

MEMORANDUM

TO: Colleen M. Dale, Secretary

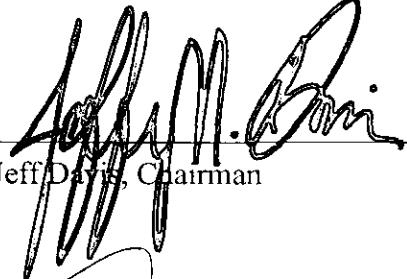
DATE: October 11, 2007

RE: Authorization to File Final Order of Rulemaking with the Office of Secretary of State


CASE NO: EX-2007-0214

The undersigned Commissioners hereby find necessity to propose the rules as attached and authorize the Secretary of the Missouri Public Service Commission to file the following Proposed Rulemaking with the Office of the Secretary of State:


Proposed Rule 4 CSR 240-23.020 – Electrical Corporation Infrastructure Standards



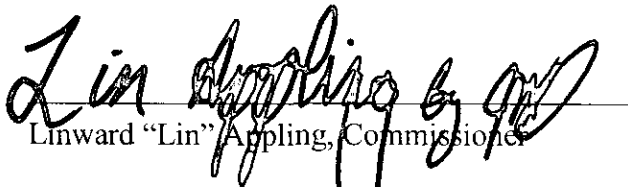
Jeff Davis, Chairman



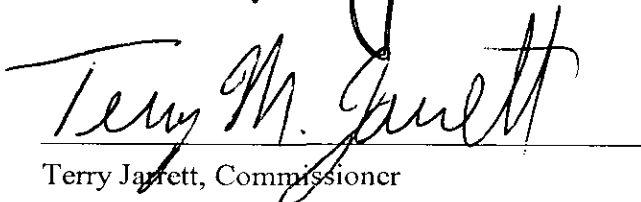
Connie Murray, Commissioner

 - NO

Robert M. Clayton III, Commissioner



Linward "Lin" Appling, Commissioner



Terry Jarrett, Commissioner

Robin Carnahan

Secretary of State
Administrative Rules Division

RULE TRANSMITTAL

Administrative Rules Stamp

Rule Number 4 CSR 240-23.020

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

Name of person to call with questions about this rule:

Content Cully Dale Phone 573-751-4255 FAX

Email address cully.dale@psc.mo.gov

Data Entry same Phone FAX

Email address

Interagency mailing address Public Service Commission, 9th 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

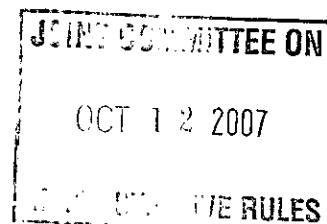
☒ Statutory 30 days OR Specific date

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

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

Small Business Regulatory
Fairness Board (DED) Stamp

JCAR Stamp





Commissioners

JEFF DAVIS
Chairman

CONNIE MURRAY

TERRY JARRETT

ROBERT M. CLAYTON III

LINWARD "LIN" APPLING

Missouri Public Service Commission

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COLLEEN M. DALE
Secretary/Chief Regulatory Law Judge

KEVIN A. THOMPSON
General Counsel

November 15, 2007

Honorable Robin Carnahan
Secretary of State
Administrative Rules Division
600 West Main Street
Jefferson City, Missouri 65101

Dear Secretary Carnahan:

Re: 4 CSR 240-23.020 Electrical Corporation Infrastructure Standards

CERTIFICATION OF ADMINISTRATIVE RULE

I do hereby certify that the attached is an accurate and complete copy of the order of rulemaking lawfully submitted by the Missouri Public Service Commission for filing on this 15th day of November, 2007.

Statutory Authority: Sections 386.250(6) RSMo 2000

If there are any questions regarding the content of this order of rulemaking, please contact:

Colleen M. Dale, Secretary
Missouri Public Service Commission
200 Madison Street, P.O. Box 360
Jefferson City, MO 65102
(573) 751-4255
cully.dale@psc.mo.gov

BY THE COMMISSION

A handwritten signature in black ink, appearing to read "Colleen M. Dale", is written over a horizontal line.

