



**Robin Carnahan**  
Secretary of State

**Administrative Rules Division**  
**Rulemaking Transmittal Receipt**

Rule ID: 6891  
Date Printed: 6/15/2007  
Rule Number: 4 CSR 240-23.030  
Rulemaking Type: Proposed Rule  
Date Submitted to Administrative Rules Division: 6/15/2007  
Date Submitted to Joint Committee on Administrative Rules: 6/15/2007

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Name of Person to Contact with questions concerning this rule:

Content: Colleen Dale	Phone: 751-4255	Email: cully.dale@psc.mo.gov	Fax: 526-6010
RuleDataEntry:	Phone:	Email:	Fax:

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Included with Rulemaking:

Cover Letter	6/15/2007
Affidavit for public cost	6/15/2007

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Secretary of State  
Administrative Rules Division

**RULE TRANSMITTAL**

Administrative Rules Stamp

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JUN 15 2007

SECRETARY OF STATE  
ADMINISTRATIVE RULES

Rule Number 4 CSR 240-23.030

Use a "SEPARATE" rule transmittal sheet for EACH individual rulemaking.

Name of person to call with questions about this rule:

Content Colleen M. Dale Phone 573-751-4255 FAX 751-526-6010

Email address cully.dale@psc.mo.gov

Data Entry same

Phone

FAX

Email address

Interagency mailing address Public Service Commission, 9<sup>th</sup> floor, Governor Office Bldg

TYPE OF RULEMAKING ACTION TO BE TAKEN

☐ Emergency rulemaking, include effective date

☒ Proposed Rulemaking

☐ Withdrawal ☐ Rule Action Notice ☐ In Addition ☐ Rule Under Consideration

☐ Order of Rulemaking

Effective Date for the Order

☐ Statutory 30 days OR Specific date

Does the Order of Rulemaking contain changes to the rule text? ☐ NO

☐ YES—LIST THE SECTIONS WITH CHANGES, including any deleted rule text:

Small Business Regulatory  
Fairness Board (DED) Stamp

JCAR Stamp

**JOINT COMMITTEE ON**

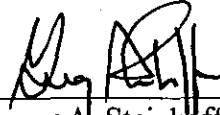
JUN 15 2007

**ADMINISTRATIVE RULES**

**AFFIDAVIT  
(PUBLIC COST)**

STATE OF MISSOURI     )  
                                  )  
COUNTY OF COLE        )

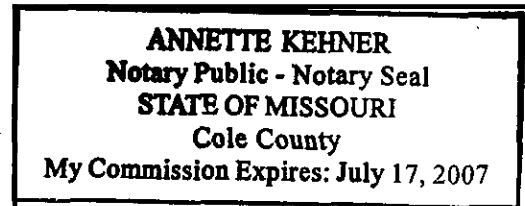
I, Gregory A. Steinhoff, Director of the Department of Economic Development, first being duly sworn on my oath, state that it is my opinion that the attached fiscal note for proposed rule 4 CSR 240-23.030 is a reasonably accurate estimate.



\_\_\_\_\_  
Gregory A. Steinhoff  
Director

Department of Economic Development

Subscribed and sworn to before me this 31 day of May, 2007. I am  
commissioned as a notary public within the County of COLE, State of  
Missouri, and my commission expires on 17 JULY 2007.

  
\_\_\_\_\_  
NOTARY PUBLIC

## FISCAL NOTE

## PUBLIC COST

### I. RULE NUMBER

Rule Number and Name	<b>4 CSR 240-23.030, Electrical corporation vegetation management standards and reporting requirements</b>
Type of Rulemaking:	Proposed Rule

### II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
Missouri Public Service Commission	\$65,767 first year, \$60,747 each year thereafter

### III. WORKSHEET

**0.5 FTE Utility Engineering Specialist III \$25,116 annually**

**0.5 FTE Utility Engineering Specialist II \$22,236 annually**

**First year equipment \$5,020**

**Annual Equipment Expense \$1,090**

**Annual Office Space Rental \$2,700**

**Annual Travel Expense \$9,605**

### IV. ASSUMPTIONS

All costs in 2007 dollars

Costs reflect estimates provided for other fiscal notes for various General Assembly bills from this year's session.

A total of two additional FTEs were assumed for this rule and the Electrical Corporation Infrastructure Standards rule that is also being considered. Their time is assumed to be evenly split between these two rules. In most cases, these FTEs will be able to conduct reviews of the utilities' vegetation management and infrastructure inspection practices in the same visit. This should reduce their travel time and increase their productivity. However, these reviews will require facility reviews (including walking electric lines and observing utility employees performing the various tasks required by these rules) and on-site document reviews at various district/division offices. This will also require reports by these two FTEs on the status of the utilities' efforts at various times of the year.

## FISCAL NOTE

### PRIVATE COST

#### I. RULE NUMBER

Rule Number and Name:	<b>4 CSR 240-23.030 Electrical Corporation Vegetation Management Standards and Reporting Requirements</b>
Type of Rulemaking	<b>Proposed Rule</b>

#### II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the proposed rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
Four (4)	Investor Owned Electric Utility Companies	
	AmerenUE	Implementation: \$0 \$184,000,000 annually
	Empire	Implementation - \$2,300,000 \$45,433,333 annually
	Aquila	Implementation - \$59,550,905 \$14,300,000 annually
	Kansas City Power & Light	Implementation - \$13,770,000 \$44,740,000 annually

#### III. WORKSHEET

#### IV. ASSUMPTIONS

##### Ameren

1. (3)(A): The newly implemented inspection program call for urban lines (defined as 35 or more customer on average per oh/ug line mile to be inspected every two years (once by an inspector and once by the tree crew performing maintenance every 4 years). Rural lines would be inspected every 3 years-once by an inspector and once by a tree crew. Assume Ameren definition of urban/rural. The proposed standard would require the rural lines to be inspected one extra time during the 6 year period or 13,347 miles times \$286=\$381,724. Assume under Ameren present understanding of NESC 218 that incidental vegetation contact is not a safety or reliability threat, this proposed standard would not greatly affect present cost. If interpretation of "close enough to pose a threat" is similar to the proposed standards below-see other costs.

