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PUBLIC SERVICE COMMISSION

115 Jackson Energy Lane McKee, Kentucky 40447 Telephone (606) 364-1000 • Fax (606) 364-1007

December 19, 2007

Director of Engineering Kentucky Public Service Commission 211 Sower Blvd. PO Box 615 Frankfort, KY 40602-0615

Re: Jackson Energy Cooperative: Vegetation Management Plan Administrative Case No. 2006-00494

Jackson Energy Cooperative respectfully submits the Vegetation Management Plan per the order dated October 26, 2007 in Administrative Case No. 2006-00494.

Please inform me if any further information is required.

Sincerely,

J. Warren Keller Attorney for Jackson Energy Cooperative

JWK/cr





DEC 212007 PUBLIC SERVICE COMMISSION

Jackson Energy Cooperative Engineering & Operations Department 115 Jackson Energy Lane McKee, KY 40447 606-364-1000

## VEGETATION MANAGEMENT PLAN GUIDELINES, METHODS AND PROCEDURES

Revised: December 2007

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#### **1.0 Introduction: Guidelines and Evaluation Methods**

In order to maintain line clearance for public safety and electrical reliability, Jackson Energy Cooperative regularly undertakes tree pruning and herbicide activities. These activities are required in order to be compliant with NESC, as well as Kentucky Revised Statute, and guidelines promulgated by OSHA. This guide details the methods and guidelines which JEC uses to accomplish that goal.

#### Goal:

The goal of our right-of-way clearance program is to maintain line clearance for public safety and electric reliability.

#### **Strategy:**

Our strategy for clearing and maintaining line clearance is to arrange the entire system in operable units, defined by individual circuits or substations, and to operate line clearance activities on those units in a regular and scheduled manner.

#### **Tactics:**

The tactics involved are detailed in the following Guidelines. At the development stage of Jackson Energy's vegetation management plan, circuits were prioritized on the basis of last available date of trimming, and vegetation conditions found by onsite circuit inspections which occur incidentally throughout the year as a part of normal activities to determine circuit condition. Reliability, measured by the number of tree related outages expressed on a per circuit mile basis was further used to identify circuits which should be cleared the soonest, with the highest going first and so on. Circuit outages due to trees are regularly reviewed to determine if any adjustment of the trimming cycle to address changing conditions on the circuit is warranted. Onsite inspection further allows adjustment of these time frames should extraordinary circumstances warrant such an adjustment. Examples of such circumstances are: insect infestation damage (Southern Pine Beetle, etc), heavy forest fire damage which will result in tree losses throughout the circuit, or weather related instances. The effectiveness of the plan is evaluated by the reduction of the frequency of tree related outages, and the duration of tree related outages on the treated circuit. This is monitored by the contribution of tree related outages to both customer and system average interruption indices (SAIDI, SAIFI, CAIFI, and CAIDI). Reports generated by the dispatch outage tracking system identify these circuits and the nature and frequency of outages. These reports are given daily, as well as accumulated monthly and annually to better define units needing attention. An example of this report is provided in Appendix A.

Jackson Energy Cooperative conducts clearing activity in each circuit feeder to one full circuit clearing, encompassing floor, side and shade tree trimming each six years. Halfway through this cycle, on a 3 year rotation to occur at the halfway point in each full circuit rotation, we undertake a shade tree clearing in which contractors will be expected

to address yard trees which are trimmed regularly in each full circuit cycle. Circuits and new construction units are then scheduled for chemical treatment to reduce floor vegetation within two years of full circuit clearing.

#### 2.0 Right of Way Clearing/Re-clearing Requirements

#### 2.1 General

Work within the boundaries of this project shall include clearing/re-clearing. The work may be performed on both urban/residential and rural sites where a specified or desired right-of-way shall be established, reestablished and maintained.

All work is to be performed under the supervision of the contractor. <u>Work shall be</u> <u>conducted in a manner such that all phases of the clearing and/or reclearing work shall</u> <u>progress concurrently, (i.e., cutting, disposal and final cleanup)</u>. Jackson Energy has the sole authority to designate the class of right-of-way (refer to 2.7 through 2.10). If any recent right-of-way clearing/reclearing is encountered, and it does not conform to these specifications, it must be included in the bid.

For those landowners where Jackson Energy has documented easement rights, follow the guidelines, methods and procedures outlined in this document. For those situations where Jackson Energy has no documented easement rights, and must rely on prescriptive rights and the authorized Jackson Energy representative has concluded clearing/trimming must occur, the contractor shall contact the landowner and explain Jackson Energy's guidelines, methods and procedures for line clearing.

All tree trimming on right-of-way boundaries shall be ground to sky. If the crown or a tree or any branches are within the right-of-way boundaries, even though the base of the tree is outside of the right-of-way boundary, this tree will be considered as part of the Bid Project and shall be removed or trimmed to meet the guidelines.

