previously cut is not seasonally limited.

7. **Endangered Plant Species:** Locations of endangered plant species locations within the ROW will be flagged. Construction equipment will not enter these areas unless previously approved by the OPSB Staff. Only the herbicide stump treatment as described in the Herbicide Use Plan will be used and any other herbicides will not be used within 50 feet of these flagged areas during construction of the Project.
8. **Presence of Threatened or Endangered Species:** The Threatened and Endangered Species Plan provides more details on Project construction and the presence of threatened and endangered species and in particular the Indiana bat, snowshoe hare, yellow-bellied sapsucker, *eastern massasauga rattlesnake*, *bald eagle* and *native mussels*. If the presence of threatened or endangered species is confirmed during construction activities, construction activities that could adversely impact the identified plants or animals will be halted until an appropriate course of action has been agreed upon by the Companies and the OPSB Staff. Once such construction activities are halted, the Companies' Project oversight staff shall immediately contact the OPSB Staff, the ODNR-DOW, and the United States Fish and Wildlife Service.
9. **Tree Snags:** To the extent practical, all tree snags within the ROW that do not present a safety or reliability concern for the construction and operation of the transmission line will be retained.
10. **Snowshoe Hare:** The snowshoe hare habitat is located between Mayfield Road (U.S. 322) and GAR Highway (U.S. 6). In the identified habitat area of the snowshoe hare: 1.) only herbicide stump treatment as described in the Herbicide Use Plan will be used; 2.) clear-cutting of the right-of-way will not be employed and to the maximum extent possible shrub and scrub woody vegetation will be left within this identified area of the ROW; 3.) to the extent practical, cut branches and other removed vegetation will be left in the ROW, and 4.) priority tree vegetation may be chipped when required by the property rights obtained via negotiation with the property owner.
11. **Disposal:** Gravel, or other excess construction materials will not be disposed of by spreading such material on agricultural land. All construction debris shall be promptly removed and properly disposed of.

12. **Debris:** All contaminated soil and all construction debris shall be disposed of in approved landfills in accordance with Ohio EPA regulations.
13. **Fugitive Dust:** Clearing activities shall be in accordance with fugitive dust rules. Arrangements will be in place for equipment to be called to the construction areas, if and when needed, to spray water onto access routes or other Project locations as needed to minimize fugitive dust.
14. **Riparian Areas:** In all riparian areas and the areas within 25 feet from the top of the bank on each side of the stream, taller growing trees that are incompatible with the operation and maintenance of the transmission line may be selectively removed utilizing only hand clearing techniques. Such trees to be removed shall be discussed with the OPSB Staff at the applicable pre-construction conference. All stumps will be left in place. All low-growing plant species, including other trees and other woody vegetation shall be left undisturbed unless otherwise approved by the OPSB staff. For approved access routes that cross riparian areas, preference will be given to having the equipment pass over vegetation rather than cutting the vegetation – where vegetation must be removed for safe construction practices, such vegetation to be removed shall be discussed at the pre-construction conference. To the extent practical, trees will be felled to land outside riparian area, and trees, limbs, branches and other clearing residue will not be placed or disposed of in any water body or stream channel, nor will this material be allowed to impede water flow in the stream.
15. **Mowing:** There will be no seasonal limitation for mowing activities.

The locations and time restrictions for tree clearing are also discussed within the Threatened & Endangered Species Review Plan in Appendix I.

Tree Clearing Disposal

Upland areas: Felled trees in areas outside wetlands, stream corridors and sensitive areas may be moved to the edge of the ROW or left in place depending on the preference of the land owner. Marketable timber will generally be cut into appropriate lengths for sale or disposition by the land owner. The resulting brush and debris may be chipped or windrowed along the edge of the ROW. The chips may be spread for erosion control.

Stream Corridors: Felled trees in stream corridors (the area between the top of banks on each side of the stream) will be dropped outside the corridor to the extent practical. Trees dropped

within the stream corridor, as well as resulting brush and debris, other than incidental fallback of cut vegetation, will be removed utilizing hand equipment and manually carrying pieces to outside the stream corridor.