2. (3)(B): AmerenUE presently addresses any reliability or safety concerns between trim cycles. Assume the same Ameren criteria presently being used is continued. If staff interpretation is different, could add substantial cost.

3. 4: Present process includes a pre-work inspection of maintenance circuits. Assume present audit process of having the contractor supervisor audit minimum 2 days per month and vegetation supervisor audit 10% of contractor management is sufficient to meet this standard.
4. 5: Unable to determine cost implications due to vagueness of draft language.
5. 6: Assume present participation on urban councils, municipal meetings, individual customer inquires and all present educational material would meet this requirement.
6. 1. In wooded, rural areas would either have to research and contact all property owners or make arrangements, if possible, to bring in mowers.
7. 2: Range of cost reflects both the severity of the storms and frequency. Assume additional limited tree crews would be available. Assume Ameren would be responsible for disposal of all tree brush and wood. Assume Ameren would be given several months post major storm to complete work. Assume that cranes/lift trucks can access the majority of lines.
8. 1: Assumption is that ALL trees that are able to make contact, if they fell would need to be cut down. Assumption is that MPSC or other body would grant Ameren the additional rights and easements. Assume no legal claims as a result. Assume floor of existing ROW is clear of vegetation. Assume an additional 60' (30' on each side) for clearing mature trees. Assume all material can be left on site wind-row. Assume 50% of all transmission rights-of-way will be affected (1217 miles). Assume per acre clearing cost to be \$2393. Assume annual maintenance will be light density, after initial clearing, to be light density and addressed by low volume foliar application on a 3 year cycle for "expanded" ROW.
9. 2: Assumption is that ALL trees which can grow greater than 15' must be removed. Mature trees located in deep valleys and urban areas with more than sufficient conductor to tree clearance would require removal. Assume 3% of the transmission system has brush over 15' in height(1591 Acres). The associated cost for cut stubble \$700 per acre. Assume 3% of system has tall trees in ravines/valleys(1591 Acres). The associated cost to clear would be \$2393(did not figure any erosion remediation which could be substantial). Assume 2500 yard trees in the system with average cost to remove of \$309. Assume in rural areas wood/brush could be left. With a 5% assumption vrs 3% and 3200 yard trees the cost would be 6.8M. Assume the acreage associated will cost in average of \$400 per acre to maintain on a 3 year cycle.
10. 8: Assume emergency work is exempt. Would need to build data base with transmission lines and customer cross reference.

#### **6 Training, recordkeeping and reporting**

11. (A): Assume the intent is for Ameren to be redundant for all records that contractor is currently responsible for.
12. (B): Assume the intent is for Ameren to be redundant for all records that contractor is currently responsible for.
13. (C)1: In highly urban areas such as St. Louis City/County with over 1000 circuits and 100 plus municipals, can have one circuit go through multiple municipals, at times for very short distance. Could have no notify one municipal multiple times throughout the year. On items 1-5, depending on detail and reporting requirements could add substantial administrative time.
14. 3: AmerenUE presently tracks information on items 2-6 on crew timesheets however does not track by municipal. If present timesheets would not satisfied proposed standard, could add substantial administrative cost.
15. 8: Assume Ameren present process of supplying Staff with all next years circuit and miles is sufficient.
16. (D): Ameren presently supplies "all circuits and operating areas affected. See notes above-unsure of cost to associated all parts, of all circuits with municipals boundaries. Would be substantial administrative and software costs to report by municipals for information in C. This would involve a complete change in the way work is reported by crews and tracked.

#### **Public notice of planned vegetation management**

17. (A): Notification cost would be dependent on cycle length. Assume would need to notify 600,000 every year. If notification by post card figure on average 12 cents. Administrative cost unknown however figure one

person due to all supervisors time needed to coordinated all ongoing projects in order to notify within window given.

18. (D): Assume restoration and other unplanned trimming would be exempt. Similar concerns as above. Unsure of intent of how specific "locations of vegetation management" needs to be, however even a broad description will add substantial administrative cost. Unsure of meaning "easements rights".

#### **(8) Outreach programs**

19. (B): Assume this is an annual requirement and each year all electric customers must be notified, along with public entities. Assume this will be a separate mailing.

20. (C): Assume present web site with information meets this requirement.

#### **(10) Specific Requirements**

21. (A): Assume this requirement would require Ameren to trim the entire Distribution system(not Transmission) in 2 years. Assume the present clearance that Ameren has in place would be sufficient. Presently budget is at/above 45M per year to trim urban circuits (7877 miles or 1969 per year) on 4 year cycle and rural circuits(13347 miles or 2224 per year on average. The "average" miles trimmed per year presently is 4193. This standard would require 1/3 of entire system trimmed in first year or 2626 urban and 4449 rural miles or 7075 miles year one Mile increase from present to proposed would be an increased of 69%, the corresponding budget increase would be 27.2 M or 67.2M in Year 1. Year 2 assume need to trim the remaining 2/3 of system, resulting in 54.4M increase or 121.6M Assume trained manpower locally or nationally would be available(not a valid assumption). Assume productivity of "additional crews" is the same. Did not figure any per diems for off system resources, generally increase cost by 20% per crew. Assume no major restorations efforts on system/off system to delay schedule.

22. (B): **Item 1**-Assume MPSC or other body would grant Ameren the rights to go off easement and assumed no legal claims resulting. Assume this voltage applies to 69kV lines estimated at 700 miles. Assume a cost to clear an additional 30' of ROW at \$2000 per acre/windrowing all material. Annual maintenance cost based on 35% of 69kV existing as brush acres at \$300 per acre for low volume foliar application on a 3 year cycle. **Item 2**-Seems to conflict with Item 3. **Item 3**-Assume present clearances. Assume this does not include neutral conductors. Assume this is on conductors rated greater than 600V only. Assume the present cycle cycle length would need to adjusted to 2 years to in effect have a "no contact rule" on urban and 3 years on rural lines along with hotspotting between cycles. At a minimum would be 2.5 times present budget or 112.5M, could be as high as 4 times or 180M. Similar crew assumptions as above. Costs figured seperate of section A.