All tree and brush species within the required right-of-way width shall be cut, leaving a stump three inches or less in height, or flush with the grade whenever possible. Exceptions to be directed by the authorized Jackson Energy representative.

All manually cut stumps will be treated with an approved cut stump herbicide. Actual product to be used must be approved by Jackson Energy. Applicators must be licensed by the Kentucky Department of Agriculture. The contractor assumes any and all liability that may arise as a result of the misapplication of the cut stump treatment.

Stumps will be defined as all manually cut stumps from trees that are 2 inches or greater. Before any herbicide application can be made, the contractor's representative must explain the procedure and option to the landowner. Jackson Energy will allow their members and other landowners the right to refuse the use of herbicides on their properties. All communications concerning notifications and refusals of cut stump herbicide applications must be recorded in the written daily log kept by the contractor and referenced to the specific property in question (refer to Item 3.1, paragraph 4 for definition of written daily log).

A set of maps shall be marked with the location number and color-coded to show where cut stump treatment has been applied. These maps shall be kept current on a daily basis and made available to the co-op on demand.

The unit of measurement for work accomplishments shall be recorded as acres.

# 2.2 Options for Refusals/Reluctance to Yield Right-of-Way in approved Urban Locations

Options to modify right-of-way clearing may be offered to individual landowners or groups of adjacent landowners that object to clearing according to the standards indicated by the Jackson Energy right-of-way program. In providing these options, Jackson Energy seeks to enable individual members to choose methods for right-of-way clearance that best address their concerns while preventing the burden of costs for use of non-standard procedures from being placed upon Jackson Energy members as a whole.

Because of varying site conditions, not all options will be offered in all locations. Options that may be available for a particular site include:

#### **Relocation of lines:**

Where consistent with Jackson Energy standards for line maintenance/improvement, rerouting of lines or moving lines underground at the member's expense will be considered. Rerouting must follow Jackson Energy guidelines, and accessibility to the lines must be as good as or better than at the original location. In locations where groups of landowners must agree to rerouting, it is the responsibility of the interested landowners to negotiate agreement with adjacent landowners and obtain necessary easements before rerouting can proceed. If such agreement cannot be obtained within a time frame specified by Jackson Energy, right-of-way clearing will proceed unless other options are negotiated individually with Jackson Energy.

#### Transplanting/replacement of trees/shrubs:

Subject to agreement with the landowner, Jackson Energy may assume or share reasonable costs for replacement or transplantation of trees/shrubs. Replacement of trees/shrubs will be limited to landscape trees. Trees/shrubs must be replaced with an approved species planted at an appropriate distance from the lines (diagram #1) and members are responsible for their care. Jackson Energy reserves the right to limit quantities of replacement trees/shrubs, and no more than one replacement tree/shrub will be allowed for each tree removed.

#### Grinding of stumps in approved urban Locations:

Stump grinding is an option. In **maintained yard** areas, it will be the option of the member to request Jackson Energy's contractors to grind all stumps (unless otherwise requested by the member) at no cost to the member for trees removed by us under this clearing program that are 4 inches or larger in diameter.

#### 2.3 Screening:

Options to leave exiting screening will be discussed on an individual basis where appropriate.

#### 2.4 Right-of-Way Width

Jackson Energy's right of way widths are 40 feet for multiphase lines and 30 feet for single phase lines, measured perpendicularly from the centerline of the conductor outward half the distance in either direction. The contractor shall designate the edges of the desired right-of-way with flagging or other acceptable marking, as required, to maintain a uniform width as specified by the contract documents, attachments, or authorized Jackson Energy representative.

#### 2.5 Mechanical Clearing and Re-clearing

Clearing and reclearing work will be permitted by mechanical operations. After any mechanical operation, the Contractor shall restore the land to the natural contour existing prior to the start of the work. This must be accomplished to the satisfaction of Jackson Energy and the landowner.

#### 2.6 Selective Cutting

Selective cutting may be performed in specified areas designated by an authorized Jackson Energy representative during the course of the contract period. These are generally areas of high public exposure (i.e. streams and lakes)

#### 2.7 Primary Lines Rights-of-Way for Rural Sites

The Contractor shall meet the required right-of-way width in designated areas by removing and/or trimming trees and other woody vegetation (all diameter classes). The work shall meet with the authorized Jackson Energy representative's approval.

#### **Exceptions:**

As designated by the authorized Jackson Energy representative. Large mature trees within the right-of-way may not require removal. Fruit bearing trees or yard trees that

remain within the right-of-way shall be trimmed in accordance to the Jackson Energy right-of-way clearing guidelines.

#### 2.8 Secondary Lines Rights-of-Way for Rural Sites

Secondary circuits are to be cleared only if authorized by Jackson Energy's representative.

Secondary circuits include all right-of-way between the Jackson Energy owned pole with transformer and the final Jackson Energy owned pole.

All limbs and branches within three feet of a secondary conductor shall be removed by natural pruning methods. Trees in which the main stem contacts secondary conductors shall be removed.