Colleen M. Dale
Secretary
Missouri Public Service Commission

**Title 4 – DEPARTMENT OF ECONOMIC DEVELOPMENT
Division 240 – Public Service commission
Chapter 23 – Electric Utility Operational Standards**

ORDER OF RULEMAKING

By the authority vested in the Public Service Commission under section 386.250(6), RSMo 2000, the commission amends a rule as follows:

4 CSR 240-23.020 is adopted.

A notice of proposed rulemaking containing the text of the proposed rule was published in the *Missouri Register* on July 16, 2007 (32 MoReg 1096). Those sections with changes are reprinted here. This proposed rule becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: A public hearing on this proposed rule was held August 15, 2007, and the public comment period ended that day. Five sets of written comments were received and an additional person commented at the hearing. Written comments were received from Union Electric Company, dba AmerenUE; the Empire District Electric Company; Kansas City Power and Light; Missouri Industrial Energy Consumers; Ford Motor Company; the Staff of the Missouri Public Service Commission; Missouri Department of Conservation; the President of St. Louis County Municipal League and the Cities of Webb City, Hazelwood, Wentzville and Troy. Each of those companies or groups and the Missouri Public Counsel commented at the hearing, except Conservation, the cities and the Municipal League, in addition to which several witnesses testified on behalf of the various commenters. The commenters suggested changes to every section.

COMMENT: Commenters noted that if there is a need for an infrastructure standards rule, it should be tailored to make it enhance reliability to a greater extent than it does as drafted and so that it will cost less than is estimated with the published draft. The language of the Purpose section overstates the efficacy of the proposed rule in that it states the rule is designed to “ensure” safe and high quality service. No amount of management or standards could ensure such a result.

RESPONSE AND EXPLANATION OF CHANGE: The commission finds that the Purpose section of the rule should be changed so that it no longer seeks to ensure, but to provide safe and adequate service, which reflects the statutory standard. The purpose clause will also be clarified as more fully set forth below.

COMMENT: The applicability of the rule, as set forth in section (1) is both too vague and too specific. Factors such as location relative to decay zone, age of pole plant, storm frequency, type of original pole treatment, and inclusion of remedial treatments for wood pole life extension should be taken into consideration when determining the type and timing of inspections. The vagueness of the MOPSC proposed rule could cause

JOINT COMMITTEE ON

OCT 12 2007

ADMINISTRATIVE RULES

misinterpretation of the rule by the utility resulting in misapplied allocation of resources. The lack of quantifying the condition rating makes it difficult for utilities to comply with the rule. It may be appropriate for the utility to have the authority to classify condition or have the ability to deviate from the final rule if current maintenance practices are equal to or superior to the recommended standard. Major indices (SAIFI, SAIDI, etc.) are not utilized in this rule. The performance of the overhead and underground components or equipment is an integral part of those indices as well. The inspection method described in the proposed rulemaking is a minimalist approach to predictive maintenance on wood poles. In the short term, it will find 'the worst of the worst' poles in the plant. In the long term, it does nothing to avoid future replacements. The process prescribed by the rulemaking is basically a 'run to failure' strategy and should be considered the most expensive. These comments are primarily for wood poles in response to the proposed infrastructure rule. The useful service life of steel and concrete poles could also be extended through inspection, cathodic protection, application of coatings, and predicted repairs as needed, although steel and concrete poles were not referenced in the proposed rule.

RESPONSE: The commission agrees that the "applicability" section is limited, but it is meant only to clarify that the commission does not intend to extend its jurisdiction in these matters to companies not regulated by it, such as electrical cooperatives. To the extent that particular reliability standards are not included, commenters disregard the fact that this rulemaking is part of a set of three rules designed to increase the overall reliability of the system that provides electricity to Missouri consumers. Finally, to those comments that address the particular wording of sections, those are responded to in the applicable sections below.

COMMENT: The inspection method described in Section (2) of the proposed rulemaking is a minimalist approach to predictive maintenance on wood poles. In the short term, it will find 'the worst of the worst' poles in the plant. In the long term, it does nothing to avoid future replacements. The process prescribed by the rulemaking is basically a 'run to failure' strategy and should be considered the most expensive.