23. 4.- Item 4-assume Ameren's present procedure of clearing all overhang on sub-transmission is sufficient with this proposed standard. Assume majority of pulling all overhang on 3 ph backbone will be in highly urban areas. Assume 5000 highly urban miles, 30% is classified backbone or 1500 miles. Assume additional cost of \$15,000 above present clearances or \$22.5M or 5.6M per year on a 4 year cycle. Assume no claims/litigation from causing tree fatalities or the need to completely remove trees after pulling overhang.

24. Range of Implementation costs-YR1-YR3: Unable to estimate all proposals. Figured the above proposed standards "separately", if more than one was done at once, could greatly increase cost on any additional proposals. The effect of Proposal A alone on the budget year to year is significant with going from 1/3 of system work in YR 1 and 2/3 in YR 2(and need to "repeat" thereafter".

25. Range of On going per year Compliance Cost: Unable to estimate all proposals. Figured the above proposed standards "separately", if more than one was done at once, could greatly increase cost on any additional proposals.

26. Range of AUE FTE: Assumed AUE FTE's could be in placed once any proposed standard goes into effect.

27. Range of Additional Crews Yr1, Yr2, Yr3, ongoing: On all costs did not figure in use of off system tree crews which typically add 20% per diem. Assumed productivity of additional crews equal existing crews. Did not figure in wide fluctuations in workloads and crew.

28. **On all the above proposed clearances and standards assumed that Ameren would be granted the legal authority by MPSC or other entities, if proposed is beyond present rights. Assumed no legal**

challenges or claims would result. All proposed standard would need further clarification on the intent and analysis performed before final figures can be given.

#### **Empire:**

1. One-time start-up costs: 2 divisional centers, furniture, hardware/software. Office facilities for additional Vegetation Management personnel
  2. Area Vegetation Managers/Supporting staff to adhere to requirements listed in the General Provisions section. Additional vegetation management personnel needed to manage as proposed in this regulation.
  3. Biennial Distribution System Surveys and 24 Month Compliance Period Utility Line-Clearing. Costs associated with the functional portion of utility line-clearance from vegetation and biennial system vegetation surveying in accordance with the specifications listed in section 10(A).
  4. Ongoing application costs associated with four-year maintenance cycle and mid-cycle trimming as needed. Reflects compliance to "No Contact" rules by mid-cycle trimming of cycle-busting trees. NOTE: 10 feet of separation is not possible due to right-of-way issues.
  5. Development of new standards. Re-development of standards under which EDE operates to meet State regulation while adhering to all Regional/Federal transmission requirements vegetation management requirements.
  6. Training, Recordkeeping and Reporting. The requirements of this proposed regulation would require additional personnel in the Vegetation Management department who would be responsible for the documentation of training, public education and outreach, production levels, immediate and future hazards, and reporting to MPSC.
  7. Hazard tree Identification and elimination. No additional costs were added for hazard tree elimination; however, looking at other danger tree programs, upper level costs could easily exceed \$100,000,000.
  8. Storm related debris comment. Storm related debris could vary greatly from around \$500,000 to well over \$20,000,000 per major event depending on the interpretation of what is "storm related debris" and the size, severity and type of storm impacting the system.
  9. Transmission administration and staff required to adhere to section 5 in addition to all other requirements herein while complying to Federal and Regional Requirements. Many key assumptions listed in the distribution sections of this proposed regulation also apply to the transmission section. EDE does not have right-of-way on portions of the transmission system to provide for the minimum 25 ft. clearance listed in section 10(B). These figures do not include the cost associated with either the purchase of additional right-of-way or the potential ensuing settlements, litigation costs, or trespass and loss of value lawsuits.
- NOTE: Additional costs associated with storm debris removal and danger tree identification and elimination estimated from \$500,000 to more than \$120,000,000.**

#### **Aquila**

1. Workload forecast based on 40% of the entire MO system requires tree maintenance.
2. Productivity based on a tree crew working 350 feet of vegetation per 8 hour work day.
3. The current average crew cost approximately \$780 per 8 hour work day.
4. New clearance standards will require the 34.5 and 69kv to be maintained on a three year trim cycle.
5. Contract foresters would be employed to help plan the tree work and to help audit the completed work to ensure compliance of the new proposals. The cost of the contract foresters would be approximately \$400,000 per year.
6. The line clearance notification letters and an annual tree education mailing sent to the electrical customers will cost approximately \$1.00 per customer.
7. Our program, The Power of Trees and an annual Arbor Day celebration will cost approximately \$60,000 per year. Aquila will use these programs to become a Tree Line USA utility sponsored by the Arbor Day Foundation.



8. The current database used to track productivity and tree inventory will require an upgrade. Software and IT costs will be approximately \$35,000.
9. Most trees on the distribution system are not readily climbable and clearance can be reduced to something less than 10' per Aquila's current standards.
10. Note: If clearance is required to a minimum of 10' (readily climbable/hazard trees) a significant number of trees will have to be removed at an additional cost of approximately \$14,760,000 over the first two years. This cost would not impact the following years.
11. Currently working an average of 164,000 trees per year. An additional 30% of those trees would require removal at approximately \$300 per tree.
12. The legal ability to prune or remove trees outside the private or platted easements is a major concern. Most of the back-lot distribution easements are 5-7.5 feet on either side of the property line. Front-lot distribution lines are located at the edge of the street right of way. Utilities would need some sort of legislation that specifically grants us the right to obtain the clearances stated in the proposed rule.
13. The public and the local authorities will probably vehemently oppose the additional clearances stated in the proposed rule.
14. The removal of trees on the transmission system that grow taller than 15 feet may create additional unnecessary work. There are many "wire friendly" species growing on the right of way that mature in the 20-25 foot range.

