# **PUBLIC**

# Evergy, Missouri Metro 2024 Annual Missouri Vegetation Management Report Pursuant to 20 CSR 4240-23.030

Evergy, Missouri West
2024 Annual Missouri Vegetation Management Report
Pursuant to 20 CSR 4240-23.030

TRANSMISSION and DISTRIBUTION RIGHT-OF-WAY VEGETATION MANAGEMENT PROGRAM

# April 1, 2025

This program document applies to vegetation maintenance of Evergy Missouri Metro and Evergy Missouri West transmission and distribution power lines. It meets the requirements of the Missouri Public Service Commission Rule 20 CSR 4240-23.030 *Electrical Corporation Vegetation Management Standards and Reporting Requirements*. Evergy Missouri Metro, by operating agreement, provides vegetation management services to Evergy Missouri West. References applicable to both companies are offered under the collective name Evergy.

# 2024 Annual Vegetation Management Report

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#### **2024 Annual Vegetation Management Report**

#### Confidential Information and Data

This report contains information that falls under the definitions of Confidential Information, Critical Energy Infrastructure Information, and/or Critical Infrastructure under the *Rules of Procedure of the North American Electric Reliability Corporation*, Section 1500. In light of the requirements to maintain the confidentiality of information and data that falls under Section 1500, portions of this report are marked as Confidential.

#### 1.0 Introduction

Evergy Missouri Metro and Missouri West Transmission and Distribution Vegetation Management Program ("Program") report presents the strategy, key processes, and guidelines for orderly, uniform, safe, and efficient management of Missouri Metro and Missouri West overhead delivery systems. The report reflects vegetation management performed in 2024 and planned for 2025; also, the report describes removal, trimming and spraying methods. The Program is dynamic in nature and, at times, requires adjustment to conform to performance as measured by tree-related service reliability; to take advantage of opportunities to gain efficiency; to incorporate customer feedback; to address changes in regulatory initiatives; and to address other program drivers.

# 2.0 Safety and Reliability

Evergy Missouri Metro and Missouri West Transmission and Distribution vegetation management program promotes safe and reliable electric service. Beyond compliance and requirements of a robust vegetation maintenance program under 20 CSR 4240-23.030 and the National Electric Safety Code Vegetation Management Section 218 (2007), regular vegetation management mitigates service interruptions and reduces potentially dangerous conditions, like downed power lines.

Crews performing vegetation management working on or near Missouri Metro and Missouri West, rights-of-way ("ROW"), or easements are required to follow approved safety guidelines and procedures. Contractors performing vegetation management work are contractually required to comply with government safety and health regulations and Evergy's own safety and health standards.

Contractors must, prior to work commencing and at all times during the course of their work, have processes and procedures in place to maintain awareness of the nature and characteristics of Missouri Metro and Missouri West, electric facilities. Foundational to safety is the contractors' understanding that Missouri Metro and Missouri West, electric facilities are energized during the performance of their work unless, prior to the work commencing, arrangements are made with an authorized Evergy representative to deenergize the facilities.

Evergy Missouri Metro and Missouri West are pleased to report that in 2024 no incidents occurred resulting in death or life-threatening or serious injury to persons assigned to perform vegetation management activities or to the public.

#### 3.0 Vegetation Manager

Evergy employs a vegetation manager to oversee Missouri Metro and Missouri West, vegetation management program, ensuring regulatory compliance and implementation of the program described in this report.

#### 4.0 Distribution Vegetation Management Program Strategy

#### 4.1. Program Objectives

The Program's distribution system objectives are to promote and maintain safe operation of the distribution system; to support system reliability; to ensure optimum use of resources; and to ensure compliance with regulatory requirements. The Program seeks to achieve these objectives, and reduce outage risk, by managing vegetation; trees, and other vegetation, left unmanaged, impact the number of service interruptions and service restoration efficiency. The Program strategy focuses on maintenance activities that reduce outage risks associated with trees growing into distribution lines and risks associated with trees breaking and then falling onto distribution lines.

# 4.2. Maintenance Scheduling Strategy

The Program's maintenance scheduling strategy utilizes a risk model to determine scheduling of the annual plan. This model considers time-based maintenance intervals, voltage, historical reliability, potential vegetation interference of energized lines, and a comparison from year-to-year of the impact on safety and service reliability. Inspections of primary distribution lines are scheduled every 2 years for urban, 3 years for rural, to identify conditions requiring maintenance in advance of the regular primary cycle.

Table 1: Missouri Cycle Lengths in Years

Circuit Description	Primary Cycle Length (Years)	Mid-cycle Inspection/selective Tree Maintenance (Years)
Urban Circuits	4	2
Rural Circuits	6	3

The Program's maintenance scheduling strategy results in maintenance of 25-percent of total urban distribution miles on an annual basis and 25-percent of rural distribution miles on an 18-month interval.

#### 4.3. Tree Selection Criteria

Evergy uses a strong prescriptive maintenance approach to tree selection. Professional utility arborists are assigned to create work plans designating specific vegetation for pruning, removal, or treatment by contract crews. Trees are selected based on risk factors, avoiding indiscriminate and wholesale maintenance decisions simply based on a fixed-distance-from-conductors

criterion. Trees selected for pruning or removal are characterized as exhibiting observable and predictable threats that pose significant threats to service reliability. Also, trees exhibiting only some of the risk factors may be pruned or removed in anticipation of impacting service reliability.

General selection criteria for tree maintenance include:

- Potential to cause service interruption by growth into or across energized conductors prior to the next scheduled inspection or trim cycle;
- Obvious defects that predispose the tree to failure and damage to electrical facilities; and/or,
- Dead or broken branches hanging over electrical facilities.

Selection factors considered include:

- The natural growth rate of the tree;
- The expected re-growth rate following pruning of the tree;
- The relative wood strength of the tree species and potential for breakage;
- Voltage, construction type, conductor spacing, and conductor covering;
- Legal right to access the area;
- Extent of defects (decay, splits, weak branch attachments, etc.), customers served by the line, and potential for tree limbs or trunks to strike primary conductors in the event they break or fall; and/or,
- Sag of conductors at elevated temperatures and under wind and ice loading and combined displacement of vegetation, supporting structures, and conductors under adverse weather or routine wind conditions.

Trees affecting secondary service lines are the property owner's responsibility and not normally maintained. However, as part of the primary scheduled maintenance cycle, trees growing into service lines may be maintained to avoid deflection of secondary voltage conductors by tree limbs.

# 4.3.1 Tree Removal (trees larger than 4 inches diameter)

Tree removal, together with stump treatment to prevent re-sprouting, provides permanent clearance, eliminates the potential for removed trees to break and cause damage, and reduces future maintenance costs. However, neither is it practical, environmentally desirable, or welcomed by property owners to remove all trees that effect power lines. Consequently, designation of trees selected for removal is based on cost effectiveness, failure risk, and signed permission of the property owner.

Trees may be designated for removal if:

- Pruning will result in a significant adverse impact on the health of the tree;
- The tree is a hazard tree that poses an unacceptable risk to overhead lines; and/or,
- It is economically advantageous to remove rather than periodically prune the tree.

#### 4.3.2 Hazard Trees

Structurally unsound trees, on or off the easement or ROW, which can fall into electrical conductors are evaluated for possible removal. Hazard tree conditions can include, but not limited to, the following symptoms:

- Dead or dying
- Cankers
- Severe lean
- Conks (fungal fruiting bodies)
- Weak branches
- Internal decay
- Root failure

# 4.3.3 <u>Brush and Vines (trees smaller than 4 inches diameter)</u>

Removal and/or treatment of small-size brush with herbicides is a costeffective method of reducing future maintenance costs before the brush grows large enough to affect power lines. Brush growing below conductors is designated for removal and stump treatment, mowing, foliar treatment, or individual stem treatment prior to growing to wire height and when it can be cost effectively treated. Vines observed growing on poles and guy wires are selected for cutting and treatment with approved herbicides. Pruning brush should be avoided.

