

**Kansas City Power & Light Company
2011 Annual Missouri Vegetation Management Report
Pursuant to 4 CSR 240-23.030**

**KCP&L Greater Missouri Operations Company
2011 Annual Missouri Vegetation Management Report
Pursuant to 4 CSR 240-23.030**

**TRANSMISSION and DISTRIBUTION RIGHT-OF-WAY
VEGETATION MANAGEMENT PROGRAM**

April 1, 2012

This program document applies to vegetation maintenance of Kansas City Power & Light Company's ("KCP&L") and KCP&L Greater Missouri Operations Company's ("GMO") transmission and distribution power lines. It meets the requirements of the Missouri Public Service Commission Rule 4 CSR 240-23.030 *Electrical Corporation Vegetation Management Standards and Reporting Requirements*. KCP&L, by operating agreement, provides vegetation management services to GMO.

2011 Annual Vegetation Management Report

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2011 Annual Vegetation Management Report

Highly 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 Highly Confidential.

1.0 Introduction

Kansas City Power & Light Company (“KCP&L”) and KCP&L Greater Missouri Operations Company’s (“GMO”) Transmission and Distribution Vegetation Management Program (“Program”) report presents the strategy, key processes, and guidelines for orderly, uniform, safe, and efficient management of KCP&L’s and GMO’s overhead delivery systems. The report reflects vegetation management performed in 2011 and planned for 2012; 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

KCP&L and GMOs’ Transmission and Distribution vegetation management program promotes safe and reliable electric service. Beyond compliance and requirements of a robust vegetation maintenance program under 4 CSR 240-23.030 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 KCP&L and GMO facilities, 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 KCP&L’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 KCP&L’s and GMOs’ electric facilities. Foundational to safety is the contractors’ understanding that KCP&L’s and GMOs’ electric facilities are energized during the performance of their work unless, prior to the work commencing, arrangements are made with an authorized KCP&L representative to de-energize the facilities.

KCP&L and GMO are pleased to report that in 2011 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

KCP&L employs a vegetation manager to oversee KCP&L and GMOs' 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 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. Maintenance cycles of distribution lines are based on customer density—urban versus rural¹. Mid-cycle line inspections of primary distribution lines are scheduled 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	5 to 6	2 to 3

Primary maintenance cycles result 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 cycle.

¹ Urban circuits are defined as those with customer density equal to or greater than 35 customers per line mile. Rural circuits are defined as those with customer density less than 35 customers per line mile. 4 CSR 240-23.030(1)(G) and (J).

4.3. Tree Selection Criteria

KCP&L 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, that 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
- Severe lean
- Weak branches
- Root failure
- Cankers
- Conks (fungal fruiting bodies)
- Internal decay

4.3.3. Brush and Vines (trees smaller than 4 inches diameter)

Removal and/or treatment of small-size brush with herbicides is a cost effective 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. Integrated Vegetation Management (IVM)

KCP&L 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 definitely 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

KCP&L 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 KCP&L'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. Property Owner Notification

KCP&L 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, but not more than, ninety days prior to performing scheduled maintenance.

4.5.3. County and Municipal Notification

KCP&L 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 dates and locations of scheduled vegetation maintenance and other information relevant to the particular municipality or county. The primary contact for each municipality or county is selected by mutual agreement between KCP&L and the highest elected official in the jurisdiction or highest appointed official if there is no elected official.

4.5.4. Public Outreach

KCP&L 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. Also, KCP&L annually mails information to KCP&L and GMO customers regarding vegetation management.

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. Also, vegetation management contractors are required to follow industry safety standards such as, the *American National Standards Institute (ANSI) Z133.1 – 2006, Pruning, Trimming, Repairing, Maintaining, and Removing Trees and Cutting Brush – Safety Requirements, 2006. ANSI A-300 (Part 1) - 2001 Tree, Shrub and Other Woody Plant Maintenance – Standard Practices*—a requirement as it applies to utility tree pruning. Furthermore, contractors are required to implement the pruning concepts presented in the booklet, *Pruning Trees Near Electric Utility Lines*, by Dr. Alex L. Shigo.

4.6.2. KCP&L Vegetation Management Guidelines and Clearance Standards

KCP&L 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. Post-Work Inspection and Acceptance

KCP&L, 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

KCP&L and GMO 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 KCP&L's and GMO'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 1st of each year pursuant to 4 CSR 240-23.030. 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 not 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* (4 CSR 240-23.030) within 30 days of discovery and include a mitigation plan for the irregular operation.

STATE OF MISSOURI)
)**Ss**
COUNTY OF JACKSON)

1. My name is Michael Deggendorf. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Senior Vice President, Delivery.

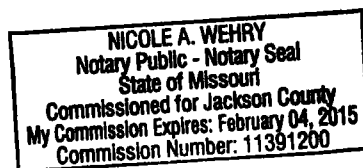
3. I hereby swear and affirm that the report is true and accurate to the best of my knowledge, information and belief.

~~MICHAEL DEGGENDORF~~

Subscribed and sworn before me this 30th day of March 2012.

Notary Public

My Commission expires: Feb. 4, 2018



5.0 APPENDICES

APPENDIX A – KCP&L's and GMO's DISTRIBUTION LINE CLEARANCE GUIDELINES

About This Guideline

KCP&L's and GMO's Distribution Line Clearance Guidelines ("Guidelines") are intended as a contractor's guide to implement KCP&L and GMOs' Distribution Vegetation Management Program. The Guidelines' underlying principle is that each tree, and tree species, has its own unique growth pattern, condition, proximity to conductors, structures and other obstacles, and will require the exercise of professional judgment in implementing the guidelines.

The Guidelines apply to vegetation management of KCP&L's and GMOs' distribution system, including voltages from 600 to 35,000 Volts.

Note: *The Guidelines are not intended as personal safety guidelines*¹.

(1) Introduction

A copy of the Guidelines and the book, *Pruning Trees Near Electric Utility Lines*, by Dr. Alex L. Shigo shall be kept on each crew truck and available at every work location.

The Distribution Vegetation Management Program (hereinafter called the "Program") objective is to help maintain safe, reliable, and least cost electric service, while complying with all regulatory requirements. The Program helps achieve this overall objective by efficiently managing vegetation to reduce outage risk. Left unmanaged, trees and other vegetation can become a leading source of power interruptions during non-storm events and can delay outage restoration associated with major and regular weather events. The Program's strategy focuses on maintenance activities that help reduce tree-caused outage risks associated with trees that grow into lines and risks associated with trees breaking and falling onto lines.