Secondary circuits will be assigned as necessary. Payment will either be by contractor's submitted time and materials (T&M) rate or we may accept bids for each project as they develop.

#### 2.9 Individual Services

Services are to be cleared only if authorized by Jackson Energy's representative. Tree limbs/branches contacting and deflecting individual service shall be trimmed to provide three (3) feet of tree-to-conductor clearance. Services are to be defined as the span or spans from the last Jackson Energy pole to customer's meter. Method of payment will be contractor's submitted time and material rate.

#### 2.10 Overhead Guy Stubs

All overhead guy stubs and anchors shall be cleared within a 5-foot radius of a pole and anchor(s).

#### 2.11 Anchors

All anchors shall be cleared within a 5-foot radius of an anchor(s)

#### 2.13 Primary Riser Poles

Clear 10 foot radius around all under ground primary riser poles

#### 2.14 Primary Poles

All primary poles shall be cleared within a 10-foot radius of trees. Other vegetation (shrubs, etc.) shall be cleared within a <u>5-foot radius including maintained yard areas.</u>

#### 3.0 Notification/Authorization to Trim or Remove Trees

#### 3.1 Notification

The Contractor shall provide the property owner(s) with notification of intent to conduct the required right-of-way clearance and cut stump herbicide application work. Any trees marked by contractor shall be marked with paint, not ribbons. This contact shall precede any work done on any property by a minimum of five (5) working days. The work will then be scheduled for each crew. Any line clearance work done without proper notification must have specific approval by the authorized Jackson Energy representative. Jackson Energy must have **10 business days** notice requesting notification calls be sent before any contact takes place.

Verbal notification of the property owner for routine line clearance work is sufficient. If the property owner is not home, a notification card may be left on the door. Notification cards shall not be placed in any U.S. mailboxes. Notification cards shall only be used where the owner is likely to be present on site on a regular basis. Absentee owners may be notified by mail or by phone.

In the case of the industrial, municipal, county, state, or large private estate type of properties, the caretakers or other designated individual in the employ of the owners who is responsible for the trees or brush to be cut or trimmed is considered to represent the interest of the owner. Notification of such caretakers or grounds maintenance supervisors is sufficient.

For both bid and T&M crews, the contractor shall maintain a written daily log of all property owner notification and/or refusals by personal contact, letter, phone call, and notification card. The log shall include a record of the date of initial contact, party contacted, address, any agreements entered or understanding reached, and any follow-up conducted. Contractor shall make an attempt to have landowner/member sign log sheet. Contractor shall also keep appropriate maps marked to reflect current <u>daily</u> progress for all projects/substation circuits.

#### 3.2 Access

If landowner refuses access, Contractor shall notify authorized Jackson Energy representative immediately.

#### 4.0 Trimming Methods and Procedures

Tree trimming may be required where limbs of trees outside the clearing limits encroach the right-of-way. Trimming shall adhere to ANSI A300 guidelines and be performed as follows:

Trim trees so as to provide maximum clearance per this document from Jackson Energy's facilities, consistent with current easement requirement.

Re-establish or improve the clearance provided from all previous tree maintenance performed.

Techniques consistent with the practices of natural, lateral, and drop crotch trimming should be utilized. Drop crotch pruning consists of reducing tops, sides, or individual limbs and avoids cutting back to small suckers. Directional pruning or trimming shall be used to direct or train future tree growth or sprouting away from the wires.

Cuts should be made immediately above lateral branches, which are no smaller in diameter than one-third the diameter of the branches being cut. The Shigo method (<u>Pruning Trees near Electric/Utility Lines</u>, by Dr. Alex L. Shigo) of making flush cuts to the parent stem, limb, or trunk, without cutting into the branch collar or leaving any protruding stubs shall be used. All trees requiring trimming shall be trimmed at the edge of the clearing limits, unless otherwise agreed to with written consent from the landowner.

The practices of "shearing", "flat-topping", "pollarding', "stubbing", and "rounding over" shall not be permitted anywhere along Jackson Energy's lines.

Where practical, cuts should be primarily restricted to large diameter branches made well within the crown. Shaping through the use of many cuts of small diameter branches in the outer crown shall be avoided.

Branch and topping cuts are to be made outside the branch bark collar leaving as small a stub as possible, in a manner consistent with natural target trimming techniques.

Tree trimming required on coniferous trees (pine, spruce, hemlock, etc.), along the established tree edge shall involve the removal and/or trimming of limbs that are encroaching the right-of-way. Removal of the limbs will be back to the main stem, trunk, and/or to suitable live lateral branch.

The pruning work shall preserve, where possible, the natural form of the tree, typical to the species. Should one third or more of the tree's live crown area need to be reduced or removed to achieve the required clearances, the Contractor shall attempt to remove rather than trim. When the tree's shape and appearance deviate from what is generally normal, the tree shall be considered for removal.