# 4.3.4 <u>Integrated Vegetation Management (IVM)</u>

Evergy utilizes principles of Integrated Vegetation Management ("IVM") to control brush on distribution ROW. IVM is an approach that considers the use of mechanical mowing, hand cutting, and herbicide applications, together with the benefits of biological control to manage undesirable woody vegetation on a ROW. The responsible, targeted use of herbicides is an important component of this approach.

Foliar application of herbicides for control of ROW brush on ROW, as well as basal and cut stump methods, will be used when appropriate. Cut stumps should be treated with an effective herbicide mixture to prevent re-sprouting. Small diameter brush stumps should be treated unless a follow-up foliar application is scheduled.

In rural locations, herbicide application may be scheduled to occur 1 to 2 years in advance of tree maintenance. Brush stems missed during

herbicide application can be retreated or cut during the tree maintenance cycle. If brush is too tall to control with herbicides and requires hand cutting or mowing, herbicide application should be scheduled approximately one growing season following cutting.

# 4.4 Contracting Strategy

Evergy contracts with several utility tree maintenance contractors as opposed to performing vegetation maintenance exclusively with its own personnel. Contracts are written to combine time and equipment with performance-based components.

#### 4.5 Customer Relations

#### 4.5.1 Customer Inquiries

Customer inquiries generated through Evergy's Customer Care Center, or other channels, are responded to by the appropriate vegetation management individual by personal meeting, telephone, or letter. Requests for tree trimming, removal assistance, or other requests are evaluated by inspection prior to assignment of work to a maintenance crew. Service provided to customers who request assistance with tree removal for the customer's convenience, normally includes removal of overhanging branches and all limbs within ten feet of energized conductors. Any debris is left at the worksite.

#### 4.5.2 <u>Property Owner Notification</u>

Evergy notifies affected property owners or occupants of pending tree maintenance. Notification is by a combination of personal contact, door hangers, or mailings at least seven days, but not more than, ninety days prior to performing scheduled maintenance.

# 4.5.3 County and Municipal Notification

Evergy notifies appropriate county and municipal officials in writing at least two months in advance of planned vegetation management work in their respective jurisdictions. The notice includes planned locations of scheduled vegetation maintenance and other information relevant to the municipality or county.

#### 4.5.4 Public Outreach

Evergy provides information to the public through its website, publications, and community events, regarding its vegetation management program and appropriate trees to plant near overhead lines.

### 4.6 Vegetation Management Practices

### 4.6.1 Industry Standards

Vegetation management contractors are required to comply with federal, state and local laws and regulations, including those of the U.S. Occupational Safety and Health Administration. All work shall be conducted in accordance with ANSI Standard Z133.1 (American National Standard for Arboricultural Operations-Safety Requirements), latest revision. Furthermore, contractors are required to implement the pruning concepts presented in the booklet, *Pruning Trees Near Electric Utility Lines*, by Dr. Alex L. Shigo, and the ISA handbook "Utility Pruning of Trees" (ANSI A300 Part 1: Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices, Pruning), latest revision.

# 4.6.2 <u>Evergy Vegetation Management Guidelines and Clearance Standards</u>

Evergy Vegetation Management Guidelines, Appendix A, provide guidance to the performance of work by the vegetation management contractors. Included as part of the guidelines are standards for clearance at the time vegetation is maintained. For conductors energized at 600 to 50,000 volts, the minimum required clearance is ten feet or clearance to the edge of the ROW, whichever is less. Mature trees, whose trunks or limbs have sufficient strength and rigidity to prevent the trunk or limbs from damaging the conductor under reasonably foreseeable wind and weather conditions, may be retained within ten feet of conductors.

#### 4.6.3 <u>Post-Work Inspection and Acceptance</u>

Evergy, as part of its contract management process, inspects work following completion by vegetation maintenance contractors and prior to final acceptance. This inspection/audit process ensures the work performed is of acceptable quality, completeness, and consistent with work plans and specifications.

#### 4.7 Reports and Record Keeping

# 4.7.1 Operational Reporting

Complete records and reporting are important to effective management of vegetation management programs. Records are maintained to identify key aspects of the vegetation management program, to document program performance, and provide information necessary for ongoing program management, including:

Completed work data (substation and circuit designation, date worked, crew size, supervisor and type of work performed);

Cost metrics (cost per mile, cost per circuit, scheduled work, reactive work, etc.);

Contractor performance (man-hours per unit, miles completed, schedule attainment, etc.);

Schedule of future work by substation and circuit; and,

Safety hazards encountered by contractors and OSHA reportable events or accidents.

### 4.7.2 Regulatory Reporting

Missouri Metro and Missouri West, submit quarterly and annual reports to the Missouri Public Service Commission ("MPSC"). The quarterly report is submitted approximately six weeks after the quarter ends. It is required under the terms of Missouri Metro's and Missouri West's, *Non-Unanimous Stipulation and Agreement* (Case Nos. ER-2008-0089, ER-2009-0090, respectively.), and provides data regarding Program expenditure, miles planned, and miles completed on the distribution and transmission systems.

The annual report—the instant report—is filed with the MPSC on or before April 1<sup>st</sup> of each year pursuant to 20 CSR 4240-23.030. It summarizes the vegetation management program success for the previous year, a plan for the current year, and an affidavit, verified by an officer with knowledge of the matters stated therein. Similarly to the quarterly reports, the annual report includes:

- vegetation management expenditures for the preceding year;
- vegetation management budget for the current year;
- circuits, completion dates, and miles trimmed in the preceding year;
- circuits, completion dates, and miles scheduled for the current year; and,
- total distribution miles for the system and corresponding classification between rural and urban.

The Companies understand material changes contemplated in vegetation management scope, guidelines, or standards are to be filed with the MPSC no later than thirty (30) days prior to implementing the change and verified by affidavit of an officer with knowledge of the matters stated therein. Additionally, the Companies will report to the MPSC a failure to meet requirements under the *Electrical Corporation Vegetation Management Standards and Reporting Requirements* (20 CSR 4240-23.030) within 30 days of discovery and include a mitigation plan for the irregular operation.

# APPENDIX A – MISSOURI METRO AND MISSOURI WEST DISTRIBUTION LINE CLEARANCE GUIDELINES

#### **About This Guideline**

The following information is intended as a guide to the effective implementation of the Evergy Distribution Vegetation Management Program, by providing information that facilitates orderly, uniform, safe, and efficient furtherance of Evergy's objective relative to vegetation management activities. These guidelines apply to vegetation management of the distribution system including voltages from 600-35,000 volts.

This document is not intended to prescribe industry practices, or as a personal safety guideline. Evergy, its officers, directors, and employees assume no responsibility in whole, or in part, for the practices of a vendor, or any third party, whether or not referred to in this document.

#### Introduction

The Distribution Vegetation Management Program (hereinafter called the "Program") objective is to efficiently manage vegetation adjacent to Evergy facilities to reduce outage risks. This primary objective assists a broader company objective of delivering safe, reliable, and affordable electric service. The Program strategy focuses on those maintenance activities that help reduce tree-caused outage risks associated with vegetation that grow into energized facilities, and risks associated with trees that break and fall onto energized facilities.

Each tree has unique growth patterns, proximity to energized facilities, physical structure, life history, and other site-specific conditions, requiring the exercise of professional judgment in implementing these guidelines.

#### Safety

All vegetation management work shall be performed in accordance with the safety rules of the Vendor and shall also be done in accordance with the provision of the Vendor's contract with the Company. All work shall be conducted in accordance with OSHA regulations & ANSI Standard Z133.1 (American National Standard for Arboricultural Operations-Safety Requirements), latest revision.