The objectives of the Program are to be achieved within the framework of positive customer relations and using sound environmental practices. The Program also provides incentives to the Contractor to exceed specific production and quality criteria. On the other hand, the Program penalizes Contractors for failing to maintain specific production and quality criteria. KCP&L, and/or its designated representative, is exclusively responsible for program oversight.

(2) Line Clearance Guidelines

(A) Pruning and Removal Guidelines

¹ While the Guidelines may comment on safety issues, Contractors and their crews performing vegetation management work on or near KCP&L and GMO facilities, rights-of-way, or easements are contractually required to follow government safety and health regulations and KCP&L's own safety and health provisions.

All tree pruning shall be governed by approved principles of modern arboriculture and shall adhere to industry standards, including, ANSI A-300 and Z-133 standards and the natural pruning method. KCP&L representatives, in certain cases, can grant exceptions to these pruning standards where mechanical trimming equipment is used. Pruning shall be done in a manner that protects current tree health and with regard for future growth and development.

(B) Voltages

1. Vegetation management for voltages of (35,000) volts and higher are considered to be Transmission voltages and are deferred to the Transmission Program.
2. Vegetation management for distribution lines energized at 35 kV and below are maintained by the Program. Primary voltages range from 600 to 34,500 Volts, and are further defined as follows: Backbone consists of (3) energized conductors, and Lateral consists of (1) or (2) energized conductors. Conductors with voltages of less than 600 Volts are considered Secondary voltage. The neutral wire has the potential to carry primary voltage, which CONTRACTOR shall take into consideration when clearing primary lines.

(C) Clearance for Primary voltages

1. For primary conductors, radial clearance to be achieved at the time of maintenance is 10 feet.
2. Sub-transmission lines and Backbone lines shall be trimmed vertically to remove overhanging limbs to the widths prescribed in paragraphs (2)(C)1.
3. Any tree affecting or potentially affecting a primary distribution line shall be trimmed to help maintain reliable service. The following factors are considered during the clearance process: The natural growth rate per species; The re-growth rate of the tree species (how fast the branches grow back after pruning), see Section 9 "Tree Re-growth Rates"; The wood strength of the tree species (what is the chance of the branch breaking under the load of strong wind, snow, ice); the voltage conducted by the line (the risk presented by the branch contacting the line; the higher the voltage, the greater the risk); branches rubbing insulated wires and broken or hanging tree branches.
4. The radial clearances in subsection (2)(C) are minimum clearances that should be established between the vegetation and the energized conductors and associated live parts where practicable. Vegetation management practices may make it advantageous to obtain greater clearances than those listed. In the event that the specific trimming conflicts with any other materials within this section, the strictest rules shall apply.
5. Notwithstanding any provision to the contrary in this section (2), 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 are exempt from the minimum clearance requirements in this section (2).
6. Minimum clearances may be subject to limitations of right-of-way width or legal access.
7. All dead wood shall be removed when it is a risk to conductors or when the KCP&L directs the CONTRACTOR to do so.

(D) Clearance considerations for Secondary Conductors, (600) volts or less

1. Open Wire secondary shall be cleared to the same standards as lateral primary conductors.
2. Triplex, street light and service lines shall be cleared only to remove **hard contact**, or deflection of the line's intended path.
3. All dead wood shall be removed when it is a risk to conductors or when the KCP&L directs the CONTRACTOR to do so.

(E) Clearance considerations for other electrical equipment

1. The neutral wire has the potential to carry primary voltage, which CONTRACTOR shall take into consideration when clearing primary lines.
2. Guy Wires and poles shall be cleared on a case by case basis as determined necessary during field inspection, to free them from weight, strain, or displacement caused by contact with trees.
3. All dead wood shall be removed when it is a risk to conductors or when the KCP&L directs the CONTRACTOR to do so.

(F) Removal Considerations for trees greater than 4" DBH

1. If the amount of tree crown to be removed in order to obtain adequate clearance will have an adverse impact on the overall long term health of the tree, the tree will be considered for removal.
2. Tall-growing trees within the width of the right-of-way shall be considered for removal.
3. Hazard trees that pose a risk to the utilities overhead facilities shall be considered for removal. Hazard tree conditions could include, but are not limited to the following symptoms: Dead or dying, severe lean, weak branches, root failures, cankers, conks or internal decay.
4. All removed trees should be cut as close to the ground as practical and chemically treated to prevent resprouting.
5. Trees where the cost of removing is equal to or less than the cost of trimming shall be considered for removal.

(G) Brush considerations

1. Brush is defined as any tall growing tree that is less than 4" DBH. Brush also includes vines growing on or around KCP&L and GMOs' overhead facilities.
2. Brush that has been planned to be removed shall be basal treated or cut as close to ground level as practical and chemically treated to prevent resprouting.
3. Vines shall be cut off approximately one foot above ground level. All vines shall be treated with herbicides below the cut.
4. Brush (as defined in (2)(G)1) that has been selected for removal and is located within the width of the right-of-way shall be removed and treated.
5. Second growth from stumps cut on previous pruning cycles shall be removed if it has been planned.

(H) Debris disposal

1. Unless specified otherwise, CONTRACTOR shall dispose of all debris resulting from scheduled maintenance work. Wood too large to be chipped shall be cut

into fireplace lengths (approximately 18" lengths) and stacked on-site unless the homeowner requests the wood to be removed.

2. CONTRACTOR shall remove all debris produced from scheduled maintenance within 5 business days, unless property owner gives consent to leave debris.
3. Disposal of chips, wood and brush is the responsibility of the contractor.
4. Any debris resulting from outages and/or storms will be left on site.

(I) Herbicide treatment

1. The CONTRACTOR shall provide all necessary herbicide products and comply with applicable Laws regarding the application, storage and handling.
2. The CONTRACTOR shall use the most effective herbicide available for any given situation to prevent regeneration of vegetation and subject to approval by KCP&L. The applicable MSDS shall be submitted as part of the approval process. Herbicides shall be applied according to manufacturer instructions. Consideration must be given to the surrounding vegetation and soil conditions to prevent damage to other growth or surface water or ground water.
3. CONTRACTOR shall warranty herbicide treatment for one (1) year after application and remedy any new growth identified.