Riparian Areas: Felled trees in riparian areas beyond the stream corridors will be dropped outside the riparian area to the extent practical. Trees dropped within the riparian areas beyond the stream corridors may be moved to the edge of the ROW or left in place depending on the preference of the land owner. Marketable timber will generally be cut into appropriate lengths for sale or disposition by the land owner. The resulting brush and debris may be chipped or windrowed along the edge of the ROW outside of the riparian area and may be windrowed within the riparian area if it supports Snowshoe hare habitat enhancement requested by the Ohio Department of Natural Resources. The chips may be spread for erosion control outside the riparian area.

Wetlands: Felled trees in wetlands will be dropped outside the area to the extent practical. Trees dropped within wetlands, other than incidental fallback of cut vegetation will generally be removed from the wetland area. Trees and resulting brush and debris may be left in the wetland if it supports Snowshoe hare habitat enhancement requested by the Ohio Department of Natural Resources.

Snowshoe hare habitat area: Resulting brush and debris in snowshoe hare habitat areas shall be windrowed and/or left in place to the maximum extent practical to support habitat for the snowshoe hare.

Other sensitive areas: Felled trees in other sensitive areas will be dropped outside the area to the extent practical. Trees dropped within other sensitive areas will be left in place to the maximum extent practical. Trees and resulting brush and debris that must be removed will be removed utilizing hand equipment and manually carrying pieces to outside the area.

Stump removal: Trees will be cut as close to the ground surface as practical. Other than at the immediate vicinity of new poles, stumps and root structures are generally not planed to be removed. However, stumps may be removed in upland areas (outside of wetland and stream buffers) under specific agreements with property owners. In general, stumps will be removed or ground out only in those locations where transmission line poles are installed and where the transmission line ROW crosses residential lawns.

2.3.2 Vegetation Removal in Riparian Areas

Stream Riparian Areas

In stream riparian areas, defined as within 25 feet of the stream bank, vegetation removal will utilize hand clearing activities, consisting of equipment sitting outside of the riparian area and reaching into the area, or hand use of chain saws and similar tools. Only those trees in this area that are tall enough to or have the potential to interfere with safe construction and operation of the line will be removed.

Along the stream crossing route when necessary, rubber-wheeled vehicles or vehicles equipped with tracks will be used. At low quality stream crossings, clearing equipment will cross the stream in a one pass operation, but will not be used to clear within the 25 foot riparian buffer. At high quality streams, to the extent practical, the clearing equipment will cross in coordination with the crossing method to be employed for line construction.

Compatible understory trees and shrubs in the riparian buffer along streams which do not pose an impact to the safe construction, operation and maintenance of the transmission line within the first five year cycle of vegetative growth following line construction will initially be left in place to provide ground cover and shading of the stream while other compatible vegetation is established.

Disturbed areas adjacent to streams will be re-vegetated using methods to minimize soil erosion and degradation.

2.3.3 Vegetation Removal in Wetlands

Clearing Requirements and Practices

In wetland areas the Companies will to the extent practical selectively remove only vegetation that will impede construction or that could grow tall enough to interfere with safe construction, operation and maintenance of the transmission line.

Equipment used for ROW clearing activities will not be operated in small wetland areas. Hand clearing techniques will be used to clear these wetlands, consisting of equipment sitting outside of the wetland area and reaching into the area, or hand use of chain saws and similar tools.

For ROW clearing activities in large wetland areas, as discussed in the Construction Access Plan, the clearing crews will employ equipment operating on construction matting with limited hand clearing techniques. Generally, tracked equipment supported by matting will be used for ROW clearing activities in these areas with potential use of rubber tired equipment operating on the matting for material handling activities including placing and removing matting, chipping vegetation and removing vegetation from the wetland. Generally, the hand clearing techniques consist of equipment sitting outside of the wetland area and reaching into the area, or hand use of chain saws and similar tools to cut vegetation and carry it out of the wetland. The construction matting may consist of timber, steel, plastic or similar materials. At present, the Army Corps of Engineers permit does and the OEPA permit does not authorize using low ground pressure vehicles in lieu of matting in wetland areas provided ground disturbance can be sufficiently minimized; and thus only if subsequently authorized by the OEPA would low ground pressure vehicles operate in or traverse wetlands without matting. To the maximum extent possible, equipment will operate in a one pass operation through the wetland. If the construction matting is removed after the initial clearing activities, construction matting will be placed in accordance with the Construction Access Plan prior to line equipment crossing the wetlands.