Electrical outages caused by Vendor personnel, injuries to Vendor personnel from contact with electrical lines and other major injuries to Vendor personnel shall be reported as promptly as possible to the appropriate Company Representative. All accident locations shall remain intact and undisturbed to provide for adequate investigation of the incident, unless there is a danger to other workers or the public.

It is the Company's policy that vegetation management Vendors shall be solely responsible for their own actions and decisions relating to safety.

#### **Maintenance Strategy**

It is the Company's intent to prune and/or remove vegetation in a manner that reduces the risk of vegetation caused outages by implementing a risk-based scheduling strategy. This strategy aims to quantify reliability risks associated with vegetation across the Evergy service territory and prioritize annual pruning schedules to maximize reliability impact.

In addition to performing vegetation management as described above, the Company aims to perform visual inspections to identify immediate reliability threats on a fixed, cycle-based cadence. The cadence of which is every two years for Urban circuits, and every three years for Rural circuits. Urban circuits are defined as circuits with a customer density equal to or greater than 35 customers per line mile. Rural circuits are defined as circuits with a customer density of less than 35 customers per line mile.

#### **Customer Notification Process**

Evergy vegetation management personnel should make a reasonable attempt to notify customers in advance of regularly scheduled work. Customers should be notified in person or by a door card with appropriate contact information. Notification on non-emergency work should be at least 7 days in advance and no longer than 90 days. Vegetation shall be pruned to enhance service reliability as such, no permission is required to prune.

#### **Clearance Distance guidelines**

The Company's responsibility for clearance of energized facilities extends only to those facilities owned and operated by the Company.

Factors that should be considered with each tree during the pruning process include but are not limited to the natural growth rate; the re-growth rate; the wood strength of the species; the voltage conducted by the facility; any broken vegetation adjacent to energized facilities and structural defects with high likelihood of failure. A greater amount of clearance may be required in certain circumstances (see footnote in Table 1). Minimum clearance distances may be subject to limitations of right-of-way width, or legal access. Additionally, notwithstanding any provision to the contrary in this document, mature trees whose trunks or limbs have sufficient strength and rigidity to prevent the trunk or limbs from damaging Company facilities under typical wind and weather conditions are exempt from the minimum clearance and overhang requirements.

The following clearance distances in Table 1 are considered minimum clearances to be established at the time of scheduled maintenance pruning, between energized facilities and adjacent vegetation, utilizing Directional Pruning techniques.

Table 1					
Voltage	Mi	nimum Clearance			
Voltage	Feet	Remove Overhang			
Sub-Transmission (23kV-34.5kV)	-	10	Yes		
Duimou	Backbone	10	Yes		
Primary	Lateral	10	ı		
Casandami	Open-Wire	10	-		
Secondary	Other	rer	nove hard contact		

<sup>\*</sup> Regrowth, water sprouts, and/or sucker growth shall be completely removed at the time of pruning and should not be utilized to establish proper pruning points regardless of distance to Company facilities.

### **Clearance considerations for Sub-Transmission and Primary voltages**

Radial clearance to be achieved at the time of maintenance pruning should be a minimum of 10 feet depending on species and associated growth rates. Additionally, overhanging limbs above Sub-Transmission and Backbone Primary conductors should be pruned vertically to remove overhanging limbs to the distance defined in Table 1. Site specific conditions such as structure, previous pruning, topography, etc. may make clearances greater than 10 feet required.

### **Clearance considerations for Secondary voltages**

Open Wire secondary shall be subject to the same clearance standards as primary conductors. Other secondary conductors such as: street-light wires, triplex, and service lines *should* be cleared only to eliminate hard contact, or deflection of the conductor's intended path, as a result of vegetation interference or vegetation growth.

Service lines are not maintained as part of the Program. However, the Company may remove hard contact from service lines while already on site to perform other work, at the discretion of a Company Representative.

### Clearance considerations for other electrical equipment

The neutral wire has the potential to carry primary voltage, which vegetation management vendors *should* take into consideration when pruning vegetation near primary conductors. Guy wires and poles *should* be cleared on a case-by-case basis as determined necessary during field inspection, to eliminate hard contact or deflection of the wire. Dead wood *should* be removed when it is a risk to conductors or when the Company directs vegetation management vendors to do so.

#### Removal considerations for trees greater than 4" DBH

Trees that are good candidates for removal are those that can be removed at a cost equal to, or less than the cost of pruning. Some trees may exhibit certain characteristics that would justify their removal, which are greater than the cost of pruning. Other removal considerations:

- If the amount of the tree's crown that must be removed, to obtain adequate clearance will have an adverse impact on the overall long-term health of the tree, the tree should be considered for removal.
- Tall growing trees, whose crown at maturity will be in constant conflict with energized facilities should be considered for removal.
- Danger trees, as defined by ANZI A300..., that pose a risk to the energized facilities should be considered for removal. Danger tree conditions could include but are not limited to the following symptoms: dead or dying, severe lean, weak branches, included bark, root failures, cankers, conks or internal decay
- Any tree adjacent to the Company's electrical infrastructure in which the base of the tree is located within 3 feet of any facility including but not limited to: poles, guy wires, and transformers.

• Tree deemed an immediate threat to safety or reliability of the electric system.

#### Removal considerations for Brush

Brush is defined as any woody species that is less than 4" DBH and includes vines growing on or around Company facilities. Brush shall be treated with herbicide or cut as close to ground level as practical, and the remaining stump shall be treated with herbicide to prevent re-sprouting.

# **Debris Disposal**

Unless specified otherwise, vegetation management vendors shall dispose of all debris resulting from scheduled maintenance activity. Wood too large to be chipped *should* be cut into manageable/firewood lengths (approximately 18") and stacked on site unless the homeowner requests the wood to be removed. Vendor shall remove all debris resulting from scheduled maintenance activity within 5 business days, unless the property owner gives consent to leave debris on site. Disposal of chips, wood, and brush is the responsibility of the Vendor. Any debris resulting from outages, storms, or customer requested tree trimming shall be left on site.

#### **Herbicide Application**

Herbicides may be used to eliminate regrowth as well as brush and/or trees where appropriate. Application methods may include but are not limited to high-volume, low-volume, or ultra-low-volume foliar, basal, or cut stump treatments. The Vendor shall provide all necessary herbicide products and comply with applicable laws regarding the application, storage, and handling of herbicide. The Vendor shall use the most cost-effective herbicide available for any given situation to prevent the regeneration of vegetation and is subject to approval by the Company. Herbicides shall be applied according to manufacturer instructions. Consideration must be given to the surrounding vegetation and soil conditions to prevent damage to other non-target vegetation, or surface or ground water. Vendors shall be responsible for documenting herbicide applications according to all applicable laws, and provide application records to the Company, upon request.

#### **Outage and Storm Response**

During outage restoration processes, safety and restoration of electrical service are the Company's priorities. During such emergencies only the minimum amount of vegetation management work needed to rapidly restore electric service will be performed. Fallen trees, broken limbs, and all vegetation debris associated with service restoration are left on site. If possible, customers and property owners *should* be alerted to this policy at the time of restoration. Debris should be left in a manner that it is not an impediment to restoration of power or in such a way as to create a hazard to the general public. When possible, debris created by outage restoration activities should be left in the yard or on the property in which the trunk of the tree resides.

In the event of an emergency and when specifically requested by the Company, vegetation management Vendors shall provide personnel to perform work after hours

and on weekends and holidays, as necessitated by the emergency. The Company will utilize an On-Call/Call out procedure to coordinate efficient utilization of vegetation management vendor personnel during restoration processes. A formal On-Call list will be established and distributed by the Vegetation Management department to Dispatch headquarters annually, to facilitate after-hour and holiday call outs for vegetation management crews to assist with electrical restoration. All efforts should be made to minimize response time by vegetation management crews by utilizing the closest responding crew to the outage.