#### **Kansas City Power & Light**

1. Costs expressed in 2007 dollars.
2. Additional insurance will be required of contractors and consultants working on the system.
3. Only 100,000 (34%) customers per year would experience storm damaged trees subject to utility pick-up requirements. 5 cubic yards per location.
4. 500,000 cubic yards of brush will need to be picked up annually following storms.
5. Two-year cycle assumed for all distribution lines.
6. Removal of trees tall enough to fall on distribution lines that are diseased, dead or hazardous will be ongoing as tree conditions change over time.
7. Transmission clearing to be accomplished within the first two years with no reclearing anticipated thereafter.
8. No cost was estimated for tree removal outside existing transmission right-of-way.
9. Additional record keeping and reporting will be required for: customer notification completed, training records of contractor personnel and annual report to the MOPSC.

**Title 4 – DEPARTMENT OF ECONOMIC DEVELOPMENT**

**Division 240 – Public Service Commission**

**Chapter 23 – Electric Utility Operational Standards**

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**PROPOSED RULE**

**4 CSR 240-23.030 Electrical Corporation Vegetation Management Standards and Reporting Requirements.** Commissioner Connie Murray dissented from the decision to propose the following rule. The text of her dissent follows the language of the proposed rule below.

***PURPOSE:** This rule sets forth requirements that electrical corporations shall follow in managing vegetation in proximity to an energized conductor in order to ensure public safety and the efficient and reliable supply of electric power. The requirements in this rule provide the minimum standards for conductor clearances from vegetation to provide safety for the public and utility workers, reasonable service continuity, and fire prevention. Each electrical corporation must have a vegetation management plan and keep appropriate records to ensure that timely trimming is accomplished to keep the designated minimum clearances. These records must be made available to the Commission upon request.*

***PUBLISHER'S NOTE:** The secretary of state has determined that the publication of the entire text of the material which is incorporated by reference as a portion of this rule would be unduly cumbersome or expensive. Therefore, the material which is so incorporated is on file with the agency who filed this rule. Any interested person may view this material at the agency's headquarters at a cost not to exceed actual cost of copy reproduction. The entire text of the rule is printed here. This note refers only to the incorporated by reference material.*

(1) Definitions. The following words and terms, when used in this rule, shall have the following meaning unless the context clearly indicates otherwise.

(A) Arboriculture means the cultivation of trees, shrubs and other woody plants.

(B) Agricultural crop means a cash crop which is sold for money.

(C) Border zone means the space from the edge of the wire zone, as defined herein, to the outer boundary of the right-of-way.

(D) Contractor means a person or entity, other than the commission, with which electrical corporation contracts to perform work, furnish information and/or material. This term includes all subcontractors engaged by a contractor to perform any of the obligations required by a contract.

(E) Distribution line means a primary electric voltage line, wire or cable, including supporting structures and appurtenant facilities, which deliver electricity from transformation points on the transmission system to points of connection at a customer's premises that would not be considered a transmission line as set forth in this definition section.

(F) Energized conductor means an electric circuit or equipment through which electricity is flowing or usually flows within the transmission or distribution system.

(G) Electrical corporation means electrical corporation as defined in Section 386.020(15), RSMo Cum. Supp. 2005.

**JOINT COMMITTEE ON**

**JUN 15 2007**

**ADMINISTRATIVE RULES**

(H) Electric utility arborist means a person that has been certified as a Utility Specialist by the International Society of Arboriculture.

(I) Grass means a type of plant with jointed stems, slender flat leaves and spike-like flowers.

(J) Major event means any of the following:

1. A sustained interruption of electric service resulting from conditions beyond the control of the electrical corporation, which may include, but is not limited to, thunderstorms, tornadoes, hurricanes, heat waves or snow and ice storms, which affect at least ten (10) percent of the customers in an operating area. Due to an electrical corporation's documentable need to allocate field resources to restore service to affected areas(s) when one operating area experiences a major event, the major event shall be deemed to extend to those other operating areas of that electrical corporation which are providing assistance to the area(s) affected by the major event. The commission retains authority to examine the characterization of a major event;

2. An unscheduled interruption of electric service resulting from an action:

- A. Taken by an electrical corporation under the direction of an independent system operator or regional transmission organization;

- B. Taken by the electrical corporation to prevent an uncontrolled or cascading interruption of electric service; or

- C. Taken by the electrical corporation to maintain the adequacy and security of the electric system, including emergency load control, emergency switching and energy conservation procedures, which affects one or more customers;

3. A sustained interruption occurring during an event which is outside the control of the electrical corporation and is of sufficient intensity to give rise to a state of emergency or disaster being declared by State government.

(K) Operating Area means a geographical subdivision of each electrical corporation's franchise territory as defined by the electrical corporation. These areas may also be referred to as regions, divisions or districts.

(L) Readily climbable means vegetation having both of the following characteristics:

1. Low limbs, accessible from the ground and sufficiently close together so that the vegetation can be climbed by a child or average person without using a ladder or other special equipment; and

2. A main stem or major branch that would support a child or average person either within arms' reach of an uninsulated energized electric line or within such proximity to the electric line that the climber could be injured by direct or indirect contact with the line.

(M) Right-of-way means less than fee interest in property, which gives a public utility a limited right to use land owned by another person or entity for the purpose of transmitting or distributing electricity. This right is typically memorialized in an easement. This term also includes the parcel of land for which a public utility holds a right-of-way or easement.

(N) Transmission line means an electrical line, wire or cable, (including the supporting structures) and appurtenant facilities which transmits electricity from a generating plant to electric distribution lines. An electric transmission line usually has a rating exceeding sixty-nine (69) kilovolts.

(O) Tree means a perennial woody plant with a main trunk and branches forming a distinct elevated crown at a height exceeding three (3) feet at maturity.

(P) Vegetation means trees, shrubs and other woody plants.

(Q) Vegetation management means the removal of vegetation or the prevention of vegetative growth, to maintain safe conditions around energized conductor(s) and ensure reliable electric

service. Vegetation management consists of biological, chemical, cultural, manual and mechanical methods to control vegetation in order to prevent hazards caused by the encroachment of vegetation on energized conductor(s), and to provide utility access to the conductor.