(3) Maintenance Cycle

(A) Missouri Maintenance Cycle

1. Urban circuits are defined as circuits with a customer density equal to or greater than 35 customers per line mile.
2. Rural circuits are defined as circuits with customer density less than 35 customers per line mile.
3. Urban circuits, both backbone and lateral, shall be maintained on a four (4) year cycle.
4. Rural circuits, both backbone and lateral, shall be maintained on a five (5) or six (6) year cycle.
5. Urban circuits shall be inspected every two (2) years. Where needed, vegetation maintenance will occur in a timely manner.
6. Rural circuits shall be inspected at least every three (3) years. Where needed, vegetation maintenance will occur in a timely manner.

(4) Outage/Storm Response

(A) On-Call/Call Out

1. In the event of an emergency and when specifically requested by KCP&L, contractors shall provide crews to perform work after hours and on week-ends and holidays, as necessitated by the emergency. Work that is unrelated to the restoration of reliable electric service shall not be performed. On such emergencies, only essential work (i.e. no chipping of brush) shall be done per tree as required to restore electric service rapidly.
2. If necessary a Vegetation Management Supervisor will report to dispatch headquarters to aid in the dispatching of tree crews.

3. Improper pruning during outage/storm response work may occur due to unsafe conditions.
4. Fallen trees, broken limbs and all trimmings and cut vegetation associated with service restoration are left on site. Crews shall not inform customers that KCP&L will return at a later day to clean up the trimmings and cut vegetation.

(5) Customer Request Process

(A) Customer requests

1. Customer requests generated from KCP&L's call center or other designated source are managed by the vegetation management staff. Customer requests can include but are not limited to: Trim for Line Clearance; Customer Assisted Removal; Check for Drop Service; Pick Up Brush.
2. Customer requests will be inspected and the customer will be notified with the specific action that will be taken.
3. Under some circumstances, a customer request may be answered by a standard letter.
4. Response time to customer requests will vary depending on the number of requests in the system and the type of work required.
5. When necessary and with customer consent, brush will be left on-site.
6. For customer requested assistance for tree removal, any tree(s) to be removed by customer will have all overhang removed and ten feet (10') of clearance from all energized conductors will be provided.

(6) Notification Process

(A) Landowner Notification

1. For regularly schedule maintenance, customers will be notified in person or by door card with appropriate contact number, by a KCP&L representative. Questions regarding the scheduled work will be answered at this time. Notice to affected property owners or occupants will occur at least seven (7) days, but not more than ninety (90) days, prior to performing planned vegetation maintenance. Alternative notification methods may include direct mail, postcard or bill insert. KCP&L shall maintain a record of the dates, content, and addresses to which all notices provided were given until the subsequent scheduled vegetation management cycle has occurred for each affected property owner or occupant.
2. KCP&L and or its representative must secure signed permission to remove any tree equal to or greater than 4" DBH.
3. If vegetation management is necessary and the landowner refuses permission, the concern will be addressed by KCP&L and or its representative.
4. (Pending results of variance request) The vegetation manager's name and contact information is posted on KCP&L's website and is included on all notifications in the state of Missouri.

(B) Public notification

1. KCP&L shall provide written notice of any pending vegetation management activities to a primary contact for each county and municipality affected. The primary contact shall be selected by mutual agreement between KCP&L and the highest elected official, or if no elected official, then the highest appointed official, of the county and municipality.
2. Notice shall be made in writing to the primary contact designated under subsection above (6)(B)1, at least two (2) months in advance of the planned vegetation management. This notice shall include the planned dates and locations of the vegetation management.

(7) Contractor Guidelines

(A) Appearance and Conduct

All contract line clearance workers shall maintain professional appearance and conduct and shall adhere to the following guidelines. The following guidelines are neither intended to be nor should they be considered to be inclusive. The contractor:

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. shall 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 KCP&L to make any payments to another party, nor make any promises or representations of any nature to another party for or on behalf of KCP&L/GMO;
11. shall maintain neat appearance at all times and;
12. shall wear clothing and hard hat displaying CONTRACTOR's color and/or emblem.

(B) Supervision

1. The CONTRACTOR shall ensure that it has adequate supervisory personnel on the property to ensure that all of the CONTRACTOR's crews on the property are properly supervised. CONTRACTOR's personnel shall provide the interaction and communication with KCP&L as required by this Contract. Such supervisory personnel shall be called "General Foremen" in these guidelines.
2. All contract supervisors and General Foreman will be Certified Arborists through the International Society of Arboriculture (ISA). Employees currently in these

positions will have six months to obtain the certification; newly assigned supervisors and general foreman shall obtain their certification within twelve months.

(C) Identification

All General Foreman and Crew Forman shall possess identification stating employee name, employer, as well as documentation stating the contractor is providing vegetation management services for KCP&L.

(D) Employment expectations

1. CONTRACTOR shall conduct pre-employment and random drug and alcohol screening to detect the presence of amphetamines, cocaine, marijuana, opiates, and phencyclidine, at no additional cost to KCP&L.
2. CONTRACTOR shall conduct pre-employment background check for felony criminal convictions and motor vehicle violations for all states of residency within the past five (5) years, at no additional cost to KCP&L.

(E) Vehicles

1. All vehicles and equipment shall be in good working condition, kept clean and organized at all times, maintaining a professional appearance. All trucks shall clearly display CONTRACTOR markings and vehicle numbers. Truck numbering should be visible from both side and the back. Also, the numbering should be large enough to be legible from a distance commonly encountered in traffic, i.e., several car lengths or across a four-lane intersection.
2. Each General Foreman and Crew shall be equipped with a two-way communication device at no additional cost to KCP&L. If radios are supplied by KCP&L, the contractor will replace all lost or stolen radios.
3. Cones will be placed at a highly visible area (street intersections, driveways, alleys, etc.) when a crew's work location is not readily detectable, as recommended by Missouri Department of Transportation .

(F) Time Fulfillment

1. All work shall be performed Monday through Friday, except under special circumstances as agreed by KCP&L. The CONTRACTOR and KCP&L shall mutually agree to the working hours in accordance to IBEW local 53. Any approved overtime shall be paid at the rates set forth in contract, depending on the circumstances, by KCP&L for any work performed in excess of 40 hours per week.
2. While on **stand-by**, crew(s) shall be dumping chips, fueling trucks, maintaining chainsaws, and engaging in other productive duties. *Crews sitting for the **2-hour show up time** shall not charge time towards their perspective equipment.*
3. Holidays - CONTRACTOR may, upon receipt of permission from KCP&L, work at straight time on any KCP&L-observed holiday.