# <u>Customer Request Response</u>

Customer requests for tree trimming are common and generated from the Company call centers, local Evergy service centers, and from customers, via the Company website. Customer requests are managed by Company representatives and can include but are not limited to, trim for line clearance, customer assisted removal, brush pick up requests, and service line trimming requests. Customer requests will be inspected, and the customer will be notified with the specific action that will be taken. Under some circumstances, a customer request may be answered with a standard letter. Response time to customer requests will vary depending on the number of active requests in the queue and the type of work required. Debris created from work performed for a customer request shall be left on site, after securing signed permission from the customer. For customer requested assistance for tree removal, any tree to be removed by the customer shall have all overhanging branches removed, and minimum of 10 feet of clearance from all energized, Evergy maintained conductors.

# **Landowner** Rights

It is generally accepted that the person on whose land the trunk of a tree is located is the owner of the tree including the crown and the roots. As such, any debris generated that is to remain should be left on the property of the owner of the tree, where practical, as to not interfere with the rights of adjacent or adjoining properties. If there is an energized conductor in proximity to a tree on private property, the Company has or can acquire the right to enter onto private property and perform whatever work is required, to such extent as is necessary, to enhance the safety of the public and the reliability of electric service.

Notification and/or permits may be required for any vegetation management activity on State routes/ highways. Vegetation management vendors shall comply with and follow all applicable permitting and traffic control measures when it is necessary to perform work located on State and Federal Department of Transportation rights-of-way.

Within cities, towns, and subdivisions, lands used for public streets and road rights-of-way may be owned by the city. Cities may require permits to perform work on said street and road rights-of-way. Vendors will be required to attain said permits and comply with the terms of the permit. The city will generally possess an easement for certain purposes

such as locations of streets and/or utilities such as water, sewer, electricity, gas, etc. Regardless of ownership, the property owner may not interfere with the exercise of easements relative for their intended purposes. This includes easements of record and implied easements in which the utilities have been in place and serving customers for a set number of years.

### **Vendor Guidelines**

# **Appearance and Conduct**

All vegetation management personnel shall maintain a professional appearance and conduct and shall adhere to the following guidelines. The following guidelines are neither intended to be nor should they be considered all inclusive. Vegetation management Company and Vendor personnel:

- 1. shall be courteous to customers at all times;
- 2. shall not engage in "horseplay" while on the job;
- 3. shall not use language that is profane, boisterous, derogatory, racial, or of an ethnic nature;
- 4. shall not display sexually suggestive objects or pictures, such as t-shirts, magazines, calendars or posters;
- 5. shall not use customers' property (i.e. patios, picnic tables, etc.) for breaks;
- 6. shall not leave refuse from lunches, etc. on private or public property;
- 7. shall not enter the customer's house;
- 8. should refrain from climbing over or standing on any fence, garage, tool shed, etc. unless absolutely necessary to access work and only when it can be done safely and without damaging customers' property;
- 9. shall not solicit private work, including tree work, while performing work pursuant to this Contract;
- 10. shall not obligate the Company to make any payments to another party, nor make any promises or representations of any nature to another party for or on behalf of the Company;

# Refusal/Access

- 1. If the Vendor encounters conditions prohibiting performance of Work, the crew foreman and General Foreman should document all efforts to secure access. The vendor shall notify the appropriate Company representative after all efforts to secure access have failed. A locked gate shall not, in and of itself, constitute "No Access". The vendor shall not be entitled to additional compensation for No Access.
- 2. In the event a property owner refuses access to the scheduled work, the crew foreman or General Foreman shall notify the appropriate Company representative and move on to the next job site. Work shall not be performed until the Company has notified the Vendor that access has been granted.

# **Appendix: Definitions**

**basal treatment** - Herbicide application covering the entire stem to approximately 18 inches above the soil

**brush** - a woody plant that is less than 4 inches DBH, that is not part of an existing tree, and that may reach the conductor at maturity.

**brush work** – trimming, clearing brush and applying herbicide to the cut stems, or only applying herbicide to brush.

**clearance** - the distance between vegetation and the conductors.

**coniferous** - any of the cone-bearing trees or shrubs, mostly evergreens.

**DBH** - "diameter at breast height" – the diameter of individual tree trunks or individual stems of brush measured at a point 4.5 feet above the ground.

**deciduous** - any perennial plant that sheds its leaves annually at the end of a growing season.

**demand tree trimming** - trimming or removing trees on a customer requested or emergency basis. Also, may include tree work associated with line construction projects. This is typically required when trees have grown into the conductors, or are close to the conductors, and have created a potentially dangerous situation. This may also include special trimming or chipping work when requested by the Utility. Customer requested only Utility authorized representatives may assign demand tree work.

**directional pruning** - a form of natural pruning used to encourage tree regrowth away from the conductor. It is accomplished by removing limbs growing toward the conductors entirely at the branch collar near the trunk of the tree, or by pruning to lateral branches that are at least one-third the diameter of the limb being cut and are growing away from the conductor.

**drop-crotching** - is a crown reduction technique in which a tree trimmer makes proper pruning cuts at crotches, removing the larger limb and favoring the smaller. For electric line clearance, the trimmer would remove limbs growing toward the conductors and favor those growing away from the conductors. This usually results in a "V" shaped appearance of the tree crown and is frequently referred to as "V-trimming". See definition of "natural pruning" for further description.

**evergreen** - any plant that retains its leaves/needles year-round.

**foliar herbicide application -** the application of herbicide to the leaves or needles of a target plant.

hazard trees - trees that are located off the right of way, have a high probability for failure and are of sufficient height to contact the conductors and/or structures and guy wires if they were to fall in that direction, and should be cleared. Conditions could include but are not limited to the following: Dead, dying or diseased, leaning trees, weak branches, shallow root system, root failure, internal decay, canker or canker root.

**herbicide** - a chemical pesticide used to control, suppress, or kill plants.

**natural pruning** - a method by which branches are cut to the branch collar at a suitable parent limb, the trunk of the tree, or an appropriately sized lateral branch. This method of pruning is sometimes called "drop-crotching", "proper pruning", the "Shigo method" or "lateral trimming."

**preventative maintenance** - trimming or removing vegetation on a systematic basis typically by, but not limited to, circuit or grid, and in a manner intended to achieve system reliability.

**pruning** - the removal of dead, dying, diseased, interfering, objectionable, and/or weak branches of trees or shrubs using proper arboricultural techniques.

**removal** - completely removing an entire tree as close as practical to ground level and applying herbicide to the cut stump when appropriate.

**right-of-way** - a transmission or distribution right-of-way, an easement, a utility easement, or any other corridor of land paralleling, on both sides, an overhead transmission or distribution line, and in respect of which the Utility has certain rights.

**rounding over -** the making of many small cuts so that a tree underneath the conductors is rounded over in a uniform curve. This creates an unhealthy tree condition and results in rapid regrowth directly back toward the electrical conductors. This is not an acceptable practice.

**safety zone work** – removing all overhang and cutting back limbs to a minimum clearance of 10 feet from the energized conductor.

**selective herbicide** - a herbicide that, when applied to a mixed population of plants, will control specific species without injury to others.

**shearing** - the making of many small cuts so that a tree adjacent to the conductors is sheared in a uniform line. This is not a generally acceptable practice.

**show-up site** – site where CONTRACTOR crews receive work assignments.

**side pruning** - using natural pruning methods to cut back or removing side branches that are threatening the conductors; required where trees are growing adjacent to conductors.

**stump treatment** - applying an approved herbicide to the outer ring (cambium) portion of the stump to reduce or eliminate re-growth.