(R) Volts means nominal voltage levels, measured phase-to-phase.

(S) Wire zone means the land located directly under the widest portion of a transmission line. The wire zone is bounded on each side by a location on the ground that is directly under the outermost transmission wire.

(T) Woody plant means any vascular plant that has a perennial woody stem and supports continued vegetative growth above ground from year to year and includes trees.

## (2) General provisions

(A) An electrical corporation shall ensure that vegetation management is conducted in accordance with this rule on energized conductors of six hundred (600) volts and higher, whether for distribution or transmission, that the electrical corporation owns, in whole or in part.

(B) Each electrical corporation shall obtain, and shall ensure that its contractors obtain, all required permits and licenses prior to commencement of vegetation management.

(C) An electrical corporation that utilizes chemical or biological agents in vegetation management shall comply with any laws or regulations governing the use of those biological and chemical agents.

(D) Each electrical corporation shall employ a vegetation manager, who is an electric utility arborist, as defined in section 1. The vegetation manager shall be an employee of the electrical corporation, not a contractor. The electrical corporation shall provide the vegetation manager with the authority and the resources to administer all aspects of the electrical corporation's vegetation management program, and the vegetation manager shall ensure that the electrical corporation complies with this rule. The vegetation manager's name and contact information shall be posted on the electrical corporation's web site and shall be included on all notifications provided pursuant to the notice requirements of section 6.

(E) Each electrical corporation shall ensure that all contractors hired to perform vegetation management inform its workers of all applicable federal, state, county, and municipal laws, rules or regulations that apply to the work performed under this rule. The electrical corporation shall also ensure that all contractors comply with each applicable requirement of this rule.

(F) An electrical corporation that performs vegetation management at the request of a municipality or government agency, other than vegetation management required under this rule, may require the requesting party to pay any cost above the electrical corporation's cost to perform the vegetation management required by this rule. An electrical corporation shall not perform such additional vegetation management if the additional vegetation management would decrease the reliability or safety of an energized conductor.

(G) Upon a written request from a municipality, the commission may authorize an electrical corporation to temporarily suspend compliance with one or more of the vegetation management requirements of this rule, within the following limits:

1. The suspension of compliance shall apply only to the distribution system, and shall not apply to vegetation management under transmission lines;

2. The suspension of compliance shall apply only to those portions of a distribution system that are located within the municipality, and that do not affect service to any adjacent municipality;

3. The electrical corporation shall not suspend compliance with any requirement if the suspension would result in danger to the public; and

4. If the suspension results in additional costs to the electrical corporation due to lack of tree trimming, the municipality shall reimburse the electrical corporation for these costs.

(H) An electrical corporation may seek recovery in rates of the distribution and transmission portion of vegetation management program costs required under this rule in future rate proceedings. However, the commission may deny recovery in future rate proceedings of costs an electrical corporation incurs due to a delay in implementing a tree trimming program or costs associated with meeting compliance standards after failure to achieve the standards. Upon a showing of good cause by the electrical corporation for the delay or the failure to meet the compliance standards, the commission may allow such recovery.

(I) Upon an electrical corporation's receiving notice of, or having actual knowledge of, any dead, rotten, or diseased vegetation which overhangs, leans toward, or may fall into an energized conductor or guy, the electrical corporation shall promptly remove or remedy the potential safety concern. If removal of the vegetation requires the electrical corporation to access or cross property for which it does not hold an easement or other legal authorization, the electrical corporation shall take all reasonable steps to obtain any necessary permission from the property owner and remove or remedy the potential safety concern as promptly as possible. In response to a major event, the electrical corporation will only be required to remedy the potentially dangerous condition.

(3) Maintenance cycle.

(A) An electrical corporation shall perform a visual inspection at least once every two (2) years of all energized conductors, to determine whether vegetation management is needed. Where vegetation is close enough to pose a threat to its energized conductors, the electrical corporation shall perform vegetation management. The visual inspection may be performed from the ground except in cases where the conductor is not visible from the ground. The electrical corporation shall take into account the height of the vegetation and the distance of the vegetation from the energized conductor, in determining whether vegetation management is needed. Vegetation management performed along a circuit in compliance with this rule shall meet this two (2) year visual inspection requirement.

(B) In addition to the maintenance required in (A) above, if an electrical corporation becomes aware either through notification or during the inspections required under (A) above or at any other time, of any vegetation close enough to pose a threat to its energized conductor, which is likely to affect reliability or safety prior to the next required vegetation management, the electrical corporation shall ensure that necessary vegetation management is promptly performed as required under section 4.

(4) Technical standards for vegetation management.

(A) Each electrical corporation shall ensure that vegetation management conducted on its energized conductors is performed in accordance with the standards, guidelines and procedures set forth in this rule, which includes to the extent not otherwise inconsistent with this rule, the following publications:

1. Pruning Trees Near Electric Utility Lines, by Dr. Alex L. Shigo. This publication may be available from Shigo and Tree Associates, P.O. Box 769, Durham, New Hampshire 03824;

2. Part 1 of the document entitled Tree, Shrub, and Other Woody Plant Maintenance-Standard Practices. This document, also known as ANSI A300, is published by the American National Standards Institute;

3. Best Management Practices, Utility Pruning of Trees, 2004. This title is published by the International Society of Arboriculture;

4. Environmental Stewardship Strategy for Electric Utility Rights-of-Way, (2002). This title is published by the Edison Electric Institute Vegetation Management Task Force;

5. Pruning, Trimming, Repairing, Maintaining, and Removing Trees, and Cutting Brush - Safety Requirements, 1994. This document, also known as ANSI Z133.1, is published by the American National Standards Institute;

6. Native Trees, Shrubs And Vines For Urban And Rural America: A Planting Design Manual for Environmental Designers, by Hightshoe, G.L., 1987, is published by John Wiley and Sons;

7. Manual of woody landscape plants 5th Ed., by Michael A. Dirr. Stipes Publishing, LLC; 5th edition (August, 1998);

8. Hortus Third: A concise dictionary of plants cultivated in the United States and Canada, by L.H. Bailey Hortorium, 1976; and

9. National Electric Safety Code as referred to in 4 CSR 240-18.

(B) Where multiple standards, guidelines and procedures listed at (A) above would apply or conflict, the vegetation manager, or his or her designee, shall select the most appropriate standard, guideline or procedure.