(G) Certification and permits

The CONTRACTOR shall acquire all certifications and permits required by local, county, municipality, state, tribal and federal agencies in which the CONTRACTOR's crews will be performing work pursuant to this Contract.

(H) Refusal/Access

1. In the event that the CONTRACTOR encounters conditions prohibiting performance of Work, the crew foreman will make, and document on Work Log, all reasonable efforts to secure access. CONTRACTOR shall notify KCP&L after all reasonable efforts to secure access have failed. A locked gate shall not, in and of itself, constitute "No Access". CONTRACTOR shall not be entitled to additional compensation for No Access.
2. In the event that a property owner refuses access to the work scheduled, the crew foreman will notify KCP&L and move on to the next job site. Work will not be performed until KCP&L has notified the CONTRACTOR that access has been granted.

(I) Reporting

The CONTRACTOR shall collect and report key aspects of the vegetation management program to document program performance and provide information necessary for ongoing program management including:

1. CONTRACTOR Weekly Work Log
2. Weekly TRES timesheets
3. Daily Crew Locations
4. A record of any safety hazards encountered
5. Any unexpected occurrence or accident resulting in death, life-threatening or serious injury to a person assigned to perform vegetation management activities or the public.
6. Additional documentation as requested by KCP&L

(J) Contact information

KCP&L and the CONTRACTOR shall provide each other as needed, a list of all Vegetation Management personnel, and the phone numbers where each can be contacted, including pagers/beepers/cell phones.

(K) Communication

During the progress of the work, CONTRACTOR shall provide crew locations to KCP&L staff as requested. In the event the CONTRACTOR plans to deviate from the normal work schedule, e.g. leaving the job site or starting location due to inclement weather or other cause, the foreman shall notify the appropriate personnel immediately.

(L) System Awareness

1. The CONTRACTOR shall at all times be aware of the nature and characteristics of the electric facilities, including circuit voltage. It is understood that all circuits shall remain energized during the performance of work. Any exceptions must be authorized and scheduled by KCP&L. If in the judgment of the Contractor's

general foreman/supervisor, it is hazardous to prune or remove trees with the circuits energized, the Contractor must contact an authorized KCP&L representative. If appropriate KCP&L will provide the necessary protective materials or de-energize circuits to ensure the safe pruning or removal of the tree(s).

2. Should the Contractor knock down or come into contact with conductors (power lines), the Contractor shall immediately notify KCP&L and take the necessary protective measures. All Contractor-caused electric service interruptions are subject to repair at the Contractor's expense. This includes any damage to customers' property, including any electrical damage.
3. In the event a Contractor becomes aware of any broken, damaged, loose or faulty line facilities in the normal course of its line clearance performance, the Contractor shall promptly notify KCP&L as to the exact location(s) and nature of the condition found.
4. The CONTRACTOR's Representative (i.e. Regional Manager or designated representative) and General Foreman shall attend meetings as scheduled by KCP&L to discuss work practices and issues.

(M) Expectations

1. CONTRACTOR shall insure that crew's are being productive at all times.
2. CONTRACTOR shall perform Work as identified by KCP&L. The CONTRACTOR shall only accept work assignments from KCP&L's designated representative. The CONTRACTOR shall make an attempt to contact the homeowner at each property they have planned work.

(8) 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 a 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 a 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.

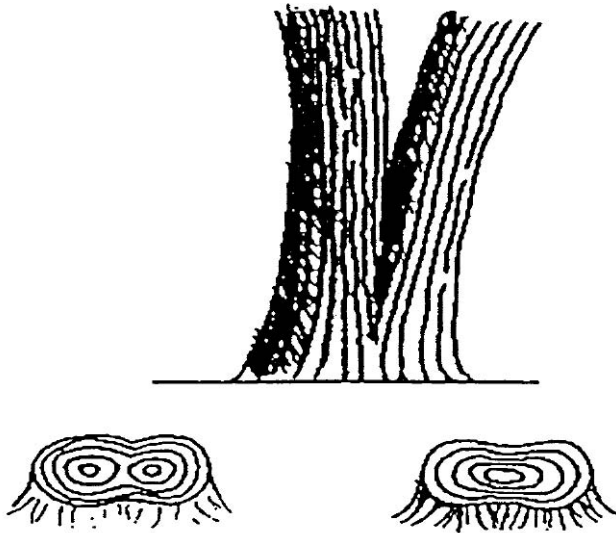
sucker growth - the re-growth within the tree that originates near the cuts made during the previous trimming.

the property - any work site associated with this contract.

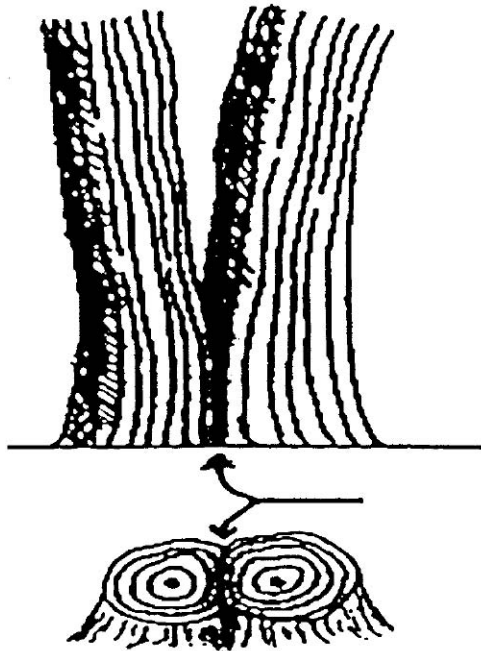
topping - cutting back the upper crown of a tree to a uniform horizontal line, leaving multiple stubs. This is an improper and unacceptable trimming technique.

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. Also known as crown reduction pruning or drop-crothing.

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

(9) Tree Re-growth Rates

Average Annual Re-growth Rates For Individual Species on the KCP&L and GMO Distribution Systems.