Large diameter limbs shall be removed with proper sequence and placement of saw cuts to prevent stripping or tearing down of bark from the remaining limb or trunk.

All slash (branches, limbs, and tops) which hang up in the tree(s) being pruned or in adjacent trees shall be removed before moving from the work site.

Contractor shall perform trimming or removal as necessary to Jackson Energy's guidelines when diseased trees are encountered.

#### 5.0 Danger Tree Removal Methods and Procedures

#### 5.1 General

For those landowners where Jackson Energy has documented easements rights, follow the guidelines, methods and procedures outlined in this document. For those situations where landowners are affected, when Jackson Energy has no documented easement rights, and must rely on prescriptive rights, and the authorized Jackson Energy representative has concluded clearing/trimming must occur, the contractor shall contact the landowner and explain Jackson Energy's guidelines, methods and procedures for line clearing.

Contractor must investigate all trees along edge of right-of-way (including the opposite side of the road for lines adjacent to a road) for danger trees. Any danger trees noted shall be removed or pruned to the extent that they will not interact with Jackson Energy's facilities.

A danger or hazardous tree is defined as a tree having one or more of the following characteristics, which may conflict with the conductors or structures (poles and hardware) if such tree(s) fell in the direction of or otherwise endangers the Jackson Energy line. No danger or hazardous tree should be cut or removed if it cannot make contact with the conductors or structures.

#### 5.2 Dead or dying

All dead or dying trees along or outside the Jackson Energy right-of-way which may fall and damage Jackson Energy's facilities will be felled or removed. Decision criteria here include height of tree and direction of the lean.

#### 5.3 Leaning trees

Trees that have such a lean toward the right-of-way that they cannot be trimmed without removing the tops and slanting the tree back (refer to 2.1 paragraph 4) should be removed. Removal depends on height and species of the tree and direction of the lean.

#### 5.4 Cankers and canker-rots

If present in localized dead trees on the bark of trunk around the circumference of the tree and often are visible on the canker face, the tree should be removed. In some cases, canker-rots are internal and not visible.

#### 5.5 Animal and mechanical damage

If present in the main trunk and broken branches and shows visible signs of decay with evidence of wounds, the tree should be removed.

#### 5.6 Danger Tree Removals – Rural, Urban, Residential Sites

Contractor shall identify dangerous or hazardous trees and bring to Jackson Energy's attention. In addition, removal of dangerous or hazardous yard trees is permitted to establish a right-of-way and required clearances after discussion with the property owner.

The timely scheduling of danger tree removal is the responsibility of the Contractor, except in cases of critical need as determined by the Cooperative.

Contractor shall contact the authorized Jackson Energy representative concerning questions on responsibility for diseased tree removals. Generally, Jackson Energy's responsibility is to trim per guidelines and make the tree safe. All trees shall be felled away from the conductors and limbs, so that slash is close to ground. Slash from trees felled onto the right-of-way shall be disposed of according to the requirements in Item 6.0 of these guidelines.

#### 5.7 Stump/Stubble Height

Whenever trees and brush are cut within or outside of the right-of-way, the cut stumps/stubble shall not be more than three (3) inches above ground and flush with the grade whenever possible.

#### 6.0 Clean Up and Disposal Procedures and Methods

The Contractor, as the work progresses, shall remove all equipment, wood, branches, brush and debris from the work site, and the work area shall be left in a neat, presentable condition. The Contractor shall dispose of all such material in accordance with applicable laws, rules, ordinances and regulations and in accordance with the desire of property owners, occupants, or Jackson Energy, and at such times and in such a manner as to prevent injury to persons or property.

All trees, brush, slash, and other debris shall be disposed of in accordance with the procedures and methods outlined below.

#### 6.1 Rural Sites

#### Chipping/Grinding/Mechanical Mowing:

All cut material (slash) including tops and stem wood less than four inches in diameter shall be chipped and/or mowed. Resulting debris may be blown onto the site with

permission from property owners. In situations where the right-of-way is on public land, permission to blow wood chips and/or wood debris on site is required from the adjacent property owner. Resulting debris shall not accumulate to depths greater than 6 inches. Chipping and/or mechanical mowing shall be accomplished in such a manner that no wood material will enter any open water, accumulate in existing tree branches or bury desirable low-growing trees/shrubs.

#### Piling, lopping and scattering of Slash:

In areas approved by Jackson Energy, piling, lopping, and scattering of slash and brush may be accomplished such that all material shall not exceed 3 feet in height. The method of disposal shall be limited to the outer one-third area of the right-of-way. In such areas, all logs shall be neatly piled parallel along the edge of the right-of-way opposite the roadside wherever possible. Wind-rowing of small diameter vegetation shall be permitted in or adjacent to wooded areas, with permission of property owner.

#### Timber:

All merchantable timber from trees to be salvaged shall be trimmed flush to the trunk and neatly piled parallel along the edge of the right-of-way, opposite the roadside wherever possible, in lengths as specified by Jackson Energy or the property owner.