(C) Each electrical corporation shall develop its own vegetation management standards, guidelines and procedures, which shall be consistent with this rule. In developing these standards, guidelines and procedures, an electrical corporation shall prioritize its vegetation management based upon:

1. The extent of the potential for vegetation to interfere with the energized conductor; and

2. The voltage of the affected energized conductor; and the relative importance of the affected energized conductor in maintaining safety and reliability.

(D) Each electrical corporation shall file a copy of its vegetation management standards, guidelines and procedures at the commission by January 1, 2008, with verification by affidavit of an officer who has knowledge of the matters stated therein. If an electrical corporation makes a change in its vegetation management standards, guidelines or procedures, it shall file a copy of the change at the commission no later than thirty (30) days prior to implementing the change, with verification by affidavit of an officer who has knowledge of the matters stated therein.

(E) Each electrical corporation's vegetation management standards, guidelines and procedures shall cover, at a minimum, all of the following activities:

1. Tree pruning and removal;
2. Vegetation management around poles, substations and energized conductors;
3. Manual, mechanical, or chemical vegetation management along rights-of-way;
4. Inspection of areas where vegetation management is performed, both before and after the vegetation management;
5. Research and development of improved vegetation management; and
6. Public education.

(F) Among the factors the electrical corporation shall consider in determining the extent of vegetation management to be performed at a particular site are:

1. The rate at which each species of vegetation is likely to grow back;
2. The voltage of the energized conductor, with higher voltages requiring larger clearances, including but not limited to:
  - A. Location;
  - B. Configuration; and
  - C. Sag of conductors at elevated temperatures and under wind and ice loading, and growth habit, strength, and health of vegetation growing adjacent to the conductor with the combined displacement of the vegetation, supporting structures, and conductors under adverse weather or routine wind conditions;
3. The potential movement of the energized conductor during various weather conditions;
4. The potential movement of trees or other vegetation during various weather conditions; and
5. The electrical corporation's legal rights to access the area where vegetation management is to be performed.

(G) The electrical corporation shall remove all trimmings and cut vegetation resulting from vegetation management that are part of the electrical corporation's regular maintenance cycle, within five (5) business days after the vegetation was cut, except if:

1. The electrical corporation obtains consent from the owner of the property upon which the trimmings or cut vegetation are located to leave the trimmings or cut vegetation; or
2. The vegetation management is performed as a direct result of a major event, in which case the electrical corporation shall remove the trimmings and cut vegetation that was cut or trimmed as part of its vegetation management activities after the conclusion of the major event.

(5) Transmission line vegetation management.

(A) In addition to the other requirements of this rule, transmission lines, as defined at section 1, are subject to the requirements in this section.

(B) In addition to meeting the other requirements in this section, each electrical corporation shall ensure that the following requirements for transmission lines are met:

1. Clearing under and over transmission lines shall be wide enough so that no vegetation or parts of vegetation will grow or fall into the transmission lines prior to the next scheduled vegetation management cycle;
2. An electrical corporation shall not allow any vegetation that grows taller than fifteen (15) feet at maturity to grow anywhere within a transmission line right-of-way;
3. Landowners and political subdivisions may request the right to allow woody plants that naturally mature above three (3) feet tall to grow in the wire zone and/or border zone. The electrical corporation's vegetation manager or his/her designee will be responsible for determining if these woody plants are permissible;
4. The electrical corporation shall not allow any woody plant species that naturally matures above fifteen (15) feet to grow in the border zone;
5. Grass vegetation and non-woody agricultural crops, not exceeding twelve (12) feet in height at maturity, shall be permitted to grow anywhere in the right-of-way;
6. Where an electrical corporation has cleared a right-of-way of vegetation and bare soil is exposed, the electrical corporation shall comply with the soil erosion requirements of the applicable soil conservation district in order to prevent soil erosion;

7. To the extent that any plant species identified by the Missouri Department of Conservation as invasive and non-indigenous to Missouri poses a hazard to electrical transmission conductors, the electrical corporation shall make reasonable efforts to eliminate the species from the entire right-of-way. To do so, the electrical corporation shall use the best integrated vegetation management practices available and practical; and

8. In each electrical corporation's March billing cycle for customers in which vegetation management is scheduled that year, or two months prior to the commencement of vegetation management on a particular property, whichever is earlier, each electrical corporation shall notify owners of land upon which the electrical corporation holds a right-of-way of the requirements in this subsection, through a separate direct mailing.

(C) For the purposes of this section, the mature height of woody and non-woody agricultural crops shall be determined in accordance with the publications incorporated in this rule in section 4(A).

(D) Each year, before June 1, each electrical corporation shall develop a schedule for transmission line vegetation management. (The schedule shall be included in the electrical corporation's annual system performance report as required by 4 CSR 240-23.010(6)(D)). The schedule shall:

1. List the transmission lines planned for vegetation management for the next four (4) years;
2. Ensure that transmission line vegetation management is performed prior to vegetation becoming a threat to safety or service reliability; and
3. Be distributed to municipalities served by, or whose residents are served by, or through, transmission lines of the electrical corporation or those with such lines located within the boundaries of the municipality.

(6) Training, recordkeeping and reporting.

(A) Each electrical corporation shall ensure that all persons who perform vegetation management for the electrical corporation, whether employees or contractors, are trained in the proper care of trees and other woody plants, are knowledgeable regarding safety practices and line clearance techniques, and have demonstrated the ability to perform vegetation management safely.

(B) Each electrical corporation shall keep a record of all personnel used by a contractor or the electrical corporation to perform vegetation management for the electrical corporation, and the dates and types of training that each has received.

