BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Proposed Rule 4 CSR 240-23.020, Establishing Infrastructure Standards for Investor-Owned Electrical Corporations.	))))	**Case No. EX-2008-0231**

OPINION OF COMISSIONER ROBERT M. CLAYTON III
DISSENTING IN PART AND CONCURRING IN PART

This Commissioner dissents from the majority's Final Order of Rulemaking relating to infrastructure standards for electrical corporations ("ECs").[1] The Commission missed its opportunity to implement real change to improve electrical service reliability. Customers have experienced far too many instances of storm-related outages which, in some cases, have been frequent in number and lengthy in duration. Additionally, recent investigations have suggested that non-weather-related interruptions of service have become far too commonplace. This Commission has a responsibility to act in the presence of poor performance yet these rules do not go far enough to effect necessary change in policy. The initially published rules were drafted to establish a new framework for how the Commission monitors ECs with mandates in reporting and mandates for minimum standards for EC inspections of plant in service. While the final rules adopted

[1] The Infrastructure Standards and Reporting rule was originally filed under case number EX-2007-0214 along with the Vegetation Management and Reliability rules. The rules were subsequently filed under separate case numbers for clarity and organization purposes. The Vegetation Management rulemaking is now EX-2008-0232 and the Reliability rulemaking is now EX-2008-0230.

the general framework—which does have value—the adopted minimum standards reduced EC obligations to the point where reliability will be only marginally improved.

BACKGROUND

The need to improve electrical reliability for Missouri consumers became apparent following public hearings held in the St. Louis metropolitan region after significant storm outages occurring in July 2006. Two storms ripped through the region leaving 646,000 people without power during, arguably, the hottest day of the summer. Some customers were without power for nine days while the average customer in the metro area suffered through seven days without power. Many families were unable to remain in their homes without means to cook, to keep food and medicine refrigerated, or to simply stay cool. Countless residents fled their homes for refuge with relatives or paid exorbitant rates for elusive hotel rooms. Those without the resources to travel or those without family were forced to stay at home in stifling heat or suffer the inconvenience of moving to overcrowded shelters. Millions of dollars of food spoiled and businesses were forced to close, idling workers. The most tragic result was that four Missourians lost their lives due to the storm-related electrical outages.

The July storms were not the first to hit the region and its electrical distribution system since storms and the resulting electrical outages affected the St. Louis area in 2004, 2005 and on April 2, 2006. In addition, these storms would not be the last, as more adverse weather conditions caused outages again on November 30, 2006, as well as in January of 2007. During the November 30th outage, thousands of residents were once again without power for up to nine days due to an ice storm which crippled the electrical distribution system. As many as 270,000 customers were left without power when the

temperature fell into the teens and much of the city remained in the dark and cold.[2] And then again, within a few months, in January of the next year, another 350,000 citizens in both Missouri and Illinois were left without power for up to five days.[3]

At the heart of this discussion is whether there is a problem in electrical reliability in Missouri and whether the Commission is satisfied that ECs are offering an acceptable level of service. Some have argued that electrical reliability performance is not only acceptable, but meets high standards.[4] Since Missouri has no reliability standards in place, it is difficult to make such an assessment or calculation. This Commissioner, and former Commissioner Gaw,[5] argued that the outages in question during the summer of 2006 warranted special treatment and analysis. Following investigations of storm outages in 2004[6] and 2005,[7] these Commissioners were not satisfied that sufficient change had occurred and that the public demanded improvement, if not for convenience, for public health and welfare. The PSC investigation into the outages of 2006 was unprecedented and involved new efforts at reviewing EC performance. First, over objections of some, the Commission opened a formal working docket to fully document the investigation and all facts gathered.[8] Secondly, these Commissioners asked for public hearings to learn of the extent of the storm outages as well as the specific hardships endured by residents in the metro St. Louis area.[9]

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[2] Ameren Storm Fact Sheet, available at www.ameren.com/Outage/adc_StormFactSheet.pdf.
[3] *Id.*
[4] "PSC Holds Public Hearing On Ameren's Handling of July's Power Outages," KMOV, October 3, 2006; Levins, Harry, "Surprise: Ameren Is Honored for Its Post-Storm Effort," January 11, 2007.
[5] The term of former Commissioner Steve Gaw ended upon the appointment of his successor on September 18, 2007.
[6] Case No. EW-2004-0583.
[7] Informal investigation report available at www.psc.mo.gov/electric/UE_Storm_Rest_Report_2005.pdf.
[8] Case No. EO-2007-0037, Order Directing Staff to Investigate Union Electric Company d/b/a AmerenUE and Setting Intervention Deadline (Clayton and Gaw, concurring, and Murray, dissenting)
[9] *Id.*, *see also* Commissioners' Request for Local Public Hearings.