Log piles shall not exceed 5 feet in height and shall be placed parallel along an outer edge of the right-of-way. At no time will log piles obstruct trails, access roads, the general construction area, or be piled up against standing trees on the edge of the right-of-way. Wood will either be left long for subsequent removal by Jackson Energy contractors or left for the member. Jackson Energy contractors **will not** cut firewood.

All slash (branches, limbs, and tops) that hang up in the tree(s) being trimmed or in adjacent trees shall be removed before moving from current work site.

Unless otherwise specified, timber shall be left in 100-inch lengths.

#### 6.2 Urban Sites

All cut material/debris (slash) shall be removed from right-of-way crossing sites occupied by urban trees and yard trees. Large limb wood and trunk wood shall be <u>removed</u> and may only be left with consent of property owner. The work site shall be clear of all slash and debris upon completion of work on a daily basis. Dump all wood chips for property owners requesting wood chips and having granted permission for tree maintenance on their properties and without solicitation for financial reimbursement.

All slash (branches, limbs, tops) that hang up in the tree(s) being trimmed or in adjacent trees shall be removed before moving from current work site.

Brush and/or trees growing immediately adjacent to poles will be cut and removed. Vines do not have to be removed, but must be completely cut at a height of 4 feet from the base of poles and guy wires. In the case of kudzu vines, Jackson Energy must be notified within 2 days of the existence of this condition, and a kudzu guard (supplied by Jackson Energy) will be placed by Contractor.

#### 7.0 Complaints and Adjustment of Claims

Complaints/claims of any nature received from property owners or those in authority over trees or brush removed or trimmed shall receive immediate attention by the Contractor. The Contractor shall immediately inform Jackson Energy by phone, then in writing, of any property damage complaints, which may arise. The contractor shall keep Jackson Energy informed of the status of each complaint and of any settlement made with the damaged party. All claims shall be settled as soon as possible and to the reasonable satisfaction of Jackson Energy and the landowner. An executed copy of the release for every damage claim settled shall be furnished to authorized Jackson Energy representative within two weeks of the settlement.

The contractor will be billed by Jackson Energy for any unplanned interruptions to electrical service resulting from the Contractors actions. (Based on unsafe work practices on an individual basis)

The contractor assumes entire responsibility and liability and shall adjust all complaints, whether said complaints arise from Municipal, county, State, or Federal authorities or from property owners or owners of the abutting property sustained or alleged to have been sustained in connection with or to have arisen out of the performance of the work.

The contractor shall, without cost to Jackson Energy, re-perform any work that does not comply with the terms of this agreement, including, but not limited to:

- 1) Re-trimming if the work is not to the reasonable satisfaction of the authorized Jackson Energy representative.
- 2) Returning to an area to clean up debris left, or to remove a tree that should have been removed.

Repairing any and all damage to any property caused by contractor to the reasonable satisfaction of Jackson Energy and the property owner. Including but not limited to repairing all ruts caused by contractor's equipment and repairing all damage to fences caused by Contractor.

#### 8.0 Safety to Employees and the Public

The contractor shall obtain full information from Jackson Energy as to the voltage of its circuits before starting the various parts of the work.

The Contractor shall at all times conduct the work in a manner as to safeguard the public from injury to persons or property, and shall comply with the regulations set forth in OSHA 1910.269, OSHA 1910.331 and ANSI Z133.1 – 1994. All provisions of Jackson Energy safety policy, as detailed in the Jackson Energy Safety Manual, further apply to all contractors on Jackson Energy.

The contractor shall use all necessary protection for its employees and to guard against interference with the normal operation of the circuits. If, in the judgment of the Contractor's General Foreman/Supervisor, it is hazardous to trim or remove trees with the circuits energized, the authorized Jackson Energy representative(s) shall be contacted. If deemed appropriate, the necessary protection or de-energizing the circuits will be provided by Jackson Energy to ensure the safe removal of the affected tree parts.

Should the Contractor knock down or come in contact with Jackson Energy's conductors, Jackson Energy's main office <u>must be notified immediately</u>. The following telephone number shall be used: 1-606-364-9236, directing the call to "dispatch".

When applying herbicides, the contractor shall at all times take all reasonable precautions for the safety of employees on the work and of the public by utilizing safety equipment and methods in accordance with the manufacturer's specifications on the herbicide label. Contractor shall comply with all applicable provisions of Federal, State, and local laws specifically including 302 KAR Chapters 27, 28 and 29 relating to the use and application of herbicides. Contractor will furnish copies of any required licenses, certifications or permits to Jackson Energy upon request.

#### 9.0 Reporting

The Contractor shall report to the authorized Jackson Energy representative. The following activities are included:

The Contractor shall give prior notification of work start-up and when adding or changing crew. Crew locations to be given daily to the authorized Jackson Energy representative or to Jackson Energy dispatch if the forester is unavailable.

The Contractor shall contact the authorized Jackson Energy representative on a daily basis or as often as needed.