Vegetation that occurs within wetland areas may require periodic cutting. Maintenance cutting of woody vegetation in wetland areas would be hand-cut by chain saws, or equipment such as hydro-axes utilizing non-mechanized clearing techniques.

2.3.4 Herbicide Use Plan

Herbicide Application Requirements

The Herbicide Use Plan has been developed to describe how herbicides will be used on the construction of the Project. Herbicide use during the construction of the Project will be in accordance with this plan.

The Companies utilize an integrated vegetation management approach to conducting vegetation management activities, this includes inspection, tree removal, brush clearing, mowing and selective herbicide application on the transmission ROW.

Herbicides are used by the Companies as an effective tool in vegetation management, and are applied by trained and licensed personnel. Common vegetation management practices of hand

cutting and mechanical methods for removing vegetation from the ROW are supplemented by the use of herbicides providing for an Integrated Vegetation Management approach.

The chief benefit and objective of herbicide application is to selectively remove species that exhibit prolific re-sprouting and root suckering that typically follows mechanical removal as a mechanism to reduce the frequency and/or intensity of maintenance activities. It is not uncommon for certain species such as oak, poplar or maple to grow more than 10 feet in the first year following mechanical cutting. Clusters of stems emerge from stumps and/or root systems and increase the stem density. Treating the stumps with an herbicide of selective application to target species reduces or eliminates the re-sprouting.

Water based herbicides, and their selective method of application (i.e., low-volume foliar application with a water carrier or cut stump treatment) are used to minimize impact on the environment, particularly in wetlands and riparian zone areas. The low-growing shrubs and grasses retained in the ROW will flourish and expand into dense stands of vegetation that naturally inhibit reestablishment of taller faster growing species. The elimination of undesirable species by selective foliar treatments encourage other shrub and herbaceous growth and slows the invasion of the unwanted species, which may eventually touch or fall on power lines causing interruption of electrical service.

Once the preferred low growing shrub/herb community becomes dominant, future maintenance is reduced. A reduction in the maintenance activities provides the added environmental benefits of limiting disturbance to wildlife, reducing soil erosion and excessive compaction of soils from vehicular travel in the ROW. Repeated selective treatment of the ROW for removal of tall-growing species will result in a residual plant community of low-growing plant species that includes shrub species, ferns, herbaceous wildflowers, dogwoods and grasses which inhibit regeneration of taller species by directly competing for sunlight, water and nutrients.

Establishing vegetation clearances involves removal of trees and other vegetation located within the ROW that potentially interfere with the construction and safe operation of transmission facilities during the transmission line construction process. This may be accomplished by using power saws and mechanical equipment. Disturbance to compatible trees, shrubs and other vegetation that do not interfere with construction or operation of the transmission facilities is minimized.

During construction of the Project, the Companies will use a selective herbicide program that utilizes water based herbicides, and their selective method of application specifically low-volume

foliar or cut stump treatment. Using a selective herbicide program will assure that generalized broadcasting of herbicide will not be employed. This approach minimizes the potential for trees to re-sprout and impact the reliable operation of the transmission line and safe access for service and maintenance needs, while promoting a compatible, low growth vegetation environment within the ROW. This approach is in compliance with the OPSB conditions as generalized broadcasting of herbicide will not be used.

Herbicide Use Plan for Project Construction

Herbicide use on the Project will be in accordance with applicable state and federal regulations and will be applied in accordance with the manufacturer instructions. Only selective methods of application including low-volume foliar and cut stump treatment will be used on the construction of the Project. The application of a stump herbicide treatment consists of applying herbicide to the cambium layer of the stump and associated root flares. A low-volume foliar application method targets specific incompatible vegetation by applying the herbicide directly on the foliage of the target vegetation.

Herbicide mixtures used on the Project will be limited to aquatic mixtures that are registered and approved as a herbicide for use near wetland areas, streams, lakes, ponds and reservoirs. If necessary the Companies can provide the specific herbicide mixtures at the pre-construction meeting with the OPSB Staff prior to the start of any Project work in the construction area being reviewed at that pre-construction meeting. The stump and low-volume foliar herbicide treatment will not be utilized during the March 15 to September 1 period to correspond to the May to June nesting period of the Yellow-bellied Sapsucker, and the mid-March to August breeding period of the Snowshoe hare. The Environmental Specialist for the Project will inspect herbicide application in or near wetlands and streams, preferably during the application, but no later than 48 hours following the application.