Eventually, six hearings were scheduled throughout the metro area. Hundreds of citizens attended the public meetings and more than 125 indicated a willingness to speak on the record. Taking time from family and work, over the course of the twelve hours of testimony, more than 75 witnesses related complaints and concerns regarding utility service. Typically, public hearings attract very few witnesses. Many citizens utilized the public hearing process to communicate their displeasure with both the company and the PSC, to learn what the PSC and AmerenUE planned for improvements and to provide anecdotal testimonials of heroics and failures during the storm outages. The process proved to be an exceptional exercise in democracy as the Commission gained specific evidence of how people were affected by the outages.

The public hearing effort revealed a great deal about the outages, the expectations of customers and the hardship many of them experienced. Witnesses testified of being without power for three, four, five, six and seven days.[10] One witness testified to not having power for a total of nine days.[11] Witnesses expressed frustration that on the night of the storm one side of the street would have power, while the other side of the street would not.[12] Communications were difficult without power and some claimed that the information handed out by the company was not helpful.[13] Phone lines were jammed and those who were able to make contact with a company representative were upset with the questionable accuracy of the information given. One witness became so frustrated when

[10] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 5, 2006 Public Hearing in Potosi, 42, Oct. 3 2006 Public Hearing in Hazelwood East High School, 25, Oct. 5, 2006 Public Hearing in Farmington, 6, Oct. 4, 2006 Public Hearing in St. Louis County Library, 56, Oct. 4, 2006 Public Hearing in Wohl Community Center, 68.
[11] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 3, 2006 Public Hearing in Hazelwood East High School, 69.
[12] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 4, 2006 Public Hearing in Wohl Community Center, 103.
[13] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 3, 2006 Public Hearing in Hazelwood East High School, 39.

cleaning up the mess of rotting food in her refrigerator that she contemplated committing harm on company executives by use of a rotten pot roast.[14]

The power outages caused more than simple frustration and imposed real hardship. Some customers with special medical needs spoke of hardships caused by the outages.[15] One family offered troubling concerns relating to their disabled child, a quadriplegic in need of a respirator. Because of the person's disability, he required the use of a special mattress when sleeping and had no body temperature control. He was forced to sleep multiple nights in his wheel chair because of overcrowding at shelters and because elevators at the care facilities did not have sufficient electricity to move the wheelchair upstairs.[16]

With electricity shut off, other critical services were also affected, leading to a potential public health crisis. Some rural and urban customers lost water service when back up pumps did not operate.[17] In one instance, water became contaminated and the city issued a boil order. Yet, many were not even aware of the existence of the boil order until the day of the hearing, almost three months later.[18] One witness related that his home lost both power and water at a very awkward time while he was in the restroom, leaving him with a number of less than desirable decisions to make.[19] Additionally, with

[14] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Oct. 4, 2006 Public Hearing in St. Louis County Library, 94.
[15] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 4, 2006 Public Hearing in St. Louis County Library, 8-13, 28-31.
[16] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 4, 2006 Public Hearing in St. Louis County Library, 28-31.
[17] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Oct. 5, 2006 Public Hearing in Potosi, 66-67.
[18] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 3, 2006 Public Hearing in Hazelwood East High School, 85.
[19] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 5, 2006 Public Hearing in Potosi, 29-30.

no electrical service, many communications systems did not function properly and phone service in some areas was disrupted due to jammed phone lines.[20]

The outages also had an impact economically. Businesses were forced to shut down or reduce their hours.[21] In one instance, a local restaurant owner lost $1,500 in food from the freezer and $1,900 in lost sales only to face having her utilities disconnected for non-payment due to a $50 arrearage on a $1,400 July 2006 electric bill.[22] Some witnesses expressed a need for more resources to address electrical back up systems.[23] Some described increases in crime due to darkened streets and neighborhoods.[24]

The most surprising aspect of the local public hearing process involved reliability issues during normal weather conditions and without the presence of storms and strong winds.[25] One customer testified that her four year old subdivision loses power so often that she is "afraid to sneeze in the house because the lights may go off."[26] Her concern was echoed by another witness whose continuous loss of service, including loss of