RESPONSE: The commission is of the opinion that finding "the worst of the worst" and remedying their deficiencies is an excellent place to begin its efforts to enhance reliability. As more fully set forth below, the commission finds that electrical corporations that have systems in place to reach the "best of the best" are encouraged and enabled to do so under section (5).

COMMENT: The definition of "corrective action" in section (2)(A) should be modified to include the interruption of service and to indicate that the corrective action may be temporary until a more permanent correction becomes feasible.

RESPONSE AND EXPLANATION OF CHANGE: The commission finds that it is most appropriate to both modify the definition of "corrective action" and add a definition of "remedial action" to differentiate between a temporary fix to render the equipment safe or functional and the more permanent repair or replacement necessary to accomplish reliability goals in the long-term, as more fully set forth below in subsections (2)(A) and (F).

COMMENT: The definition of "detailed inspection" in section (2)(B) is appropriate as long as it is clarified to provide that "This definition does not prohibit each electrical corporation from designing its own detailed inspection process and rating system for each type of equipment." The definition of what is meant by "patrol" versus "detailed inspection" is vague.

RESPONSE AND EXPLANATION OF CHANGE: Although the commission has made minor changes to the definitions of "detailed inspection" and "patrol" to more finely delineate the differences between them, the commission is unwilling to make such further changes as might be suggested. Further, the flexibility language suggested above is encompassed in the alternate plans allowed in section (5) and is unnecessary here.

COMMENT: The definition of "intrusive" in section (2)(C) does not necessarily follow industry standards. Guiding documents concerning pole inspection and maintenance have been used for many years to provide guidance to electrical utilities relative to the management of strength, load and corrective actions of their pole plant. Other Public Service Commissions have also required the inclusion of remedial treatments.

RESPONSE: For the limited purposes for which the definition of intrusive inspection is necessary in this rule, the commission finds that the definition as it is written to be reasonable and proper; no change will be made.

COMMENT: The definitions of "rural" and "urban" in sections (2)(F) and (G) do not take into account the normal practice of dealing with infrastructure by circuit. The definitions should be changed to reference to the number of customers per circuit mile.

RESPONSE AND EXPLANATION OF CHANGE: The commission agrees, and will replace the existing definitions, based on population density, with the definitions set forth in the vegetation management rule, which categorizes rural and urban based on density of customers per circuit mile, as more fully set out below.

COMMENT: To maximize efficiency, the maximum inspection intervals set out in subsection (3)(A) should be modified so that all facilities on a given circuit could be inspected at the same time and coordinated with vegetation management. For urban circuits, a two year cycle is appropriate.

RESPONSE AND EXPLANATION OF CHANGE: The commission agrees that the patrol inspection would most efficiently be carried out in conjunction with vegetation management, as long as the inspecting personnel are adequately trained in making such inspections. The rule will be modified accordingly, as more fully set forth below.

COMMENT: The table in the proposed rule is too aggressive when compared to the immaterial benefit such an aggressive schedule would produce and given the cost to ratepayers such an aggressive schedule will require. Spending the money necessary to patrol every overhead transformer each year has a real cost without any corresponding benefit. The rule fails to take into account the impracticality of inspecting buried, underground distribution infrastructure. It is impossible to visually inspect buried cable and equipment, as would be required in the definition of "patrol" and "detailed" inspections. Annual inspection of poles and attachments showing no deterioration is a wasteful, sub-optimal use of utility resources creating real costs for ratepayers, with little

or no consequent benefit. This section goes beyond the Commission's statutory authority in purporting to require the assurance of a "reliable, high quality" operation. This language should be modified to conform with the language in the PSC's enabling statute, so as to not inject confusion into a well-defined body of law.