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

<u>Species</u>	Pruning Type	Inches of Re-growth by Age of Sprout					
		<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 – 2011 Distribution Vegetation Management EXPENSE AND PERFORMANCE

Summary

KCP&L manages vegetation for itself and GMO 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 – 2011

2011 distribution vegetation management expenditures for Missouri service areas:

KCP&L	\$7,954,161
GMO	<u>\$7,965,823</u>
Total	\$15,919,984

Vegetation Management Activities – 2011

Table 2 summarizes vegetation management activities completed in 2011 on distribution circuits in KCP&L and GMO Missouri service territories.

Table 2: 2011 MO Distribution System Vegetation Management Activities

Company	Circuit	Classification	Miles	Completion Date
KCP&L	10011	Rural	1.85	1/29/2011
KCP&L	1011	Rural	9.68	1/8/2011
KCP&L	1012	Rural	14.39	3/5/2011
KCP&L	1013	Rural	0.71	1/8/2011
KCP&L	11011	Rural	0.16	12/31/2011
KCP&L	1113	Urban	6.28	2/12/2011
KCP&L	1144	Urban	1.90	2/12/2011
KCP&L	116	Rural	0.50	6/25/2011
KCP&L	11611	Rural	154.95	10/1/2011
KCP&L	11612	Rural	32.54	6/11/2011
KCP&L	120	Rural	0.36	12/31/2011
KCP&L	12013	Rural	13.80	3/5/2011
KCP&L	12211	Urban	14.67	2/5/2011
KCP&L	1521	Urban	0.16	3/26/2011
KCP&L	18	Rural	0.28	12/31/2011

Company	Circuit	Classification	Miles	Completion Date
KCP&L	1811	Rural	44.74	5/7/2011
KCP&L	1812	Rural	65.18	4/23/2011
KCP&L	1813	Rural	43.75	4/16/2011
KCP&L	2301	Urban	8.76	12/17/2011
KCP&L	2303	Urban	5.56	12/3/2011
KCP&L	2332	Urban	7.74	5/28/2011
KCP&L	2335	Urban	1.06	12/31/2011
KCP&L	2354	Urban	3.23	1/29/2011
KCP&L	2391	Urban	13.23	12/17/2011
KCP&L	2393	Urban	8.10	12/31/2011
KCP&L	2414	Urban	0.05	2/19/2011
KCP&L	2422	Urban	2.85	3/12/2011
KCP&L	2444	Urban	3.94	3/19/2011
KCP&L	2461	Urban	1.99	7/30/2011
KCP&L	2481	Urban	0.58	3/19/2011
KCP&L	2713	Urban	1.86	5/14/2011
KCP&L	2722	Urban	11.59	4/23/2011
KCP&L	2733	Urban	8.43	2/19/2011
KCP&L	2734	Urban	3.26	2/19/2011
KCP&L	2742	Urban	2.83	2/12/2011
KCP&L	2751	Rural	3.39	4/9/2011
KCP&L	2753	Rural	4.29	5/21/2011
KCP&L	2762	Urban	8.16	6/25/2011
KCP&L	2811	Rural	38.02	3/5/2011
KCP&L	2822	Urban	1.22	1/22/2011
KCP&L	3012	Urban	5.76	1/8/2011
KCP&L	3111	Urban	4.60	5/28/2011
KCP&L	3114	Urban	9.50	10/29/2011
KCP&L	3131	Urban	4.02	4/23/2011
KCP&L	3134	Urban	12.39	4/9/2011
KCP&L	3143	Urban	7.93	10/1/2011
KCP&L	3411	Rural	3.98	2/12/2011
KCP&L	3412	Rural	35.91	3/5/2011
KCP&L	3413	Rural	12.86	12/24/2011
KCP&L	3612	Rural	56.84	10/22/2011
KCP&L	3721	Urban	3.49	7/30/2011
KCP&L	3722	Urban	4.66	7/16/2011
KCP&L	3723	Urban	2.08	3/19/2011
KCP&L	3733	Urban	2.80	8/6/2011
KCP&L	3734	Urban	0.04	10/15/2011

Company	Circuit	Classification	Miles	Completion Date
KCP&L	3911	Rural	2.28	1/22/2011
KCP&L	3913	Urban	2.39	2/19/2011
KCP&L	3941	Urban	4.25	2/12/2011
KCP&L	4215	Urban	13.50	12/31/2011
KCP&L	4216	Urban	0.50	12/31/2011
KCP&L	4222	Rural	4.11	3/12/2011
KCP&L	4412	Urban	1.48	9/17/2011
KCP&L	4414	Urban	4.27	10/1/2011
KCP&L	4812	Urban	2.25	11/12/2011
KCP&L	4853	Urban	5.75	9/24/2011
KCP&L	4913	Urban	9.52	5/21/2011
KCP&L	4941	Urban	5.15	8/27/2011
KCP&L	4942	Urban	7.76	12/17/2011
KCP&L	4962	Urban	4.34	12/31/2011
KCP&L	5251	Urban	12.25	3/5/2011
KCP&L	5252	Urban	8.36	6/4/2011
KCP&L	5338	Urban	4.57	10/1/2011
KCP&L	5372	Urban	7.63	9/17/2011
KCP&L	5374	Urban	11.81	10/8/2011
KCP&L	5381	Urban	7.88	11/26/2011
KCP&L	5382	Urban	4.26	7/16/2011
KCP&L	5384	Rural	13.09	10/8/2011
KCP&L	5624	Urban	7.57	6/18/2011
KCP&L	5642	Urban	1.25	3/5/2011
KCP&L	5644	Urban	14.93	12/10/2011
KCP&L	5663	Urban	17.88	12/24/2011
KCP&L	5911	Rural	60.43	12/17/2011
KCP&L	6131	Urban	16.58	7/9/2011
KCP&L	6312	Urban	3.98	6/11/2011
KCP&L	6331	Urban	18.63	12/10/2011
KCP&L	6333	Urban	3.68	7/23/2011
KCP&L	6342	Urban	9.44	10/15/2011
KCP&L	647	Urban	0.70	12/3/2011
KCP&L	6614	Urban	5.09	4/30/2011
KCP&L	6623	Urban	27.81	4/16/2011
KCP&L	6631	Urban	2.15	4/2/2011
KCP&L	7041	Urban	5.40	7/23/2011
KCP&L	7111	Rural	2.51	10/8/2011
KCP&L	7142	Urban	2.74	6/25/2011
KCP&L	7411	Urban	3.49	7/2/2011