**sucker growth** - the re-growth within the tree that originates near the cuts made during the previous trimming.

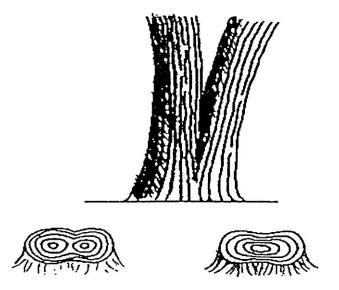
**the property** - any work site associated with this contract.

**topping** - cutting back the upper crown of a tree to a uniform horizontal line, leaving multiple stubs. This is an improper and unacceptable trimming technique.

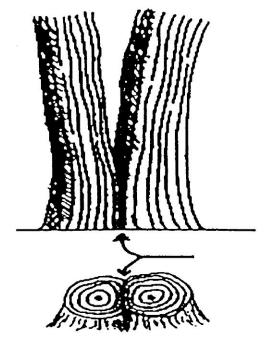
**tree** - a perennial plant with a woody trunk measuring at least four (4) inches DBH and having one set of annual rings at ground level or more than one set of annual rings not separated by included bark. Trees that grow adjacent to one another and share an apparent common base completely separated by "included bark" are considered to be

distinct trees. "Included bark" is bark that is included within the wood of a tree, or between the woody stems of separate trees, creating a physical separation between the trees.

**single tree-** a tree that splits above the ground line and has no visible included bark seam down to the ground line.



**multiple trees-** Any tree that splits at the ground line or any tree that splits above the ground line but has a visible included bark seam down to the ground line.



**tree size classifications** - tree diameter as measured at breast height (DBH): 4" to 8", 8" to 12", 12" to 24", 24" and greater

tree crown - the upper portion of the tree; the branches or leaf area.

**trimming** - cutting back tree branches or shrubs to shape or reduce the size of the tree or shrub.

**V-trim** - using natural pruning methods to cut back large portions of the upper crown of a tree. This is required when trees are located directly beneath a conductor. This is also known as crown reduction pruning or drop-crotching.

**vegetation** - all the plant (flora) life in a particular region. A plant community, assemblage, or aggregation with distinguishable characteristics

Average Annual Re-growth Rates for Individual Species on the Missouri Metro and Missouri West Distribution Systems.

(9) Tree Re-growth Rates

Species	Pruning _		Inches of Re-growth by Age of Sprout				
<u>Species</u>	Type	<u>1 Yr.</u>	<u>2 Yr.</u>	<u>3 Yr.</u>	<u>4 Yr.</u>	<u>5 Yr.</u>	<u>6 Yr.</u>
Cilver Namela	C: d =		67	0.4	101	110	425
Silver Maple	Side	55 71	67 92	84 112	101 134	118	135 18
	Тор	71	92	113	154	155	10
Hackberry	Side	36	56	78	87	100	104
,	Тор	53	81	104	120	140	161
Ash	Side	33	63	84	98	115	132
	Тор	26	61	88	118	134	161
Hanaylagust	Sido	36	68	91	115	135	162
Honeylocust	Side Top	48	81	115	115 128	133 147	173
	ТОР	40	01	113	120	147	1/3
Black Walnut	Side	43	71	87	103	119	130
	Тор	69	103	144	166	183	212
Eastern	Side	7	11	17	22	27	34
Redcedar	Тор	17	29	41	53	65	79
0							
Osage- Orange	Side	67	89	111	133	155	177
Orange	Тор	81	105	129	153	133 177	201
	100	01	103	123	133	1,,	201
Mulberry	Side	28	50	75	86	126	141
-	Тор	52	96	129	163	202	241
Scotch Pine	Side	12	22	29	37	46	54
	Тор	13	25	35	44	53	59
Sycamore	Side	71	112	137	158	176	194
Sycamore	Top	26	96	137	176	225	275
	ТОР	20	30	152	170	223	273
Eastern	Side	48	80	101	128	160	192
Cottonwood	Тор	67	105	147	176	196	209
Shingle Oak	Side	43	57	71	87	94	103
	Тор	17	36	54	66	77	88

Species	Pruning _		Inches of Re-growth by Age of Sprout					
<u>Species</u>	Type	<u>1 Yr.</u>	<u>2 Yr.</u>	<u>3 Yr.</u>	<u>4 Yr.</u>	<u>5 Yr.</u>	<u>6 Yr.</u>	
Pin Oak	Side	27	45	57	68	82	91	
	Top	30	59	80	94	106	126	
Elm	Side	50	83	111	133	152	203	
	Top	53	93	124	158	193	226	

# APPENDIX B – 2024 DISTRIBUTION VEGETATION MANAGEMENT EXPENSE AND PERFORMANCE

### **Summary**

Evergy manages vegetation for Missouri Metro and Missouri West through an Integrated Vegetation Management ("IVM") program. The IVM includes, but is not limited to: manual techniques, mechanical techniques, biological, chemical, and cultural control. Standard crew sizes are three workers on a manual crew and two workers on a bucket crew. Safety hazards may be encountered daily thereby requiring the contractor's certified line clearance trimmer to assess and take proactive measure(s) to safely clear limbs from power lines.

### Expenditures – 2024

2024 distribution vegetation management expenditures for Missouri service areas:

Missouri Metro \$ 13,006,882 Missouri West \$ 12,788,949 Total \$ 25,795,831

# **Vegetation Management Activities – 2024**

Table 2 summarizes vegetation management activities completed in 2024 on distribution circuits in Missouri Metro and Missouri West service territories.

Table 2: 2024 MO Distribution System Vegetation Management Activities

Company	Circuit Name	Classification	Total Miles	Completion Date
MO-Metro	42105	34	19.35	9/21/2024
MO-Metro	42106	34	17.08	11/9/2024
MO-Metro	104101	34	13.66	5/25/2024
MO-Metro	104202	34	6.85	6/1/2024
MO-Metro	127202	34	26.03	10/5/2024
MO-Metro	120	R	0.14	2/3/2024
MO-Metro	1021	R	6.26	6/15/2024
MO-Metro	1022	R	9.45	6/15/2024
MO-Metro	1023	R	2.07	7/13/2024
MO-Metro	1811	R	2.79	5/18/2024
MO-Metro	2112	R	6.6	9/28/2024
MO-Metro	2711	R	0.41	9/21/2024
MO-Metro	3613	R	2.76	9/28/2024
MO-Metro	4221	R	1.1	9/28/2024
MO-Metro	4222	R	2.76	9/28/2024
MO-Metro	5384	R	0.5	10/5/2024
MO-Metro	7112	R	1.12	4/13/2024
MO-Metro	7446	R	0.4	8/10/2024

Company	Circuit Name	Classification	Total Miles	Completion Date
MO-Metro	8412	R	1.4	9/21/2024
MO-Metro	9611	R	0.68	1/27/2024
MO-Metro	9612	R	1.09	7/27/2024
MO-Metro	10431	R	74.53	6/1/2024
MO-Metro	11611	R	6.94	5/4/2024
MO-Metro	11612	R	3.71	5/25/2024
MO-Metro	12012	R	21.67	10/26/2024
MO-Metro	12013	R	13.93	7/13/2024
MO-Metro	12211	R	7.23	2/24/2024
MO-Metro	12212	R	7.49	4/6/2024
MO-Metro	13611	R	0.08	3/9/2024
MO-Metro	14002	R	0.01	2/24/2024
MO-Metro	479	U	0.18	1/6/2024
MO-Metro	579	U	0.08	1/6/2024
MO-Metro	1031	U	4.42	11/16/2024
MO-Metro	1111	U	3.63	12/28/2024
MO-Metro	1112	U	2.57	5/11/2024
MO-Metro	1114	U	0.58	2/3/2024
MO-Metro	1144	U	0.19	1/20/2024
MO-Metro	1162	U	6.23	12/14/2024
MO-Metro	1562	U	0.64	11/9/2024
MO-Metro	2301	U	8.7	10/26/2024
MO-Metro	2332	U	7.57	12/14/2024
MO-Metro	2342	U	0.44	12/7/2024
MO-Metro	2352	U	5.18	12/28/2024
MO-Metro	2373	U	0.96	8/31/2024
MO-Metro	2374	U	0.7	9/21/2024
MO-Metro	2391	U	0.01	5/25/2024
MO-Metro	2393	U	0.68	11/23/2024
MO-Metro	2422	U	0.11	10/12/2024
MO-Metro	2473	U	0.09	10/5/2024
MO-Metro	2481	U	0.57	10/5/2024
MO-Metro	2522	U	9.87	10/26/2024
MO-Metro	2743	U	8.46	9/21/2024
MO-Metro	2752	U	11.32	10/19/2024
MO-Metro	2783	U	0.58	9/21/2024
MO-Metro	3012	U	13.84	12/21/2024
MO-Metro	3111	U	4.55	8/24/2024
MO-Metro	3121	U	4.25	12/14/2024
MO-Metro	3134	U	0.86	12/7/2024
MO-Metro	3143	U	2.33	12/14/2024
MO-Metro	3513	U	0.48	11/23/2024
MO-Metro	3611	U	1.02	9/28/2024
MO-Metro	3721	U	3.45	8/31/2024