(C) The electrical corporation shall monitor and document all vegetation management and related activities it or its contractors performs. Documentation shall include, but shall not be limited to:

1. The municipality in which the work was performed;
2. Identification of each circuit and substation where vegetation management was performed;
3. The type of vegetation management performed including removal, trimming and spraying and methods used;
4. The crew size and supervisor's name;
5. The date of activity;
6. Any safety hazards encountered;



7. 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; and

8. Vegetation management planned for the following year.

(D) Each electrical corporation shall include a summary of the information required in (C) above about its vegetation management during the past year, and vegetation management planned for the following year in an annual report to be filed with the commission by May 31 each year, with verification by affidavit of an officer who has knowledge of the matters stated therein. This information shall include, at a minimum, the name of each municipality in which the electrical corporation conducted vegetation management during the preceding year, and all circuits and operating areas affected.

(E) Each electrical corporation shall report its own violations of this rule to the commission within thirty (30) days of discovery and include its plan for correcting the violation.

(F) The Staff of the commission shall review each electrical corporation's vegetation management annual report for compliance with the provisions of this rule. The Staff shall identify any deficiencies in the annual report of each electrical corporation and file its analysis and recommendations for each electrical corporation complying with the provisions of this rule.

(7) Public notice of planned vegetation management.

(A) Each electrical corporation shall make a diligent attempt to notify all property owners or occupants that may be affected by planned vegetation management. This requirement will be satisfied if the electrical corporation provides notice to affected property owners or occupants at least seven (7) days, but not more than forty-five (45) days, prior to performing any vegetation management activity. Notice shall be provided by direct mailing, door hanger, post card, bill insert, personal contact or any other commission-approved method.

(B) Each electrical corporation shall maintain a record of the dates, content, and addresses to which all notices provided under (A) were given until the subsequent vegetation management cycle has occurred for each affected property owner or occupant.

(C) Each electrical corporation or its contractor shall provide written notice of any pending vegetation management activities to a primary contact for each political subdivision affected. The primary contact shall be selected by mutual agreement between the electrical corporation and the highest elected official, or if no elected official, then the highest appointed official, of the political subdivision.

(D) An electrical corporation shall notify all political subdivisions that may be affected by vegetation management activities. The notice shall be made in writing to the primary contact designated under (C) above, 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. In addition, the notice of vegetation management shall be in a form appropriate to each electrical corporation's procedures and easement rights.

(8) Outreach programs.

(A) Each electrical corporation shall conduct an annual public education program to inform its customers, as well as the political subdivisions in the electric public utility's service territory, of the importance of vegetation management, and of the electrical corporation's role and responsibility in managing vegetation near electric lines.

(B) The public education program required under this section shall be implemented by direct mail or another method approved by the commission.

(C) Each electrical corporation shall post its public education materials on its website.

(9) Penalties, Fines, Sanctions and/or Ratemaking Disallowances.

(A) Failure to comply with any provision of this rule may subject the violator to penalties, fines, sanctions and/or ratemaking disallowances in accordance with the commission's statutory authority. No penalties, fines, sanctions and/or ratemaking disallowances shall be imposed for violations of this rule for a period of six (6) months from the effective date of this rule.

(B) An electrical corporation that violates this rule may be subject to a penalty of not less than one hundred dollars (\$100) and not more than two thousand dollars (\$2,000) per day per violation, for each day the violation occurs as permitted under Missouri Statutes. The commission shall notify the electrical corporation of the violation(s) in writing. Upon receipt of the written notice of violation, the electrical corporation shall have five business days to correct the violation(s). Any failure to correct the violation may subject the electrical corporation to a penalty of not less than one hundred dollars (\$100.00) per day for each violation, calculated from the day such written notice was received by the electrical corporation.

(C) The commission may consider violations of this rule as a relevant factor in setting rates for the electrical corporation in a case where the commission is examining the propriety of the electrical corporation's rates.

(D) Penalties, fines, sanctions and/or ratemaking disallowances imposed for violations of this rule are in addition to, not a replacement for, other penalties, fines and/or sanctions that apply under other state laws and regulations and under federal laws and regulations.

(E) In determining the appropriate penalties, fines, sanctions and/or ratemaking disallowances for violation of this rule, the commission shall consider the following criteria, and any other factors deemed appropriate and material to the electrical corporation's delay or failure to comply:

1. The good faith efforts, if any, of the electrical corporation in attempting to comply with this rule;
2. The gravity of the violation;
3. The number of past violations by the electrical corporation, including violations of this rule, as well as of other standards, guidelines and procedures adopted by the commission;
4. The appropriateness of the sanction(s) in light of the size of the electrical corporation;
5. Events judged by the commission to be beyond the control of the electrical corporation; and
6. Mitigating factors.

(10) Specific Requirements.

(A) Each electrical corporation shall comply with the tree trimming standards of this rule by trimming to the extent of:

1. Thirty-three and one-third percent (33 1/3%) of total number of trees required trimming by the twelve (12)-month anniversary of the adoption of this rule;
2. Sixty-six and two-thirds percent (66 2/3%) of the total number of trees requiring trimming by the eighteen (18)-month anniversary of the adoption of this rule; and
3. One hundred percent (100%) compliance by the two (2)-year anniversary of the adoption of this rule.

(B) Each electrical corporation must maintain the following minimum clearances of vegetation from conductors:

1. Twenty-five (25) feet for conductors energized above fifty thousand (50,000) volts.
2. Ten (10) feet for conductors energized at six hundred (600) through fifty thousand (50,000) volts, except clearances may be reduced to three (3) feet if the vegetation is not readily climbable.
3. Intrusion of limited small branches and new tree growth into the minimum clearance areas of paragraphs 1. and 2. above is acceptable provided the vegetation does not come closer than six (6) inches from the conductor.
4. Subtransmission lines and three (3) -phase distribution feeders / backbone circuits (portion of distribution system directly interconnected with distribution substation and prior to the first protective device) shall be trimmed vertically to remove overhanging limbs to the widths prescribed in paragraphs 1., 2. and 3. above.

The radial clearances in subsection 10(B) 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 conflict with any other materials within this chapter the strictest rules shall apply.