[20] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 3, 2006 Public Hearing in Hazelwood East High School, 31 and 55-56.
[21] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 5, 2006 Public Hearing in Potosi, 11, and Oct. 3, 2006 Public Hearing in Hazelwood East High School, 61.
[22] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 5, 2006 Public Hearing in Potosi, 39-41
[23] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 3, 2006 Public Hearing in Hazelwood East High School, 76.
[24] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 4, 2006 Public Hearing in Wohl Community Center, 104.
[25] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Oct. 3 2006 Public Hearing in Hazelwood East High School, 65, 84, 92, and 119-20, Oct. 4, 2006 Public Hearing in St. Louis County Library, 9, 25, 32, 42, 56, 80-81, 89, and 110, Oct. 4, 2006 Public Hearing in Wohl Community Center, 32, 59, 68, and 110, Oct. 5, 2006 Public Hearing in Farmington , 8-9, and 11, Oct. 5, 2006 Public Hearing in Potosi, 8, 33, 36, 45, 50, 67-68, and 70, Oct. 18, 2006 Hearing in Hillsboro, 5-9, and 21-23.
[26] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 3, 2006 Public Hearing in Hazelwood East High School, 84.

service on Thanksgiving morning, has caused her to consider moving.[27] Many groups have become so frustrated by the unreliable service that they have found ways to track outages. One neighborhood of 900 residences has set up a system that tracks power outages electronically. They have recorded over 300 instances of electricity losses that are at least long enough to reset clocks.[28] Another family has a specific list of dates and times of power outages from 1999 until present. In fact, the family appeared at two local public hearings and had added another two outages to the list in a short period of time.[29]

Despite the overwhelming evidence of questionable service and significant suffering experienced in the region, after conducting its investigation, staff offered very little in terms of specific suggestions or mandates for improvement. The staff praised AmerenUE for a restoration plan that was "well-executed."[30] Mixed in with that praise, staff also saw fit to recommend three rulemakings relating to reporting requirements for ECs.[31] Those rulemakings mandated new, but insufficient, levels of reporting of vegetation management plans, for infrastructure inspection plans and reporting on reliability performance. Curiously, while the staff supposedly recognized the evidence of poor reliability and evidence of inadequate tree trimming,[32] staff did not mandate new clearance standards in vegetation management, did not mandate minimum intervals for

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[27] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 3, 2006 Public Hearing in Hazelwood East High School, 106.
[28] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 4, 2006 Public Hearing in St. Louis County Library, 56.
[29] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 5, 2006 Public Hearing in Potosi, 70, and Oct 18, 2006 Public Hearing in Hillsboro, 5-9.
[30] Report on AmerenUE's Storm Outage Planning and Restoration Effort Following the Storms on July 19 and 21, 2006, Case No. EO-2007-0037, at 5, 23; *see also* "PSC Compliments Ameren," Kansas City Star, November 18, 2006.
[31] Report on AmerenUE's Storm Outage Planning and Restoration Effort Following the Storms on July 19 and 21, 2006, Case No. EO-2007-0037, Appendixes D, E, and F.
[32] Jonsson, Greg, "Customers Berate AmerenUE as Regulators Listen," St. Louis Post-Dispatch, October 3, 2006.

infrastructure inspection and replacement, and did not mandate sufficiently acceptable measures of reliability performance and reporting.

The investigation which instigated this rulemaking began in 2006 in the St. Louis region, but reliability problems elsewhere have suggested additional need for new rules. Outages in 2007 occurred in Southwest Missouri in the Empire service area. Additionally, major outages throughout Missouri occurred again in 2007 in the service areas of Empire,[33] AmerenUE,[34] Aquila[35] and KCPL.[36] Investigations have been opened into each electrical corporation's performance before, during and after the storms and requests for local public hearings have been made.[37] Because the data and testimony has not been compiled, this opinion focuses on the testimony and evidence in the 2006 storm investigation.[38]

This Commissioner, and former Commissioner Gaw, believed that unexplained and unacceptable outages demanded answers and timely action. In response, these Commissioners agreed with the three-pronged effort at improving electric service in Missouri. Unfortunately, these proposals must be stronger than simply reporting as proposed by staff. First, this Commissioner argued for new plans in vegetation management including tough mandates in tree trimming quality and quantity in addition to comprehensive reporting. Second, this Commissioner believes that infrastructure failures and evidence of equipment in poor condition and plant require investment and attention through a mandated infrastructure inspection and replacement program, in