Company	Circuit Name	Classification	Total Miles	Completion Date
MO-Metro	3911	U	2.14	11/23/2024
MO-Metro	4412	U	1.67	7/27/2024
MO-Metro	4414	U	2.94	10/5/2024
MO-Metro	4441	U	3.28	10/19/2024
MO-Metro	4442	U	0.61	10/19/2024
MO-Metro	4823	U	6.55	6/22/2024
MO-Metro	4824	U	7.49	12/21/2024
MO-Metro	4841	U	7.41	12/14/2024
MO-Metro	4842	U	0.71	9/14/2024
MO-Metro	4912	U	19.57	10/12/2024
MO-Metro	4913	U	0.05	12/21/2024
MO-Metro	4941	U	4.37	12/21/2024
MO-Metro	4962	U	18.81	12/21/2024
MO-Metro	5252	U	8.98	12/14/2024
MO-Metro	5262	U	0.2	12/21/2024
MO-Metro	5338	U	1.76	6/15/2024
MO-Metro	5353	U	13.95	12/21/2024
MO-Metro	5354	U	2.61	10/19/2024
MO-Metro	5364	U	7.38	12/28/2024
MO-Metro	5614	U	6.89	12/21/2024
MO-Metro	6112	U	0.2	5/4/2024
MO-Metro	6131	U	15.64	12/21/2024
MO-Metro	6134	U	3.09	3/23/2024
MO-Metro	6141	U	1.9	3/2/2024
MO-Metro	6151	U	9.53	6/1/2024
MO-Metro	6152	U	0.07	2/3/2024
MO-Metro	6311	U	0.16	12/7/2024
MO-Metro	6313	U	6.92	12/7/2024
MO-Metro	6613	U	1.19	9/14/2024
MO-Metro	6614	U	3.6	6/8/2024
MO-Metro	6623	U	38	11/9/2024
MO-Metro	6624	U	0.14	12/14/2024
MO-Metro	6631	U	2.17	9/14/2024
MO-Metro	6632	U	2.18	9/7/2024
MO-Metro	7041	U	5.23	12/14/2024
MO-Metro	7042	U	9.09	12/21/2024
MO-Metro	7043	U	0.94	2/24/2024
MO-Metro	7051	U	2.32	3/30/2024
MO-Metro	7111	U	1.59	8/3/2024
MO-Metro	7142	U	0.93	12/21/2024
MO-Metro	7452	U	2.57	9/21/2024
MO-Metro	7454	U	5.06	7/27/2024
MO-Metro	7532	U	0.07	4/13/2024
MO-Metro	7544	U	1.67	12/14/2024

Company	Circuit Name	Classification	Total Miles	Completion Date
MO-Metro	7562	U	1.42	8/17/2024
MO-Metro	7563	U	3.12	11/23/2024
MO-Metro	7564	U	0.04	11/23/2024
MO-Metro	7824	U	0.43	6/1/2024
MO-Metro	7832	U	1.06	10/26/2024
MO-Metro	7862	U	0.56	3/2/2024
MO-Metro	7863	U	0.46	10/26/2024
MO-Metro	9811	U	3.2	12/14/2024
MO-Metro	9842	U	4.82	12/28/2024
MO-Metro	13931	U	2.96	12/21/2024
MO-Metro	13932	U	0.63	12/28/2024
MO-Metro	13933	U	0.08	11/23/2024
MO-West	22821	34	16.25	10/26/2024
MO-West	31411	34	23.92	9/28/2024
MO-West	39142	34	7.24	9/28/2024
MO-West	39143	34	5.04	9/28/2024
MO-West	39144	34	0.37	9/21/2024
MO-West	39911	34	7.5	10/26/2024
MO-West	39921	34	5.29	9/28/2024
MO-West	39922	34	12.71	8/17/2024
MO-West	40413	34	3.07	9/21/2024
MO-West	40414	34	1.28	9/28/2024
MO-West	40422	34	2.12	9/14/2024
MO-West	40423	34	1.71	9/28/2024
MO-West	223331	34	16.86	9/28/2024
MO-West	231111	34	16.58	9/21/2024
MO-West	241111	34	22.75	10/12/2024
MO-West	278111	34	14.17	7/27/2024
MO-West	300111	34	21.33	9/21/2024
MO-West	322111	34	11.35	3/16/2024
MO-West	322112	34	25.29	6/8/2024
MO-West	326331	34	13.73	12/28/2024
MO-West	326333	34	7.08	9/21/2024
MO-West	335111	34	37.51	11/9/2024
MO-West	365113	34	13.16	9/14/2024
MO-West	386221	34	8.44	10/12/2024
MO-West	386222	34	9.83	9/14/2024
MO-West	401222	34	19.7	10/12/2024
MO-West	404006	34	0.24	9/14/2024
MO-West	404612	34	0.11	9/14/2024
MO-West	407441	34	33.94	6/1/2024
MO-West	20311	R	18.65	11/2/2024
MO-West	20312	R	16.52	8/3/2024
MO-West	21111	R	6.11	9/14/2024

Company	Circuit Name	Classification	Total Miles	Completion Date
MO-West	21112	R	5.47	3/30/2024
MO-West	21611	R	6.8	5/18/2024
MO-West	21811	R	3.21	9/28/2024
MO-West	22012	R	11.94	6/8/2024
MO-West	22313	R	34.19	6/8/2024
MO-West	22812	R	2.68	7/6/2024
MO-West	23513	R	15.62	9/14/2024
MO-West	25412	R	7.38	12/7/2024
MO-West	26111	R	11.98	5/4/2024
MO-West	26112	R	15.04	2/17/2024
MO-West	28011	R	85.38	7/20/2024
MO-West	28412	R	5.19	3/30/2024
MO-West	28511	R	17.35	7/20/2024
MO-West	28513	R	5.96	7/20/2024
MO-West	28721	R	29.45	9/14/2024
MO-West	30111	R	0.9	9/14/2024
MO-West	30211	R	1.8	9/14/2024
MO-West	30411	R	0.54	9/14/2024
MO-West	30613	R	58.85	7/13/2024
MO-West	32311	R	0.36	3/30/2024
MO-West	32312	R	4.54	3/30/2024
MO-West	33322	R	98.77	11/23/2024
MO-West	33411	R	24.51	5/25/2024
MO-West	35112	R	22.87	7/27/2024
MO-West	37614	R	0.24	11/2/2024
MO-West	37641	R	12.7	9/14/2024
MO-West	38112	R	2.91	3/30/2024
MO-West	38313	R	1.27	9/21/2024
MO-West	38322	R	25.1	3/2/2024
MO-West	38611	R	20.51	12/14/2024
MO-West	38711	R	4.03	9/7/2024
MO-West	38712	R	33.24	7/20/2024
MO-West	39311	R	9.75	9/7/2024
MO-West	39521	R	7.4	8/24/2024
MO-West	39611	R	4.53	5/25/2024
MO-West	39711	R	22.01	9/28/2024
MO-West	39815	R	3.1	10/19/2024
MO-West	40121	R	8.65	9/28/2024
MO-West	40781	R	16.23	5/11/2024
MO-West	41311	R	1.18	9/7/2024
MO-West	41321	R	1.52	9/7/2024
MO-West	41521	R	36.79	9/7/2024
MO-West	41711	R	51.65	5/11/2024
MO-West	41721	R	28.93	7/27/2024