The table prescribes time-based inspections without incorporating other aspects of a utility's asset management, maintenance and automation strategy. The basis for the rule should be system performance. Application of metrics (such as System Average Interruption Duration Index ("SAIDI") and System Average Interruption Frequency Index ("SAIFI")) from IEEE Standard 1366 with appropriate exclusions, monitored for trends over several years, would be more useful. Once consistent performance metrics are established, electrical corporations should then develop an infrastructure inspection and maintenance plan based on the company's particular system requirements. This plan would be reported to the Commission for advisement and enforcement. The inspection cycles in the proposed rule are aggressive relative to national industry practices. Lengthening inspection cycles will allow utilities flexibility to incorporate asset performance, condition, design, age, failure rates, replacement cost and the degree of automation into decision models that initiate the inspection of specific infrastructure. To reflect the impact automated monitoring has on inspection cycles, an additional column entitled "Automated Patrol via Real-Time Monitoring" is appropriate. Because automated equipment and devices with remote monitoring are being constantly monitored, such equipment does not require a routine patrol inspection, but a detailed inspection of automated equipment on a 10-year cycle would be acceptable.

RESPONSE AND EXPLANATION OF CHANGE: The commission agrees that the time frames set out in the table are overly ambitious, and will extend those time frames accordingly. In addition, the table will be modified to account for the continuous monitoring of certain circuits. Finally, the language of the rule will be modified to clarify that "customer drops," those circuits operated at or below 600 volts, are not included in the scope of the rule, as fully set forth below.

COMMENT: It is unlikely that this rule will become effective as anticipated in this draft. It is, therefore, appropriate to move back, by six months, the date for compliance set out in subsection (3)(B).

RESPONSE AND EXPLANATION OF CHANGE: The commission agrees and will modify the date for compliance accordingly.

COMMENT: There is concern that the requirements of subsection (3)(B) may have a negative impact on the flexibility necessary for efficient operation of a utility. The proposed rule will create a disincentive to making an adjustment even though it would be more efficient to do so. Planning out the entire system by month may be very complicated. A utility would also need to predict the follow-up maintenance by month. It may be appropriate to schedule by substation, by year, to make it more manageable for the utility and the "staff." A time extension may be appropriate to allow the utilities enough time to adequately respond with any request for deviations from the final rule relative to reporting compliance. Some utilities have also added a 'worst performing feeder' program to their maintenance strategy. With this program, the feeders or circuits that have the weakest indices (SAIFI, SAIDI) are given top priority. Many times three

phase feeders are given priority over single phase laterals. It may be more appropriate to focus patrol cycles annually for 3 phase main feeders and every three years for laterals. The idea that "any successor staff department" will have the authority to force a utility to change it's reporting has the potential to create duplicate reports and collect and maintain data not consistent with intent of the final rulemaking. It would seem much more appropriate to have any changes go through only the MoPSC.

RESPONSE AND EXPLANATION OF CHANGE: As noted above, the rule will be changed so that electrical corporations may propose an alternate asset management program. Moreover, the rule as written allows for variances to be granted to requesting companies for good cause. Finally, the reference to the staff has been removed in this section to clarify that the commission retains all authority over changing or waiving requirements under the rule, as fully set forth below.

COMMENT: The proposed reporting requirements in subsection (3)(C) do not specify the amount of detail required and to require detail beyond generic explanations – storms, manpower shortage, etc. – would be very time consuming as it would require documentation specific to each and every facility. There is concern that the rule could be interpreted in a manner that creates a level of work that is grossly disproportionate to the associated benefit the work would provide.

RESPONSE AND EXPLANATION OF CHANGE: The commission agrees that the rule lacks some specificity, but remains convinced that being overly prescriptive at this time could indeed create "a level of work that is grossly disproportionate to the associated benefit the work would provide." Some clarifications are made to the subsection, as more fully set out below.

COMMENT: Subsection (3)(E) should be modified so that identification of the contractor with whom the utility has contracted is sufficient, as opposed to requiring the reporting of a specific individual's name.

RESPONSE AND EXPLANATION OF CHANGE: The commission agrees and will delete the requirement of reporting individual names. The commission agrees that the suggested changes are reasonable and will amend the section, as more fully set out below.