Complete the necessary reporting forms as needed. All reports, logs, timesheets, and paperwork shall be accurate, neat, and complete.

Exaggerated, padded, or incorrect work report entries may result in the dismissal of the crew foreman and/or general foreman/supervisor.

The crew foreman and/or supervisor shall maintain an up-to-date log (refer to 3.1 paragraph 5) of all property owner notification and/or refusals.

#### 10.0 Timesheets

The Contractor will be required to utilize daily time sheets provided by or approved by Jackson Energy. Timesheets shall be accurate, neat and complete, and shall detail time charged to individual work and service orders.

#### 11.0 Work Notification, Timing, and Documents

The scheduling of all firm price bid projects is the Contractor's responsibility, except in cases of critical need, as determined by Jackson Energy. Jackson Energy may, at its discretion, require that specific sites be completed in order that reliability of service is maintained.

The Contractor shall provide five (5) days notice to Jackson Energy as to the date that the work will be starting on each circuit, the number and types of crews, and the crew foreman and supervisor's names and telephone numbers. The Contractor shall also notify the authorized Jackson Energy representative when there is a change in crew foreman or the number of crews.

The Contractor must notify Jackson Energy of any work scheduled on Saturday, Sunday, holidays, or hours outside of Jackson Energy's normal hours of operation, subject to approval by the authorized Jackson Energy representative.

Crew's starting and quitting times shall be determined by the contractor, subject to approval by the authorized Jackson Energy Representative.

The Contractor shall make all necessary arrangements for crew starting points and garaging of equipment and shall be responsible for associated costs.

Jackson Energy properties will not be made available for the Contractor for crew starting points or for storing/garaging tools or equipment, unless authorized by the Jackson Energy representative.

In the event the Contractor plans to deviate from the normal work schedule (i.e., leaving the job or starting location due to inclement weather or other cause), the foreman and/or general foreman or supervisor shall call into the appropriate Jackson Energy representative.

The Contractor is responsible to ensure line clearance work is carried out on the proper project. Work performed on the wrong project will result in no payment for all work performed at that location.

The contractor shall keep Jackson Energy informed as to the progress of the work with a logbook.

It is the Contractor's responsibility, prior to submitting bids to contact all shade tree commissions and governing authorities to determine any special requirements on trimming, notices, permits etc. No payment will be made for go-backs due to non compliance with state, county, or municipal shade tree ordinances.

#### 12.0 Emergency Work

In the event of an emergency declared by Jackson Energy, the Contractor shall make the crews, supervision and equipment performing under this contract available to perform work necessitated by the emergency. All emergency work shall be billed on a time and materials basis, for crews and equipment, in accordance with hourly rates.

#### 13.0 Herbicide Use

Jackson Energy will make the initial herbicide notification either in writing or by automatic phone notification through the call center to the affected members, informing them of Jackson Energy's intent to apply herbicides on the newly cleared right-of-way. Landowners who are not Jackson Energy members will not be contacted.

All herbicides shall be applied in strict compliance with all federal, state and local laws and regulations. This includes, but is not limited to, transportation, handling, application and chemical and container disposal requirements.

All herbicides used by the contractor shall be approved by Jackson Energy and used in accordance with the manufacturer's specifications on the label.

Herbicides with a <u>National Fire Protection Association (NFPA) health rating</u> of 3 or greater shall not be used on Jackson Energy's system unless specifically approved by Jackson Energy.

The Contractor shall ensure that the on-site applicator be certified by the Kentucky Department of Agriculture, Division of Pesticides. Each hand or bucket crew will be expected to have one crewmember capable of fulfilling this requirement. Only this certified applicator(s) may apply herbicide on Jackson Energy right-of-way. Copies of applicators licenses shall be given to Jackson Energy prior to starting any projects.

There will be no herbicide application along state highway rights-of-way unless authorized with proper permits.

It is the contractor's responsibility to provide all necessary materials, including chemicals.

Applications shall not occur when precipitation is sufficient to cause wetting of the stumps, or when snow and ice depth covers the stumps, or when winds and air temperatures may promote excessive volatilization of spray materials.

All hourly crews and circuit groups shall have the ability to perform foliar and basal chemical treatment where applicable.

For foliage spraying there will be no stem height restrictions unless specifically authorized by a Jackson Energy representative.

Vegetation up to ten feet in height may be treated during the fall/winter season using basal application upon approval of the Jackson Energy representative.