(11) Variances. A variance from a provision of this rule may be granted only for good cause shown.

*AUTHORITY: sections 386.040, 386.250, 386.310 and 393.140, RSMo 2000, and 393.130 RSMo Supp. 2006.*

*PUBLIC COST: This proposed rule will cost state agencies or political subdivisions approximately sixty-five thousand seven hundred sixty-seven dollars (\$65,767) in the first year of implementation and sixty thousand seven hundred forty-seven dollars (\$60,747) per year, thereafter.*

*PRIVATE COST: This proposed rule will cost private entities approximately three hundred sixty-four million ninety-four thousand two hundred thirty-eight dollars (\$364,094,238) in the first year of implementation and two hundred eighty-eight million four hundred seventy-three thousand three hundred thirty-three dollars (\$288,473,333) per year, thereafter.*

*NOTICE TO SUBMIT COMMENTS AND NOTICE OF PUBLIC HEARING: Anyone may file comments in support of or in opposition to this proposed rule with the Missouri Public Service Commission, Colleen M. Dale, Secretary of the Commission, P.O. Box 360, Jefferson City, MO 65102. To be considered, comments must be received at the Commission's offices on or before August 15, 2007, and should include a reference to Commission Case No. EX-2007-0214. If comments are submitted via a paper filing, an original and eight (8) copies of the comments are required. Comments may also be submitted via a filing using the Commission's electronic filing and information system at <<http://www.psc.mo.gov/efis.asp>>. A public hearing regarding this proposed rule is scheduled for August 15, 2007 at 10:00 a.m. in the commission's offices in the Governor Office Building, 200 Madison Street, Jefferson City, Missouri. Interested persons may appear at this hearing to submit additional comments and/or testimony in support of or in opposition to this proposed rule, and may be asked to respond to commission questions. Any persons with special needs as addressed by the Americans with Disabilities Act should contact*

*the Missouri Public Service Commission at least ten (10) days prior to the hearing at one (1) of the following numbers: Consumer Services Hotline 1-800-392-4211 (voice) or Relay Missouri at 711.*

COPY

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

**RECEIVED**

In the Matter of Filing Requirement Rules     )  
For Electric Utilities.                                 )

**Case No. EX-2007-0214**

JUN 15 2007

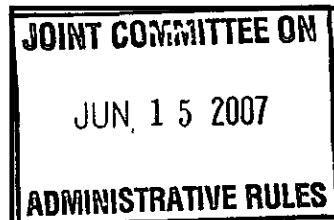
SECRETARY OF STATE  
ADMINISTRATIVE RULES

Electrical Corporation Vegetation Management Standards and Reporting  
Requirements Rule 4 CSR 240-23.030

**DISSENTING OPINION OF COMMISSIONER CONNIE MURRAY**

I must dissent from the majority's decision to send the proposed Electrical Corporation Vegetation Management Standards and Reporting Requirements Rule, in its present form, to the Missouri Secretary of State. Both, this proposed rule and the draft proposed rule "4 CSR 240-23.020 Electrical Corporation Infrastructure Standards," in my opinion, are an apparent over-reaction to recent storm outages and to reports of reliability issues experienced by a single utility. These rules were hurriedly drafted without the opportunity for a deliberate and detailed technical and legal review by Commission staff that would have otherwise been employed in the ordinary course of rulemaking.

Approximately three months ago, the Commission's technical and legal staff presented a draft rulemaking that was well thought out and drafted in a manner that provided an excellent base from which to incorporate performance standards. After discussing this draft in Agenda, Staff was directed to draft performance standards to be included in the draft and bring the draft proposed rulemaking back to the Commission for further review. Prior to Staff's revised draft rule being completed and brought back to the Commission, the set of rules which was voted upon today and for



which I write this dissent was offered, and as a result, the Staff's draft rule was never recalled to Agenda for further discussion by the Commission.

The rule that is being sent to the Missouri Secretary of State is overbroad, fiscally irresponsible and unworkable. If promulgated, the fiscal note shows, the rule would create enormous costs for both the Commission and the Missouri utilities which are subject to the rule. The degree of specificity, burdensome notification and reporting requirements, strict and sometimes conflicting timelines, and heavy fines and penalties for non-compliance combine to remove the utilities' flexibility to accomplish the ultimate goal of providing a higher degree of reliability, all at a cost of hundreds of millions of dollars annually that would ultimately be borne by ratepayers. Further, the fiscal note shows that the review and inspection requirements inuring to the Commission Staff will require the equivalent of an additional full time employee than the Commission currently employees and cost over \$60,000 annually, further driving up costs to ratepayers.

I cannot support this attempt to compile the strictest rules that could be located from various states into one melting pot to be thrown out for comments. It is my belief that government agencies have a duty to put forth draft rules that are clear, understandable and are no more burdensome, costly or intrusive than necessary to accomplish a legitimate state interest. Such a draft proposed rule provides the public a meaningful opportunity to contribute to the rulemaking process by suggesting exact and detailed substantive changes, rather than changes to general concepts a draft rule such as this invites. I believe that a more prudent approach would have been to take the time necessary for Staff and the Commission to review and evaluate the

potential effects of the rulemaking on all relevant parties, obtain stake-holder input and establish a well reasoned draft rulemaking.

The Missouri Public Service Commission has a legitimate interest in requiring its regulated electric utilities to manage and maintain their infrastructure and control vegetation in such a way that ensures the provision of safe, adequate and reliable service. Protecting that interest could be and should be accomplished by a rulemaking more in line with that originally drafted by the technical and legal staff of the Commission.

This dissent should in no way be construed to mean that I oppose the concept of such a rulemaking. I believe that some utilities are currently not achieving adequate levels of vegetation management and, as a result, administrative rules are needed. However, the draft proposed rulemaking adopted by the Commission today does not serve the best interest of Missouri and its citizens.

For these reasons, I do not support today's vote to send the substitute draft proposed rule to the Missouri Department of Economic Development for review.

**Respectfully submitted,**

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Connie Murray, Commissioner

Dated at Jefferson City, Missouri  
on this 14th day of June 2007.