COMMENT: Subsection (3)(F) should be modified to remove the reference to the non-existent rule. The flexibility of the Commission to increase the frequency of inspection cycles in subsection (3)(F) in response to patterns of non-compliance is a useful provision. To gain the maximum benefit from inspection, an annual review of inspection cycle should be conducted to determine if the inspection cycle should be lengthened as well. Inspecting facilities too frequently may not improve service quality or safety; it only increases the cost of service for the consumer.

RESPONSE AND EXPLANATION OF CHANGE: The commission will remove the reference to the non-existent rule and notes that companies that find the inspection cycles to be unrealistically short may either seek a variance as provided in section (5) or may petition the commission to amend this rule.

COMMENT: The Commission has no authority to impose penalties or sanctions. Because there is no definition of what constitutes a "violation" of the proposed rule, there

are concerns that a strict interpretation of this Section may lead to unnecessary sanctions and/or fines against utilities.

RESPONSE AND EXPLANATION OF CHANGE: The commission finds that the proposed section (4) penalties and sanctions are beyond the scope of the commission's authority and will delete the section.

COMMENT: The proposed rule is unnecessarily prescriptive, fails to account for differences among utilities, does not take into account advances in technology, and is not optimally cost-effective. Reliability is the most appropriate metric for performance measurement for an infrastructure rule. A consistent method, such as application of metrics (such as System Average Interruption Duration Index ("SAIDI") and System Average Interruption Frequency Index ("SAIFI")) from IEEE Standard 1366 with appropriate exclusions, is appropriate. Each utility should be required to develop an Infrastructure Inspection and Maintenance Plan that fits the specific system design and present needs to drive desired performance. This plan should be modified periodically. Consistent performance metrics should be provided with appropriate trending over time. The rule should utilize condition-based maintenance, monitor asset performance, and apply new technologies to automate equipment to optimize maintenance and performance as well as provide real-time monitoring, *i.e.*, constant inspection. The rule should also take into account the utility's standards, designs and historical performance trends. Inclusion of time-based cyclic inspections and maintenance to compliment other parts of the portfolio would be appropriate. The rule should serve as a long range back-drop to move toward an intelligent grid in the future, and provide for reporting to the Commission on execution of the plan and performance of the system. A more holistic asset management based portfolio of integrated programs customized for each utility would generate better results. The NESC, OSHA, and ANSI guidelines have been developed and modified over decades. The intent of these guidelines is to help establish workable, practicable solutions to safe and quality operations by electrical utilities. To require that a process be absolute, as the proposed rule does, does not seem practical.

RESPONSE AND EXPLANATION OF CHANGE: The commission finds that the comments are reasonable and will add new language in section (5), to allow alternate asset management plans, as more fully set out below.

COMMENT: The proposed rules, if put into effect, will have extremely serious financial impact on the Missouri jurisdictional utilities and their customers. It must be assumed that the costs will be passed onto Missouri customers, substantially increasing the costs of electrical service. The rules neglect property owners by mandating numerous inspections and expedited compliance which will increase damage to property and crops.

RESPONSE AND EXPLANATION OF CHANGE: The commission finds that the proposal of a cost recovery mechanism is reasonable, and adds that in new section (4) as more fully set out below.

COMMENT: The schedule contained in the table entitled "Electrical Corporation System Inspection Cycles" fails to take into account the various materials poles can be made of, such as fiberglass, concrete, metal, etc. It is counter-intuitive that poles old enough to be in their second maintenance cycle are not required to be treated, while newer poles are

treated frequently. The short intervals between patrols mandated by the rule is unnecessary unless there are known risks to warrant such frequent inspection. The rule assumes that a "Patrol Inspection" for a pole is really an above ground inspection of the facilities that the pole supports, in addition to the pole and guying condition observation. With this schedule, the Patrol could be dropped when the cycle calls for an intrusive inspection. The rule is vague concerning underground inspections. Definitions are needed for the criteria of EPR circuit inspection. It's unclear how this would effect the cycle for transformers and other devices. The vagueness of "detailed inspection" significantly increases costs, public safety and inspector safety.