[33] EO-2008-0215, *see also* Concurring Opinion of Commissioner Robert M. Clayton III.
[34] EO-2008-0218, *see also* Concurring Opinion of Commissioner Robert M. Clayton III.
[35] EO-2008-0220, *see also* Concurring Opinion of Commissioner Robert M. Clayton III.
[36] EO-2008-0219, *see also* Concurring Opinion of Commissioner Robert M. Clayton III.
[37] *See* notes 33-36, *supra*.
[38] EO-2007-0037.

addition to reporting. Thirdly, it is the opinion of this Commissioner that reliability can only be tracked and evaluated if high standards are in place to meet the demands of the Commission.[39]

This dissent outlines how the majority missed an opportunity in drafting an infrastructure standards and reporting rule by approving a watered-down version that will fail to bring about the broad and comprehensive change that the public not only desires, but deserves.

INFRASTRUCTURE STANDARDS RULE

One prong of attack in the "three-legged stool" approach to improving reliability is establishing standards and reporting for infrastructure inspection and replacement. The electrical plant in place cannot be "operated-to-failure,"[40] where it is only replaced at the time it falls down or stops working. Electrical service is not a convenience but a necessity, and the presence of old or dilapidated equipment leading to power failures, during storms or otherwise, is simply not acceptable. Electric infrastructure must be of high quality, it must be regularly evaluated for technological advances and it must be examined and reexamined to ensure it is in good condition.

During the local public hearing process, witnesses identified many parts of the St. Louis metropolitan area subject to aging infrastructure contributing to power failures. One customer reported that two poles snapped during the storm, one caused a downed

[39] The third leg of the stool involves proposals for reliability standards and reporting. That rule is pending in case number EX-2008-0230. Former Commissioner Gaw and this Commissioner drafted a reliability rule which was sent to the Department of Economic Development (DED) for procedural review. DED took three months to perform its ministerial review. *See also* Dissenting Opinion of Commissioner Robert M. Clayton III in EX-2008-0105 and EX-2008-0230.

[40] "Operating To Failure," St. Louis Post-Dispatch, July 22, 2007.

wire and the other pole held a transformer.[41] Outside of the devastation caused by the storm, one witness described the transformer behind his house as cast iron, "gray, rusty, burnt and looks horrible" with "little small copper wires."[42] Another witness testified that he called AmerenUE persistently about the pole in his back yard stating that he was assured that the core of the pole was not bad. When an AmerenUE crew finally came out to inspect the pole, the supervisor announced that the pole was 90% rotten.[43]

This Commissioner dissents from the majority's Final Order of Rulemaking relating to infrastructure inspection, which departs significantly from the initially published proposals drafted by this Commissioner and former Commissioner Gaw (Clayton and Gaw draft). The heart of the rule is located on the last page in the form of a chart with mandates on the maximum allowable intervals for inspections of infrastructure. The chart also established various degrees of inspection for different types of plant. Additionally, prior to the Final Order of Rulemaking, but during the rulemaking process, this Commissioner worked with the staff to reach an agreement that revised the initially published version of the rule as an attempt at a compromise. However, in the final rulemaking, the version approved by staff was, once again, reworked and fatally modified to remove the stringent mandates and leave in place lesser standards.

Under the rule, the level of detail in inspections will vary according to the proposed schedule whether defined as a "patrol inspections," "detailed inspections" and "intrusive inspections." "Patrol inspections" require only a visual review of certain

[41] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 3, 2006 Public Hearing in Hazelwood East High School, 88-89.
[42] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 4, 2006 Public Hearing in Wohl Community Center, 17.
[43] Union Electric Company's Storm Preparation and Restoration Efforts in Eastern Missouri, Case No. EO-2007-0037, Oct. 3, 2006 Public Hearing in Hazelwood East High School, 28.

infrastructure from a distance; "detailed inspections" involve careful visual inspection and taking routine instrument readings of certain plant in service; and, "intrusive inspections" include removing soil and taking samples for more sophisticated instrument readings of certain equipment. Further, the rule defines different schedules for urban and rural service areas.