Company	Circuit	Classification	Miles	Completion Date
KCP&L	7482	Urban	2.84	4/2/2011
KCP&L	7514	Urban	3.53	11/19/2011
KCP&L	7532	Urban	1.22	7/2/2011
KCP&L	7534	Urban	15.16	7/23/2011
KCP&L	7553	Urban	3.55	12/24/2011
KCP&L	7562	Urban	1.56	5/7/2011
KCP&L	7572	Urban	0.60	1/8/2011
KCP&L	7581	Urban	6.34	12/31/2011
KCP&L	7823	Urban	14.89	5/28/2011
KCP&L	7853	Urban	4.55	4/30/2011
KCP&L	7862	Urban	3.46	7/30/2011
KCP&L	7911	Urban	7.02	7/9/2011
KCP&L	8311	Urban	14.25	10/29/2011
KCP&L	8313	Urban	6.94	10/22/2011
KCP&L	8324	Urban	0.76	10/15/2011
KCP&L	9413	Rural	1.06	6/25/2011
KCP&L	9421	Urban	1.98	3/19/2011
KCP&L	9422	Urban	3.05	4/16/2011
KCP&L	9423	Rural	1.13	3/12/2011
KCP&L	9612	Urban	2.64	8/13/2011
KCP&L	9813	Urban	15.10	11/12/2011
KCP&L	9842	Rural	4.37	12/17/2011
MPS	11822	Urban	4.08	7/16/2011
MPS	11823	Urban	7.27	7/2/2011
MPS	11831	Urban	3.26	6/4/2011
MPS	20407	Urban	18.87	10/8/2011
MPS	20811	Urban	4.02	7/2/2011
MPS	20925	Urban	1.18	12/31/2011
MPS	21211	Urban	1.01	1/8/2011
MPS	21212	Urban	0.31	1/29/2011
MPS	21412	Urban	3.51	5/7/2011
MPS	21421	Urban	7.63	5/28/2011
MPS	21711	Rural	15.75	7/23/2011
MPS	22511	Urban	7.42	6/4/2011
MPS	22512	Urban	11.35	6/11/2011
MPS	23211	Rural	8.78	4/2/2011
MPS	23212	Urban	6.56	4/2/2011
MPS	24011	Urban	1.00	11/19/2011
MPS	24013	Urban	16.38	6/11/2011
MPS	24023	Urban	18.50	6/11/2011
MPS	24513	Urban	8.23	5/21/2011

Company	Circuit	Classification	Miles	Completion Date
MPS	24611	Urban	22.89	11/26/2011
MPS	24613	Urban	9.77	12/3/2011
MPS	24712	Urban	13.03	5/28/2011
MPS	24713	Rural	14.25	10/22/2011
MPS	24721	Rural	2.53	7/2/2011
MPS	24722	Urban	6.33	6/18/2011
MPS	24811	Urban	3.12	8/20/2011
MPS	24812	Urban	4.21	7/16/2011
MPS	24813	Urban	5.27	10/29/2011
MPS	24815	Urban	4.74	8/20/2011
MPS	25211	Rural	5.00	12/31/2011
MPS	25321	Urban	19.26	10/15/2011
MPS	25322	Rural	1.45	3/19/2011
MPS	27011	Rural	0.59	3/12/2011
MPS	27023	Rural	0.26	10/15/2011
MPS	27611	Rural	0.06	7/23/2011
MPS	27612	Rural	0.72	4/2/2011
MPS	28522	Rural	47.00	3/26/2011
MPS	29012	Urban	22.84	2/5/2011
MPS	29123	Urban	2.15	1/8/2011
MPS	29211	Urban	7.92	11/26/2011
MPS	29312	Urban	10.81	6/25/2011
MPS	30611	Urban	0.50	12/31/2011
MPS	30612	Urban	22.50	12/24/2011
MPS	30721	Urban	12.02	9/24/2011
MPS	30722	Urban	1.13	7/30/2011
MPS	31111	Urban	33.58	5/28/2011
MPS	31121	Urban	2.50	2/26/2011
MPS	31611	Urban	27.01	3/12/2011
MPS	32111	Rural	26.93	11/12/2011
MPS	32131	Urban	7.86	11/19/2011
MPS	32132	Urban	41.21	11/19/2011
MPS	32311	Rural	9.43	12/10/2011
MPS	32312	Rural	10.77	12/10/2011
MPS	32511	Urban	15.96	12/24/2011
MPS	32521	Urban	49.33	12/31/2011
MPS	32522	Urban	8.93	6/11/2011
MPS	32612	Rural	127.82	9/10/2011
MPS	32722	Urban	21.75	4/30/2011
MPS	32812	Urban	10.52	12/10/2011
MPS	33113	Rural	5.28	4/30/2011

Company	Circuit	Classification	Miles	Completion Date
MPS	33115	Rural	2.80	4/23/2011
MPS	33411	Urban	3.14	10/15/2011
MPS	34011	Rural	11.48	9/17/2011
MPS	34211	Urban	6.33	3/5/2011
MPS	34212	Urban	32.02	6/25/2011
MPS	34213	Urban	0.47	12/31/2011
MPS	34222	Rural	25.69	10/15/2011
MPS	34311	Urban	0.99	2/26/2011
MPS	34312	Urban	0.92	2/26/2011
MPS	34411	Rural	0.29	12/31/2011
MPS	34511	Urban	2.35	5/7/2011
MPS	34512	Urban	0.01	12/31/2011
MPS	34711	Urban	0.01	12/31/2011
MPS	34712	Urban	0.14	3/5/2011
MPS	34713	Urban	9.74	10/8/2011
MPS	34811	Urban	4.64	4/2/2011
MPS	34812	Urban	2.52	3/19/2011
MPS	35511	Urban	5.00	12/31/2011
MPS	35811	Rural	11.67	9/17/2011
MPS	35912	Urban	22.93	6/25/2011
MPS	37211	Urban	1.03	8/27/2011
MPS	37213	Urban	1.50	8/27/2011
MPS	37222	Urban	6.92	8/20/2011
MPS	37311	Urban	15.01	9/3/2011
MPS	37313	Urban	27.80	12/31/2011
MPS	37612	Urban	2.40	1/8/2011
MPS	37613	Urban	11.73	2/12/2011
MPS	37622	Urban	12.46	3/19/2011
MPS	37631	Urban	15.39	6/4/2011
MPS	37632	Urban	7.29	4/16/2011
MPS	37643	Urban	10.49	7/9/2011
MPS	38111	Urban	23.28	7/9/2011
SJLP	38312	Urban	12.52	4/16/2011
SJLP	38314	Urban	16.22	4/30/2011
SJLP	38315	Rural	28.15	5/14/2011
SJLP	38511	Urban	1.96	4/30/2011
SJLP	38611	Rural	42.55	8/6/2011
SJLP	386221	Urban	8.41	10/22/2011
SJLP	386222	Urban	9.73	10/22/2011
SJLP	38911	Rural	2.78	1/22/2011
SJLP	390107	Urban	8.51	8/13/2011