Company	Circuit Name	Classification	Total Miles	Completion Date
MO-West	41811	R	34.97	7/20/2024
MO-West	41911	R	28.38	9/7/2024
MO-West	42211	R	0.26	10/26/2024
MO-West	42212	R	13.9	7/20/2024
MO-West	42611	R	0.65	4/27/2024
MO-West	43022	R	32.5	12/14/2024
MO-West	43031	R	2.41	9/7/2024
MO-West	43631	R	16.64	8/24/2024
MO-West	43632	R	2.08	6/15/2024
MO-West	11822	U	3.91	8/17/2024
MO-West	11823	U	6.67	6/8/2024
MO-West	11824	U	5.6	11/9/2024
MO-West	11831	U	1.27	3/30/2024
MO-West	11832	U	19.07	11/16/2024
MO-West	20321	U	12.93	12/28/2024
MO-West	20611	U	10.1	11/9/2024
MO-West	20914	U	6.52	12/7/2024
MO-West	20922	U	7.37	12/21/2024
MO-West	20925	U	2.21	11/23/2024
MO-West	20942	U	2.21	11/16/2024
MO-West	21311	U	7.65	12/14/2024
MO-West	21312	U	0.43	3/16/2024
MO-West	21321	U	1.15	3/30/2024
MO-West	21322	U	1.09	4/6/2024
MO-West	21411	U	3.15	12/14/2024
MO-West	21412	U	3.7	8/17/2024
MO-West	21423	U	7.37	6/22/2024
MO-West	21513	U	1.91	3/9/2024
MO-West	22113	U	5.46	5/25/2024
MO-West	22312	U	16.9	12/7/2024
MO-West	22511	U	7.81	7/13/2024
MO-West	23812	U	3.99	9/14/2024
MO-West	24011	U	25.48	12/14/2024
MO-West	24013	U	5.23	8/10/2024
MO-West	24022	U	0.9	5/4/2024
MO-West	24023	U	16.34	12/14/2024
MO-West	24211	U	2.38	9/14/2024
MO-West	24212	U	4.17	9/14/2024
MO-West	24613	U	0.31	5/4/2024
MO-West	24621	U	0.28	12/14/2024
MO-West	24622	U	2.38	5/4/2024
MO-West	24723	U	2.15	5/25/2024
MO-West	25312	U	10.95	12/28/2024
MO-West	26312	U	10.26	5/18/2024

Company	Circuit Name	Classification	Total Miles	Completion Date
MO-West	26411	U	5.73	12/14/2024
MO-West	27113	U	7.76	12/14/2024
MO-West	27121	U	1.82	12/14/2024
MO-West	27513	U	12.37	10/12/2024
MO-West	27712	U	1.73	10/19/2024
MO-West	27713	U	15.17	12/14/2024
MO-West	27721	U	9.52	11/9/2024
MO-West	28111	U	0.02	12/7/2024
MO-West	28212	U	4.01	12/28/2024
MO-West	28221	U	6.23	9/14/2024
MO-West	28232	U	0.37	11/23/2024
MO-West	28411	U	1.73	3/30/2024
MO-West	29012	U	8.93	12/28/2024
MO-West	29042	U	23.64	9/14/2024
MO-West	29112	U	4.4	4/27/2024
MO-West	29113	U	4.16	11/2/2024
MO-West	29122	U	19.78	4/20/2024
MO-West	31121	U	3.11	2/24/2024
MO-West	31921	U	12.84	9/14/2024
MO-West	31922	U	69.16	12/7/2024
MO-West	32132	U	10.37	12/7/2024
MO-West	32511	U	1.45	3/23/2024
MO-West	32512	U	9.42	10/12/2024
MO-West	32631	U	21.09	12/14/2024
MO-West	33011	U	0.65	3/30/2024
MO-West	33021	U	12.84	12/28/2024
MO-West	33412	U	0.82	9/14/2024
MO-West	35111	U	15.77	12/21/2024
MO-West	35913	U	0.18	2/24/2024
MO-West	36113	U	4.69	12/28/2024
MO-West	36121	U	0.16	12/21/2024
MO-West	36611	U	1.2	5/4/2024
MO-West	36612	U	0.67	5/4/2024
MO-West	37212	U	2.93	10/12/2024
MO-West	37222	U	5.9	3/30/2024
MO-West	37231	U	1	2/17/2024
MO-West	37234	U	1.45	3/30/2024
MO-West	37321	U	0.42	3/30/2024
MO-West	37341	U	0.07	3/2/2024
MO-West	37342	U	17.02	10/12/2024
MO-West	37622	U	1.27	11/2/2024
MO-West	37623	U	2.35	12/28/2024
MO-West	37631	U	9.42	11/23/2024
MO-West	38111	U	3.94	3/30/2024

Company	Circuit Name	Classification	Total Miles	Completion Date
MO-West	38221	U	6.38	3/23/2024
MO-West	38241	U	5.79	7/13/2024
MO-West	38312	U	1.46	10/5/2024
MO-West	38321	U	10.23	10/5/2024
MO-West	38821	U	10.23	12/28/2024
MO-West	38823	U	0.65	9/21/2024
MO-West	38831	U	1.05	9/14/2024
MO-West	39152	U	0.25	9/21/2024
MO-West	39161	U	2.66	9/21/2024
MO-West	39412	U	5.73	4/13/2024
MO-West	40212	U	3.17	9/28/2024
MO-West	40782	U	3.71	9/7/2024
MO-West	40921	U	7.73	12/14/2024
MO-West	40931	U	0.25	9/21/2024
MO-West	43613	U	4.19	6/22/2024
MO-West	43614	U	4.42	6/29/2024
MO-West	43811	U	11.71	11/30/2024
MO-West	43812	U	10.23	11/9/2024
MO-West	43922	U	5.68	9/28/2024
MO-West	43923	U	17.85	11/30/2024

Table 3: 2024 MO Completion Summary of Distribution System Vegetation Management Circuits Scheduled for Maintenance

Territory	Urban Miles	Rural Miles	Total 12 kV (Urban + Rural)	34 kV	Total 12 kV + 34 kV
Missouri Metro	355	175	530	83	613
Missouri West	670	936	1,606	359	1,965
Total	1,025	1,111	2,136	442	2,578

Table 4: 2024 MO Distribution System Mileage Inventory

Territory	Urban Miles	Rural Miles	Total 12 kV (Urban + Rural)	34 kV	12 kV + 34 kV
Missouri Metro	2,002	1,743	3,745	171	3,871
Missouri West	3,074	4,299	7,372	488	7,895
Total	5,076	6,042	11,117	659	11,776

Note: Minor differences in distribution system miles occur between annual and quarterly reports. The minor differences reflect regular monitoring of the distribution system that identifies retired or new facilities.