Selective Herbicide Treatment – All tree and brush species within the required right-ofway width, i.e. all woody stemmed plants and all species of trees under and immediately adjacent to Jackson Energy's facilities, shall be treated using one or more of the following herbicide treatment methods:

- 1. Cut Stump- Herbicide Treatment Procedure: Apply per label directions on the herbicide container.
- 2. Foliar and Ground Herbicide Treat with appropriate herbicide all tree and brush species within the required right-of-way width, in or between agricultural areas, or between agricultural areas and roadway as permissible or desired by property owners, and as approved by the authorized Jackson Energy representative.
- 3. Foliar Apply the herbicides in compliance with labeled recommendations.
- 4. Ground Apply cut stubble, pellets, spot liquid or band herbicides in compliance with labeled requirements. GROUND APPLIED HERBICIDES ARE NOT TO BE USED IN THE VICINITY OF POTENTIAL ROOT GROWTH OF NON-TARGET TREES. Review herbicide labels for any restrictions, and follow the label instructions for all applications. IE: Tordon has some special soil restrictions to be recognized.

All grasses, ferns, herbaceous plants, annual weeds, and annual plants, and those compatible non-woody species shall not be treated unless directed to do so by the authorized representative. We desire minimal negative effect on grasses, etc. form the applied herbicides.

Treatment Around Poles and Guy Wire Attachments - Cut off all vines ascending all poles and guy wires at the height of reach. Treat with herbicides all vines below cutting and other vegetation, which may interfere with Jackson Energy's facilities from all poles and guy wires. Apply herbicide with pellets, low volume basal solution, or foliar applications to areas around poles and anchor guys where vines were cut off or removed, or where any other woody stemmed or vine type vegetation threatens or impedes physical access to or around.

Jackson Energy Cooperative

Right-of-Way Vegetation Management Plan Appendix A

						Legend: Shade Tree done Shade Tree bid/nof done
1007 1920	bia	1	5 ¢ (///¥///	3 9	4 3	F4
Sch. 2007	Pia			k k	8	E3
2000			5 3 4	4 3 4	<b>4 8 4</b>	F2
Sch. 2007	P!8				3 5	Campground F1
2002 .Ao2	pia	5004	///////// L	//////// L	٩ ٦	F3
		5004	4 3	F 3	3 5 4	F2
		2004	2 3 4	4 5 1	7 II 9	ا≟ب Bush
			L	۷	01	7 <u>-</u>
9002			4 10	<b>5 2</b>	<u> </u>	E3
			4 9 5	3 1 5		F2 F1
5006		5004	9 17	5 17 4	9 11 9	Brodhead
	bia	Sch. 2007	5 3 4114	5 3 (1)(4)(1)	<i>μ</i>	F3
	PIB	Sch. 2007	////// ヤ L	/////// L	5 3	F2
			9 6	//////////////////////////////////////	9	Booneville F1
				2 4 5	6 8	7 <b>-</b> 1
		5004	9 6 E 2 9 2	<b>v v 3</b>	e 3 e	E3
	bia	2005 Sch. 2007	15 13 (///\$	9	8 18	F2
	Pia	2004	5 3 4	5 5	5 4 4	F1
				and a superior and a		Beattyville
Sch. 2007	bia		///X//// L	/////// L L	<u>z</u>	9 <b>-</b> 1
					۱ ۲ ۶	E4 E3
5006			<u> </u>		2 <u>9</u> 2 <u>9</u>	ES ES
5006			5 3 1	4 4 5		E1
5006						əllivnnA
ROW Cleared Shade Trees		ROW Cleared	Out of ROW 2005 2006 2007	2002 2006 2007 In ROW	70/21/21 to SA 7005 2005 2002	
Tree Trimming			Tree Outages	Tree Outages	Unknown Cause Outage	

Shade Tree done Shade Tree bid/not done ROW Clearing done ROW Clearing bid/not done

ng Shade Trees		2006 2006	2006	Sch. 2007	Sch. 2007 Sch. 2007 Sch. 2007		
Tree Trimming ed S				Bid	Bid Bid	Bid	
Tre ROW Cleared			2005	2005 2005	2005 2004	Sch. 2007	
	[]	[]	[]				
s 2007		<b>1</b> 14 6 7	0 7 N		o alla	5 2	
Tree Outages Out of ROW 2006		3 3	ω m ∞	12 - 2	2 10 2	9 - 6	
T 2005		- 0-	2 - 2	0 <del>-</del> 0	ω <del>4</del> Γ <del>Γ</del>	ю 9	
s 2007	5	ი <del>-</del> ო ი	9 7 9 9	4	e Bellinge Bellinge	- 3	
Tree Outages In ROW 2006		e → w	0 <b>4</b> 0	4 6	6 2 20	3 5	
T 2005		- 6 4	2 2	<b>வ</b> வ	<u>+</u> + + +	3	
Dutage 2007	-	<b>0</b> م م م	2 2 4	7///X//// 5	e S	33	*****
Unknown Cause Outage 2005 2006 200		2 7	<b>ო ო</b>	6	ω <del>τ.</del> τ.	-	
Unknov 2005		m @ m	3 6	8	- v	~~~	
							¢

East Bernstadt F1 F2 F3 F3 F4 F1 F2 F3 F3 F3 F3 F3

Conway F1 F2 F3 Goose Rock F1 F2 F3 F4 F5 F5 Legend: Shade Tree done Shade Tree bid/not done ROW Clearing done ROW Clearing bid/not done