Company	Circuit	Classification	Miles	Completion Date
SJLP	390131	Urban	35.74	7/30/2011
SJLP	390208	Urban	3.26	7/30/2011
SJLP	390234	Urban	8.87	10/22/2011
SJLP	39142	Urban	7.29	10/22/2011
SJLP	39172	Urban	4.77	7/2/2011
SJLP	39173	Urban	15.65	6/25/2011
SJLP	39411	Urban	8.13	6/11/2011
SJLP	39815	Rural	1.20	3/26/2011
SJLP	39816	Rural	2.55	3/26/2011
SJLP	399109	Urban	7.56	8/6/2011
SJLP	399207	Urban	2.42	1/8/2011
SJLP	401112	Urban	0.02	9/3/2011
SJLP	40121	Rural	60.15	10/22/2011
SJLP	40122	Rural	23.39	9/10/2011
SJLP	401222	Urban	19.57	10/22/2011
SJLP	404111	Urban	0.01	3/19/2011
SJLP	404112	Urban	5.26	7/16/2011
SJLP	404117	Urban	24.99	7/30/2011
SJLP	404131	Urban	0.01	3/19/2011
SJLP	404201	Urban	3.70	7/30/2011
SJLP	41521	Rural	29.01	7/16/2011
SJLP	41711	Rural	23.10	12/24/2011
SJLP	41721	Rural	7.70	12/31/2011
SJLP	42511	Rural	2.89	5/14/2011
SJLP	42521	Rural	1.86	5/14/2011
SJLP	42612	Rural	45.56	4/2/2011
SJLP	42721	Urban	19.04	12/31/2011
SJLP	43022	Rural	4.41	7/30/2011
SJLP	43311	Urban	3.42	2/19/2011
SJLP	43312	Urban	25.97	2/26/2011
Total 2011 Miles			2,761.67	

Table 3: 2011 Missouri Completion Summary

Territory	Urban Miles	Rural Miles	Total 12 kV (Urban + Rural)	34 kV	Total 12 kV + 34 kV
KCP&L-Missouri	507.45	627.16	1,134.61	35.95	1,170.56
GMO	823.04	603.85	1,426.89	164.22	1,591.11
Total	1,330.49	1,231.01	2,561.50	200.17	2,761.67

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.

Table 4: 2008-2011 Missouri Distribution System Miles

Territory	Urban Miles	Rural Miles	Total 12 kV (Urban + Rural)	34 kV	12 kV + 34 kV
KCP&L-Missouri	1,989.75	1,860.63	3,850.38	158.75	4,009.13
GMO	2,593.82	5,102.95	7,696.77	453.20	8,149.97
Total	4,583.57	6,963.58	11,547.15	611.95	12,159.10

Note: Urban and rural classifications have changed for a few of the circuits on the system. Beginning in 2012, new urban and rural mileage totals will reflect those changes, and new mileage targets will be set.

APPENDIX C – 2012 DISTRIBUTION VEGETATION MANAGEMENT BUDGET AND SCHEDULED PERFORMANCE

The listed vegetation management work is planned for completion in 2012. 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 completion dates were excluded from this appendix.

Budget – 2012

2012 distribution vegetation management budget for Missouri service areas:

KCP&L	\$7,568,995
GMO	<u>\$10,290,377</u>
	\$17,859,372

Table 5: 2012 MO Distribution System Vegetation Management Circuits Scheduled for Maintenance

Company	Circuit	Classification	Miles
KCP&L	10912	Rural	2.29
KCP&L	10913	Rural	19.36
KCP&L	11012	Rural	8.17
KCP&L	12011	Rural	0.46
KCP&L	12012	Rural	21.74
KCP&L	1568	Rural	3.32
KCP&L	1578	Urban	0.04
KCP&L	21	Rural	0.38
KCP&L	2111	Rural	11.45
KCP&L	2112	Rural	28.41
KCP&L	2333	Urban	9.96
KCP&L	2335	Urban	2.65
KCP&L	2342	Urban	6.85
KCP&L	2344	Urban	1.30
KCP&L	2355	Urban	9.78
KCP&L	2392	Urban	1.87
KCP&L	2394	Urban	10.83
KCP&L	2422	Urban	7.03
KCP&L	2522	Urban	9.95
KCP&L	2612	Rural	11.88
KCP&L	2724	Urban	3.75

Company	Circuit	Classification	Miles
KCP&L	2732	Urban	17.00
KCP&L	2741	Urban	15.76
KCP&L	2752	Urban	11.38
KCP&L	2771	Urban	7.73
KCP&L	3121	Urban	4.62
KCP&L	3122	Urban	9.66
KCP&L	3123	Urban	1.23
KCP&L	3132	Urban	20.98
KCP&L	3151	Urban	10.26
KCP&L	3152	Urban	11.48
KCP&L	3153	Urban	6.50
KCP&L	3211	Rural	24.93
KCP&L	3401	Rural	0.17
KCP&L	3413	Rural	12.44
KCP&L	3511	Urban	4.56
KCP&L	3532	Urban	15.41
KCP&L	3533	Urban	1.02
KCP&L	3544	Urban	14.50
KCP&L	3552	Urban	16.37
KCP&L	3611	Urban	15.08
KCP&L	3613	Rural	5.25
KCP&L	3731	Rural	0.41
KCP&L	3942	Rural	23.67
KCP&L	4215	Urban	18.50
KCP&L	4216	Urban	15.80
KCP&L	4312	Rural	57.97
KCP&L	4824	Urban	7.91
KCP&L	4841	Urban	13.12
KCP&L	4912	Urban	19.74
KCP&L	4943	Urban	26.15
KCP&L	4952	Urban	6.49
KCP&L	4961	Urban	3.77
KCP&L	4962	Urban	18.95
KCP&L	5263	Urban	19.88
KCP&L	5383	Urban	11.68
KCP&L	5614	Urban	7.58
KCP&L	5623	Rural	0.20
KCP&L	60	Rural	0.23
KCP&L	6012	Rural	54.46
KCP&L	6111	Urban	17.63
KCP&L	6112	Urban	17.80