# APPENDIX C – 2025 DISTRIBUTION VEGETATION MANAGEMENT BUDGET AND SCHEDULED PERFORMANCE

The listed vegetation management work is planned for completion in 2024. The Program is dynamic in nature and, at times, requires adjustment to conform to performance as measured by tree-related service reliability; to take advantage of opportunities to gain efficiency; to incorporate customer feedback; to address changes in regulatory initiatives; and to address other program drivers. In light of the many variables affecting vegetation management activities, including weather, specific schedule dates were excluded from this appendix.

# **Budget - 2025**

2025 distribution vegetation management budget for Missouri service areas:

 Missouri Metro
 \$ 13,964,850

 Missouri West
 \$ 13,684,375

 Total
 \$27,649,225

Table 5: 2025 MO Distribution System Vegetation Management Circuits Scheduled for Maintenance

Company	Circuit	Classification	Miles
MO-Metro	1142	U	6.64
MO-Metro	2333	U	9.94
MO-Metro	2341	U	5.52
MO-Metro	2394	U	11.29
MO-Metro	2613	R	21.77
MO-Metro	2732	U	11.75
MO-Metro	2771	U	7.75
MO-Metro	2821	R	26.64
MO-Metro	3122	U	9.6
MO-Metro	3142	U	1.02
MO-Metro	3144	U	7.6
MO-Metro	3151	U	9.08
MO-Metro	3152	U	8.94
MO-Metro	3212	R	17.65
MO-Metro	3412	R	36.4
MO-Metro	3512	U	12.02
MO-Metro	3532	U	14.66
MO-Metro	3542	U	15.12
MO-Metro	3544	U	14.24
MO-Metro	3552	U	17.22
MO-Metro	3714	U	2

Company	Circuit	Classification	Miles
MO-Metro	3931	U	8.45
MO-Metro	4313	R	16.43
MO-Metro	4811	U	7.86
MO-Metro	4813	U	8.3
MO-Metro	4823	U	6.22
MO-Metro	4854	U	2.77
MO-Metro	4943	U	7.11
MO-Metro	5263	U	19.57
MO-Metro	5374	U	13.96
MO-Metro	5384	R	1.89
MO-Metro	5391	R	0.2
MO-Metro	5621	U	11.14
MO-Metro	5624	U	7.42
MO-Metro	5641	U	12.06
MO-Metro	5642	U	16.23
MO-Metro	5644	U	14.83
MO-Metro	5663	U	16.9
MO-Metro	5712	U	13.18
MO-Metro	6111	U	17.32
MO-Metro	6113	U	17.99
MO-Metro	6123	U	15.7
MO-Metro	6311	U	6.28
MO-Metro	6331	U	18.46
MO-Metro	6341	U	15.42
MO-Metro	6621	U	7.68
MO-Metro	7051	U	4.53
MO-Metro	7052	U	10.02
MO-Metro	7811	U	10.56
MO-Metro	7822	U	7.98
MO-Metro	7823	U	10.77
MO-Metro	7831	U	13.71
MO-Metro	7844	U	9.68
MO-Metro	7851	U	9.67
MO-Metro	7861	U	9.04
MO-Metro	7863	U	12.03
MO-Metro	9414	R	1.02
MO-Metro	9442	R	1.01
MO-Metro	9613	R	1.93
MO-Metro	9622	R	3.08
MO-Metro	9624	R	1.15
MO-Metro	11611	R	153.67
MO-Metro	13941	U	3.33

Company	Circuit	Classification	Miles
MO-Metro	13943	U	5.95
MO-Metro	2311	U	9.72
MO-West	11831	U	3.13
MO-West	20423	R	16.98
MO-West	20811	U	3.03
MO-West	20921	U	18.19
MO-West	21112	R	14.41
MO-West	21211	U	1.01
MO-West	21321	U	10.1
MO-West	21323	U	12
MO-West	21421	U	13.13
MO-West	21431	U	14.44
MO-West	21432	U	3.77
MO-West	21521	U	7.08
MO-West	21522	U	2.85
MO-West	22113	U	25.29
MO-West	22812	R	14.26
MO-West	23711	R	35.81
MO-West	23712	R	14.53
MO-West	23813	U	10.65
MO-West	24022	U	29.58
MO-West	24511	U	4.61
MO-West	24512	U	42.29
MO-West	24612	U	9.57
MO-West	24613	U	9.61
MO-West	24621	U	12.85
MO-West	24812	U	3.16
MO-West	24813	U	3.49
MO-West	24912	R	22.62
MO-West	25112	R	0.41
MO-West	26421	U	4.74
MO-West	27111	U	3.27
MO-West	27121	U	5.54
MO-West	27721	U	4.1
MO-West	27821	R	4.72
MO-West	28121	U	7.02
MO-West	28122	U	5.8
MO-West	28224	U	6.77
MO-West	28311	U	8.38
MO-West	28321	U	6.95
MO-West	28351	U	9.18
MO-West	28511	R	57.58

Company	Circuit	Classification	Miles
MO-West	28513	R	50.89
MO-West	29011	U	4.62
MO-West	29021	U	7.23
MO-West	29042	U	30.8
MO-West	29211	U	7.06
MO-West	29212	U	6.6
MO-West	29611	R	6.88
MO-West	30614	U	11.94
MO-West	30721	U	12.15
MO-West	31921	U	27.43
MO-West	31922	R	142.64
MO-West	32522	U	8.68
MO-West	32611	R	107.32
MO-West	32612	U	4.8
MO-West	32633	R	38.61
MO-West	33013	U	16.76
MO-West	33022	U	15.85
MO-West	33023	U	15.83
MO-West	33321	U	21.91
MO-West	34152	R	10.51
MO-West	34222	R	24.55
MO-West	35012	R	11.39
MO-West	35511	U	8.2
MO-West	35522	U	8.9
MO-West	35912	U	4.51
MO-West	35922	U	9.87
MO-West	36111	U	5.7
MO-West	36112	U	2.5
MO-West	36611	U	12.92
MO-West	36621	U	16.34
MO-West	37211	U	12.07
MO-West	37321	U	14.37
MO-West	37612	U	5.24
MO-West	37613	U	11.64
MO-West	37623	U	12.79
MO-West	38211	R	57.48
MO-West	38231	U	19.84
MO-West	38521	U	18.51
MO-West	38531	U	10.81
MO-West	38822	U	11.93
MO-West	38823	U	21.34
MO-West	38833	U	8.24

Company	Circuit	Classification	Miles
MO-West	38911	R	7.92
MO-West	39033	U	9.58
MO-West	39042	U	7.55
MO-West	39043	U	10.56
MO-West	39431	U	4.63
MO-West	39441	U	13.44
MO-West	40611	R	41.01
MO-West	40911	U	10.52
MO-West	40931	U	5.26
MO-West	40941	U	10.17
MO-West	41321	R	27.93
MO-West	41811	R	30.12
MO-West	42711	U	56.18
MO-West	43031	R	15.72

Table 6: 2025 Summary MO Distribution System Vegetation Management Circuits Scheduled for Maintenance

Territory	Urban Miles	Rural Miles	Total 12 kV (Urban + Rural)	34 kV	12 kV + 34 kV
Missouri Metro	546	283	829	0	829
Missouri West	837	754	1,591	0	1,591
Total	1,383	1,137	2,420	0	2,420

Table 7: 2025 MO Distribution System Mileage Inventory

Territory	Urban Miles	Rural Miles	Total 12 kV (Urban + Rural)	34 kV	12 kV + 34 kV
Missouri Metro	2,005	1,742	3,747	162	3,909
Missouri West	2,899	4,472	7,371	467	7,838
Total	4,904	6,214	11,118	629	11,747

# APPENDICES D THROUGH G CONFIDENTIAL

These appendices contain information that falls under the definitions of Confidential Information, Critical Energy Infrastructure Information, and/or Critical Infrastructure under the Rules of Procedure of the North American Electric Reliability Corporation, Section 1500. In light of the requirements to maintain the confidentiality of information and data that falls under Section 1500, the appendices are marked as Confidential.