Green Hall Idle F2 F3 F4 F5

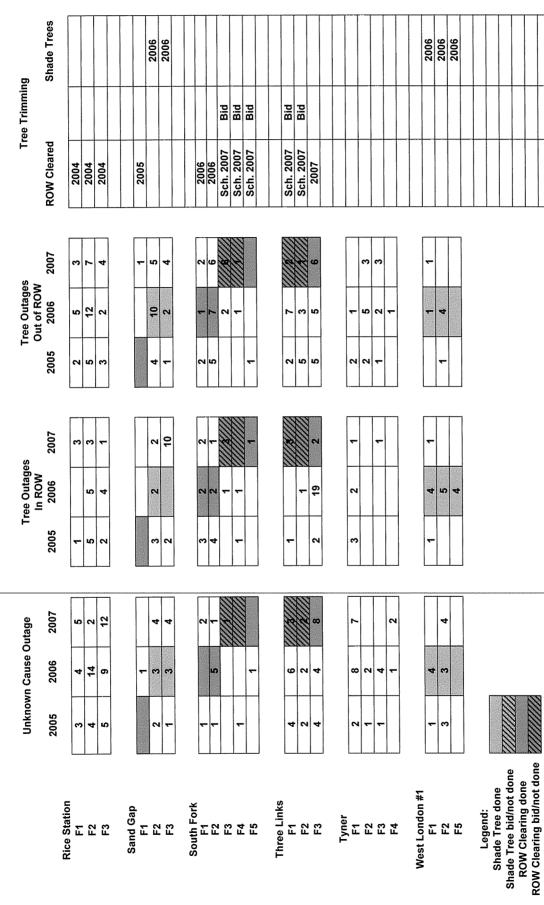
# Appendix A. 3 of 6

Tree Trimming d Shade Trees	Bid Sch. 2007 2006		Bid		2006		Bid	
Tree Tree	2004	2006 2007 2007	Sch. 2007 2006	2006	2007	2005	2005 2007 Sch. 2007	
Tree Outages Out of ROW 2005 2006 2007	1 15	2 2 1 6 4 2 8 7 8 7 2 8	2 3 ///////	4 2 3 3 3 3 3 3	7 7		7 3 1 5 7 4 4 ///////	
Tree Outages In ROW 2005 2006 2007	2 3 3	2 1 1 111111111111111111111111111111111	3 2 <i>111111</i> 4 2	2 4 2 2	4 4		4 4   1 3   2 2	
Unknown Cause Outage 2005 2006 2007	3 1	1 2 3 3 <b>15</b> 4 3 <b>15</b> 4 4 4 4 4 4 4	1 2 3 6	9 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3 7 3 2 1	2 6	5 4 4 4 4 4 3 10 5 4 4 10 5 4 10 5 1 10 10 10 10 10 10 10 10 10 10 10 10 1	
	Greenbriar F1 F3 F4	Hargett F1 F3 F4	Keavy #1 F1 F2	Keavy #2 F3 F4 F5	Laurel Co. Ind. Park #1 F2 F5	Laurel Co. Ind. Park #2 F1 F4	Maplesville F1 F3	Legend: Shade Tree done Shade Tree bid/not done ROW Clearing done ROW Clearing bid/not done

Appendix A. 4 of 6

	s							
Đ	Shade Trees	2006	Sch. 2007			2007 2007	2007 2007	
Tree Trimming			Bid Bid		Bid	Awarded	Awarded Awarded	
F	ROW Cleared	2004	2006 2006 Sch. 2007	2007 2007 2007	2006 Sch. 2007 2006			
Tree Outages Out of ROW	2006 2007	2 4 1	9 6 1 1 X	13 6 7 7 19 2	8 1 2 6 2 2 2 8	2 ()//////	2	
F	07 2005	10	<b>0 4</b>	4 1 3	4 4 -	2 7		
Tree Outages In ROW	2005 2006 2007	5 4 3	2 2 3 4 4 7 2 4 4 7 7 7 7 7 7 7 7 7 7 7 7 7 7	2 1 4 9 1 8 9 1 8	1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1	2 5 1	1 2	
Unknown Cause Outage	2006 2007	2 4	4	8 2 2 2 2		4 5 3 ////	2	
Unknow	2005	- 6	<b>7 7</b>	- <b>6</b> 4	<b>8 8 8</b>	3 3	4 2	а В С С С С С С С С С С С С С С С С С С
	:	Maretburg F1 F3 F3	McKee F1 F3 F3 F3	Millers Creek F1 F3	Oneida F1 F3 F4 F5	Pine Grove #1 F1 F4	Pine Grove #2 F2 F3	Legend: Shade Tree done Shade Tree bid/not done ROW Clearing done ROW Clearing bid/not done

Appendix A. 5 of 6



Shade Trees

**Tree Trimming** 

2006 Sch. 2007