Company	Circuit	Classification	Miles
KCP&L	6122	Urban	11.07
KCP&L	6123	Urban	15.68
KCP&L	6144	Rural	0.64
KCP&L	6153	Urban	8.98
KCP&L	6164	Urban	14.61
KCP&L	7042	Urban	13.78
KCP&L	7043	Rural	2.25
KCP&L	7051	Urban	4.82
KCP&L	7052	Urban	11.40
KCP&L	7112	Rural	3.85
KCP&L	7402	Urban	6.73
KCP&L	7414	Urban	12.56
KCP&L	7421	Urban	0.66
KCP&L	7454	Rural	5.45
KCP&L	7492	Urban	6.98
KCP&L	7493	Urban	9.98
KCP&L	7494	Urban	5.28
KCP&L	7511	Urban	2.30
KCP&L	7544	Urban	2.31
KCP&L	7811	Urban	10.56
KCP&L	7813	Urban	6.44
KCP&L	7821	Urban	0.95
KCP&L	7831	Urban	13.73
KCP&L	7832	Urban	10.01
KCP&L	7861	Urban	4.62
KCP&L	9812	Urban	3.56
MPS	11801	Urban	13.84
MPS	20321	Urban	39.30
MPS	20813	Urban	1.37
MPS	20913	Urban	3.38
MPS	20914	Urban	7.02
MPS	20921	Urban	18.47
MPS	20922	Urban	8.43
MPS	20925	Urban	8.96
MPS	20941	Urban	6.79
MPS	21611	Rural	6.77
MPS	21612	Rural	17.23
MPS	21811	Rural	3.19
MPS	21812	Rural	6.75
MPS	22011	Rural	9.31
MPS	22012	Rural	11.98

Company	Circuit	Classification	Miles
MPS	22611	Rural	5.67
MPS	23811	Urban	9.20
MPS	23813	Urban	10.33
MPS	23822	Urban	14.11
MPS	23823	Urban	0.73
MPS	24211	Urban	8.12
MPS	24612	Urban	9.61
MPS	24621	Urban	12.64
MPS	24622	Urban	15.99
MPS	24711	Urban	5.94
MPS	25211	Rural	61.99
MPS	25312	Urban	12.67
MPS	26111	Rural	32.09
MPS	26112	Rural	20.52
MPS	26311	Urban	12.96
MPS	26312	Urban	10.74
MPS	26313	Urban	8.44
MPS	27111	Urban	3.25
MPS	27113	Urban	8.12
MPS	27121	Urban	5.78
MPS	27211	Rural	35.41
MPS	27213	Urban	0.26
MPS	27911	Urban	11.84
MPS	28111	Urban	7.24
MPS	28112	Urban	13.95
MPS	28121	Urban	7.41
MPS	28122	Urban	5.16
MPS	28224	Urban	6.80
MPS	28321	Urban	8.72
MPS	28322	Urban	8.08
MPS	28323	Urban	8.37
MPS	28411	Rural	14.48
MPS	28412	Rural	27.46
MPS	29021	Urban	5.48
MPS	29121	Urban	1.65
MPS	29221	Urban	16.80
MPS	29312	Rural	30.38
MPS	30211	Rural	4.85
MPS	30411	Rural	3.91
MPS	30611	Urban	10.48
MPS	30613	Rural	59.05

Company	Circuit	Classification	Miles
MPS	32311	Rural	16.42
MPS	32312	Rural	15.66
MPS	33011	Urban	14.81
MPS	33012	Urban	12.73
MPS	33013	Urban	27.81
MPS	33021	Urban	15.51
MPS	33022	Urban	15.94
MPS	33023	Urban	16.03
MPS	33412	Rural	5.06
MPS	34131	Urban	11.71
MPS	34132	Urban	26.82
MPS	34142	Urban	15.91
MPS	34151	Urban	11.04
MPS	34221	Urban	9.97
MPS	35111	Urban	16.24
MPS	35511	Urban	8.38
MPS	35522	Urban	9.30
MPS	36111	Urban	16.60
MPS	36112	Urban	2.49
MPS	36113	Urban	1.05
MPS	36311	Rural	8.65
MPS	36612	Urban	4.91
MPS	36622	Urban	2.79
MPS	36623	Urban	15.00
MPS	37622	Rural	14.43
MPS	37641	Rural	1.81
MPS	37644	Urban	0.79
SJLP	38514	Urban	1.75
SJLP	38711	Rural	16.38
SJLP	38821	Urban	21.66
SJLP	39042	Urban	7.02
SJLP	39122	Urban	3.73
SJLP	39124	Urban	0.01
SJLP	39142	Urban	7.41
SJLP	40011	Rural	3.95
SJLP	40021	Rural	62.70
SJLP	407441	Urban	33.85
SJLP	40911	Urban	10.47
SJLP	40921	Urban	8.34
SJLP	40931	Urban	7.51
SJLP	40941	Urban	10.26

Company	Circuit	Classification	Miles
SJLP	41412	Rural	33.97
SJLP	41721	Rural	34.21
SJLP	42412	Rural	28.53
SJLP	42711	Rural	55.32
SJLP	43022	Rural	48.05
SJLP	43032	Rural	67.03
Total 2012 Miles			2,428.42

Table 6: 2012 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
KCP&L-Missouri	595.26	299.38	894.64	34.30	928.94
GMO	695.01	763.21	1,458.22	41.26	1,499.48
Total	1,290.27	1,062.59	2,352.86	75.56	2,428.42

Table 7: 2012 Missouri Distribution System Miles

Territory	Urban Miles	Rural Miles	Total 12 kV (Urban + Rural)	34 kV	12 kV + 34 kV
KCP&L-Missouri	1,967.6	1,826.1	3,793.7	161.76	3,955.46
GMO	2,835.69	4,505.08	7,340.77	472.8	7,813.57
Total	4,803.29	6,331.18	11,134.47	634.56	11,769.03

Note: Urban and rural classifications have changed for many circuits on the system. Beginning in 2012, new urban and rural mileage totals will reflect those changes, and new mileage targets will be set. This Table 7 reflects those changes.

**APPENDICES D THROUGH H
HIGHLY 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 Highly Confidential.