RESPONSE AND EXPLANATION OF CHANGE: The commission finds that the schedules contained in the table are overly ambitious and will be lengthened. As to the vagueness of other terms, clarifying language has been inserted, as discussed above. Finally, it is reasonable to assume that ambiguities will be cleared up in the process of submission of infrastructure maintenance plans; for unresolved differences, requests for variance are appropriate.

COMMENT: Throughout the rule, the draft contains awkward wording, grammatical errors and inconsistent labeling of "electrical corporations."

RESPONSE AND EXPLANATION OF CHANGE: The commission has made several such changes, as are set forth fully in the proposed rule that follows.

4 CSR 240-23.020 Electrical Corporation Infrastructure Standards.

PURPOSE: This rule establishes the minimum requirements for the transmission and distribution ~~[and transmission]~~ facilities of electrical corporations as defined in section 386.020(15), RSMo Cum. Supp. 2006 regarding inspection (including maximum allowable inspection cycle lengths), condition rating, scheduling and performance of corrective action, record keeping, and reporting, in order to provide ~~[ensure]~~ safe and adequate ~~[high-quality]~~ electrical service. These requirements shall be based on factors such as applicable industry codes, national electric industry practices, manufacturer's recommendations, sound engineering judgment and past experience.

(1) Applicability. This rule applies to all electrical corporations as defined in section 386.020(15), RSMo Cum. Supp. 2006.

(2) Definitions. For the purpose of this rule:

(A) Corrective action means maintenance, repair, or replacement of electrical corporation equipment and structures so that they function properly and safely. **Temporary interruption of service or remedial action are appropriate until corrective action can be completed:**

(B) Detailed inspection means an inspection where individual pieces of equipment and structures are carefully examined, visually and through use of routine diagnostic testing, as appropriate, and (if practicable ~~[practical]~~ and if useful information can be so gathered) opened, and the condition of each rated and recorded;

(C) Intrusive inspection means an inspection involving movement of soil, taking samples for analysis, and/or using more sophisticated diagnostic tools beyond visual inspections or instrument reading;

(D) 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;

(E) Patrol means a simple visual inspection, of applicable electrical corporation equipment and structures, which ~~[that]~~ is designed to identify obvious structural problems and hazards. Patrols may be carried out in the course of other electrical corporation ~~[company]~~ business;

(F) Remedial Action means action taken immediately or as soon as possible to eliminate an imminent hazard to person or property. Remedial action may be temporary, pending final corrective action. Remedial action may include the temporary interruption of service;

(G) [(F)] Rural means those areas [with a population of less than one thousand (1,000) persons per square mile as determined by the most recent United States census; and] where there are fewer than thirty-five (35) customers per circuit mile;

(H) Underground Network means an electrical distribution system typically located in manholes, vaults, tunnels, and other underground structures; and

(I) [(G)] Urban means those areas [with a population of more than one thousand (1,000) persons per square mile as determined by the most recent United States census] where there are thirty-five (35) or more customers per circuit mile.

(3) Standards for Inspection, Record Keeping, and Reporting.

(A) Each electrical corporation subject to this rule shall have personnel sufficiently trained in inspections conduct inspections of its transmission and distribution facilities operated above 600 volts, as necessary ~~to~~ provide safe and adequate service pursuant to section 393.130.1, RSMo Cum. Supp. 2006 ~~[assure reliable, high quality, and safe operation]~~, but in no case may the period between inspections (measured in years) exceed the time specified in the table, included herein, titled "Electrical Corporation System Inspection Cycles (Maximum Intervals in Years)."