The herbicides used during construction of the Project work on enzymes found only within plants, not people or animals. These compounds enter through leaves, stems and stumps and control plant growth from the inside of the plant. The products used have undergone years of testing. The USEPA approves such products for use only after determining that they will not adversely affect people, animals, or the environment when properly applied. The crews that apply herbicides will be required to follow strict usage guidelines in accordance with the labeling and application requirements. Workers who apply herbicides must hold a pesticide applicator license from the state of Ohio or work under the direct supervision of a certified applicator.

Herbicide Use Plan for Transmission Line Maintenance

After the two year period of initial operation, the Companies will comply with all federal and state laws, rules, and regulations governing the application of herbicides in the ROW of the Project. The two year period ends two years after the Companies notify the OPSB staff that construction of the Project has been completed.

2.3.5 Signage Plan

During construction of the Project, flagging, fencing and or signage will be utilized to identify specific features within the Project ROW and along access routes. The following features will be identified:

- a.) Boundary of wetlands
- b.) Boundaries of access routes that cross wetlands
- c.) Streams and the 25-foot boundary from top of bank on each side of all streams
- d.) Boundaries of access routes across streams
- e.) Identified locations of threatened and endangered species.

Flagging: Flagging will be installed along the perimeter of each feature where it crosses the Project ROW or is located along an access route outside of the ROW. Flagging will be installed at spacing that to the extent practical will facilitate clear visibility to the next two flags in either direction.

Fencing: Fencing will be installed at those locations where an access route is located in close proximity to and is intended to bypass or otherwise avoid a wetland, stream or riparian corridor. The fencing will be approximately 4-foot high orange plastic (or similar construction) installed in accordance with the manufacturers instructions. The fencing will be removed at completion of construction.

Signage: Signage, written in both English and Spanish, will be installed around the boundary of all wetlands, riparian areas and any identified location of a threatened or endangered plant species within the Project ROW, identifying the boundary of a "no clear-cut" and a "no

generalized broadcasting of herbicides" area. A sample of the signs is provided as Attachment A. The signage will generally be installed in accordance with the following practice:

- a) For wetland and riparian features that cross the entire width of the ROW, signs will be installed as follows: one sign at the features' boundary at the approximate centerline of the ROW, signs at each end of the features' boundary installed a few feet within the ROW, and signs spaced at approximately 100 feet along the boundary of the feature.
- b) For wetland and riparian features that extend into but do not cross the entire width of the ROW, signs will be installed as follows: one sign at each end of the features' boundary installed a few feet within the ROW, and signs spaced at approximately 100 feet along the boundary of the feature.
- c) For wetland and riparian features located entirely within the ROW, signs will be installed as follows: at least one sign on each side of the feature, and additional signs as needed so that the spacing between signs does not exceed approximately 100 feet along the boundary of the feature.
- d) In the event the signs become a common target of vandals during construction of the Project, the signs will be installed at each applicable feature only once.

The installed location of each sign will be located with GPS based survey instruments. At the conclusion of Project Construction, the GPS locations of the signs and notes indicating the area associated with the signs as a "no clear-cut and a no generalized broadcasting of herbicide area" will be transferred onto the Plan and Profile drawings or other similar records for the Project. Prior to each future cycle of scheduled vegetation maintenance on the transmission line, expected to occur on an approximate five-year cycle, the locations of the sign will be reestablished.

ATTACHMENT A

**AMERICAN TRANSMISSION SYSTEM INCORPORATED
ELECTRIC TRANSMISSION LINE**

“NO CLEAR-CUT AREA” BOUNDARY

- NO CLEAR-CUTTING OR MOWING ALLOWED
- NO HERBICIDE BROADCASTING ALLOWED
- CLEARING LIMITED TO REMOVAL OF INCOMPATIBLE VEGETATION

LIMITE DE CORTE DE VEGETACIÓN

- NO SE PERMITE EL CORTE TOTAL DE VEGETACIÓN
 - NO SE PERMITE EL CORTE DE HIERBA
 - NO SE PERMITE EL USO DE HERBICIDAS
- SOLO SE PERMITE EL CORTE DE VEGETACIÓN INCOMPATIBLE CON LA RED ELÉCTRICA

For more information contact ATSI at 1-800-589-2837