(B) Each electrical corporation subject to this rule shall file at the commission by no later than July ~~[January]~~ 1, 2008, compliance plans for the inspections and record keeping required by this rule, with verification by affidavit of an officer who has knowledge of the matters stated therein. These compliance plans shall ~~[will]~~ include the proposed forms and formats for annual reports and source records, as well as the electrical corporation's plans for the types of inspections and equipment to be inspected during July 1 through December 31, 2008 and the coming calendar year. The electrical corporation's compliance plans shall include a projected schedule for completing a full cycle for each infrastructure classification shown in the attached table titled "Electrical Corporation System Inspection Cycles (Maximum Intervals in Years)." ~~[For detailed and intrusive inspections, schedules should be detailed enough (in terms of the months of inspection and the circuit, area, or equipment to be inspected) to allow commission staff to confirm that scheduled inspections are proceeding as planned. For patrol inspections, electrical corporations should explain how all required facilities will be covered during the year.]~~ The commission ~~[energy department or any successor staff departments]~~ may prescribe changes to an individual electric corporation's obligations relating to reporting and record keeping formats and forms when and as necessary ~~[as approved by the commission if the electrical corporation does not voluntarily agree to the changes requested by staff]~~. None of these changes may conflict with the requirements of this rule unless specifically approved by the commission through a variance.

(C) Each electrical corporation subject to this rule shall file with ~~[at]~~ the commission an annual report detailing its compliance with this rule ~~to~~ during the prior calendar year, with verification by affidavit of an officer who has knowledge of the matters stated therein. The first report required under this section shall be filed with the commission by no later than July 1, 2009 and will cover calendar year 2008. Each electrical corporation shall file subsequent annual reports for every following year by no later than July 1 covering the prior calendar year. The report shall identify the number of facilities, by type, which have been inspected during the previous reporting period. It shall identify those facilities that ~~[which]~~ were scheduled for inspection but that ~~[which]~~ were not inspected according to schedule and shall explain why the inspections were not conducted, and provide the electrical corporation's recovery plan to perform ~~[a date certain by which]~~ the required inspections ~~[will occur]~~. The report shall also present the total number and percentage breakdown of equipment rated at each condition rating level, including that equipment determined to be in need of corrective action. Where corrective action was scheduled during the reporting period, the report shall ~~[will]~~ present the total number and percentage of equipment that ~~[which]~~ was or ~~[and]~~ was not corrected during the reporting period. For those instances in which equipment was

scheduled to have corrective action but the equipment was not corrected during the reporting period [the latter], an explanation shall [will] be provided, including a date certain by which required corrective action will occur. The report shall [will] also present totals and the percentage of equipment in need of corrective action, but with a scheduled date beyond the reporting period, classified by the amount of time remaining before the scheduled action. All of the above information shall be presented for each type of facility identified in the table, included herein, titled "Electrical Corporation System Inspection Cycles (Maximum Intervals in Years)," [and shall be aggregated by operating area.] If periodic reporting of infrastructure inspection results is required by another governmental entity, those reports shall also be filed at the commission.

(D) The electrical corporation [company] shall maintain records of inspection activities which shall be made available to commission staff for inspection pursuant to section 393.140, RSMo 2000 and 4 CSR 240-10.010.

(E) For all inspections, within a reasonable period, electrical corporation [company] records shall specify the circuit, area, or equipment inspected, [the name of the inspector,] the date of the inspection, and any problems identified during each inspection, as well as the scheduled date of corrective action. For detailed and intrusive inspections, electrical corporations [companies] shall also rate the condition of inspected equipment. Upon completion of corrective action, electrical corporation [company] records shall [will] show the nature of the work [;] and the date the work was performed [; and the identity of persons performing the work].

(F) Where facilities are exposed to extraordinary conditions or when an electrical corporation has demonstrated a pattern of noncompliance with Commission Safety Standards, 4 CSR 240-18; Electrical Corporation Infrastructure Standards, 4 CSR 240-23.020; [and/] or [Reliability Rules, 4 CSR 240-23.030] any other rules relating to the provision of safe and adequate service, the commission may require a shorter interval between inspections.

(G) Commission staff shall review each electrical corporation's annual report and may [shall] inspect and verify that the electrical corporation is in compliance with this rule.

(H) If the electrical corporation [company] discovers, or should have discovered, upon inspection as required under this rule, or the electrical corporation [company] is otherwise given notice that prudent operation of facilities would require corrective action, then it shall take such [of an electrical corporation's facility is required due to standards to be exercised by a prudent electrical corporation then the electrical corporation shall take such] corrective action within a reasonable period of time. If harm to person or property is imminent, [possible if corrective action is not taken,] then [such] corrective or remedial action shall be taken [made] immediately, or as soon as possible.

(4) In the event an electrical corporation incurs expenses as a result of this rule in excess of the costs included in current rates, the corporation may submit a request to the commission for accounting authorization to defer recognition and possible recovery of these excess expenses until the effective date of rates resulting from its next general rate case, filed after the effective date of this rule, using a tracking

mechanism to record the difference between the actually incurred expenses as a result of this rule and the amount included in the corporation's rates, or if there is no identifiable amount included in the corporation's rates, the amount reflected in the appropriate accounts for infrastructure inspection and maintenance on the corporation's books for the test year (as updated) from the corporation's last rate case will be used to determine the amount included in current rates. In the event that such authorization is granted, the next general rate case must be filed no later than five (5) years after the effective date of this rule. Parties to any electrical corporation request for accounting authorization pursuant to this rule may ask the commission to require the electrical corporation to collect and maintain data (such as actual revenues and actual infrastructure inspection expenses) until such time as the commission addresses ratemaking for the deferrals. The commission will address the ratemaking of any costs deferred under these accounting authorizations at the time the electrical corporation seeks ratemaking in a general rate case.

~~{(4) 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 (5) 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) 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.~~

(5) Variances. A variance from a provision of this rule may be granted for good cause shown. **Nothing in this rule shall prevent an electrical corporation from proposing and the Commission from approving an alternative infrastructure inspection program varying from the table, included herein, titled "Electrical Corporation System Inspection Cycles (Maximum Intervals in Years)" if the electrical corporation can establish that the alternative infrastructure inspection program has previously produced equal to or greater reliability performance than what would be produced under this rule or that the alternative infrastructure inspection program shall produce equal to or greater reliability performance in the future than what would be produced under this rule.**

AUTHORITY: sections 386.040, 386.250, 386.310 and 393.140, RSMo 2000, and 393.130, RSMo Cum. Supp. 2006. Original rule filed June 15, 2007; effective January 30, 2008.

REVISED PRIVATE COST: The revised rule will cost significantly less than the originally proposed rule. Depending on whether the electric corporation already has a process in place for compliance or whether new systems must be created the cost will range from less than \$500 to \$1,000,000 in implementation costs. Annual compliance costs will be divergent as well. However, the revised rule includes a cost recovery mechanism that, when used properly, will allow the electric companies to recover all prudently incurred costs of complying with this rule.

Electrical Corporation System Inspection Cycles
(Maximum Intervals in Years)

		Patrol		Detailed		Intrusive		Notes
		Urban	Rural	Urban	Rural	Urban	Rural	
Poles/Overhead Structures								
Wood		4	6	---	---	12	12	Note 1
Non-wood		4	6	12	12	---	---	Note 2
Conductors, Transformers, Reclosers, Regulators, Capacitors, Switching/Protective Devices, and Streetlighting								
Overhead		4	6	8	12	---	---	
Overhead (with real-time remote monitoring)		---	---	12	12	---	---	
Underground-direct buried and conduit		4	6	8	12	---	---	Note 3
Underground-direct buried and conduit (with real-time remote monitoring)		---	---	12	12	---	---	Note 3
Underground Networks		4	---	8	---	---	---	
Underground Networks (with real-time remote monitoring)		---	---	12	---	---	---	
Manholes, vaults, tunnels, and Other underground structures		4	6	8	12	---	---	

Note 1: No intrusive inspection required for first 12 years after installation, however, intrusive inspection required between years 12 and 18. For poles/structures greater than 12 years of age at inception of program, intrusive inspections must be completed within 12 years.

Note 2: No detailed inspection required for first 12 years after installation, however, detailed inspection required between years 12 and 18. For poles/structures greater than 12 years of age at inception of program, detailed inspections must be completed within 12 years.

Note 3: Some components of underground-direct buried and conduit distribution systems are above ground (e.g., pad-mounted transformers, pad-mounted switches, pad-mounted reclosers, etc.) The inspection intervals also apply to these above ground devices. These inspection requirements do not apply to direct-buried cable or cable installed in underground conduit.