"Patrol inspections," the least intrusive and least costly level of inspection, are utilized in the regular review of basic infrastructure in service such as overhead lines, poles and transformers. These inspections can be easily completed by trained tree trimmers, linemen or other trained staff by simply viewing the equipment. This Commissioner proposed "patrol inspection" intervals to be no greater than one year for overhead lines in urban areas and two years for lines in rural areas. Staff proposed that the intervals be increased to two years for urban areas and three years for rural areas. However, the majority adopted other proposals and quadrupled the original intervals in urban areas to inspections every four years, while in rural areas, the intervals were tripled to six years. This means that any given pole or wire will only be checked once every four or six years.

Infrastructure such as wires, above and below ground, must also be subject to "detailed inspections" which identify problems that cannot be found through a "patrol inspection." The majority adopted provisions increasing the intervals between "detailed inspections" of overhead lines in urban areas from five years to eight years, while "detailed inspection" intervals for connections to buried lines increased from three years to twelve years. In rural areas, the intervals for overhead "detailed inspections" increased from five years to twelve years and maximum intervals for "detailed inspections" for

connections to buried lines increased from three years to twelve years. These changes are significant departures from the original intent of the rules to require regular, timely inspections to aging infrastructure. Indeed, under the adopted rules, certain poles, lines and transformers will wait longer than a decade for a thorough inspection.

The Clayton and Gaw rule proposed "intrusive inspections" of wood poles under fifteen years old every ten years and subsequently every twelve years after passing an intrusive inspection. Later in the rulemaking process, this Commissioner and staff agreed to a twelve year "intrusive inspection" cycle if the wood pole was more than 12 years old. New poles would not be subject to "intrusive inspection" until they were in service for twelve years. The majority did not amend this portion of the rule and this Commissioner concurs with the majority on the "intrusive inspection" cycle.

Because of concerns for increasing costs, certain efficiencies were originally considered. For example, the Clayton and Gaw draft was designed to incorporate other inspection or maintenance schedules as part of the inspection plan. If an EC was conducting vegetation management in a given area, logic suggests that the same inspectors could assess the condition of infrastructure and report back any problems, thereby reducing costs. The inspection cycles are no longer consistent with each other and potential efficiencies cannot be readily identified. In some cases, the inspections will occur so infrequently (twelve years for certain inspections) that there is no need to actively seek out efficiencies.

Further, the rule was altered to eliminate the requirement that staff complete regular field inspections of infrastructure to verify EC compliance with the rule. Staff involvement is necessary to ensure compliance and effective infrastructure replacement.

The public expects that this agency will monitor and review utility performance, yet staff does not consistently go into the field to inspect vegetation management efforts, infrastructure condition or any other reliability problem unless a larger power outage occurs. The Commission should demand that its staff be in the field to report back with the most detailed and accurate information possible so that quality decisions can be made. Much of the original data gathered from the storm outages of 2006 was delivered by the utility rather than first-hand, eye-witness review by the staff. The cost to the agency, and, in turn, to the ratepayer through utility assessments would be negligible for a designated group of engineers to evaluate and study the performance of ECs in the field on both infrastructure and vegetation management. Unfortunately, this rule will not mandate those inspections to ensure objective, independent evaluations are made on utility performance.

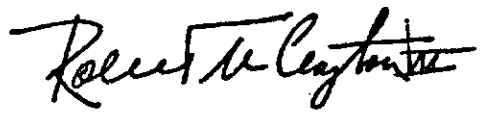
Lastly, this Commissioner believes some progress has been made through adoption of the infrastructure standards rule and must concur, in part, with the majority's Final Order of Rulemaking. While the staff's original infrastructure rule focused on reporting, the staff believes now that reliability will improve because of this mandated inspection and replacement program. If the original draft of the rule, as published, had not been proposed, fewer inspections would be occurring on a less frequent basis leading to more failing electrical plant. The basic framework of the inspection mandates and reporting was adopted, which will permit future evaluation of the program and improvement, if necessary. Notwithstanding that modest improvement, however, the mandates for inspection will not bring about the change the public demands and deserves.

CONCLUSION

In conclusion, now is the time to act in making effective changes in regulatory policy to improve reliability through new infrastructure inspection and replacement practices. While some of the rule provisions are better than others, this Commissioner believes that the rules adopted by the majority will result in far less improvement than the original proposals. The public and its elected representatives expect that the Commission will implement positive change. This Commissioner believes that the Commission has missed its opportunity to become a national leader in reliability and that electric customers will continue to receive, in some places, insufficient service.

For the foregoing reasons, this Commissioner dissents, in part, and concurs, in part.

Respectfully submitted,



Robert M. Clayton III
Commissioner

Dated at Jefferson City, Missouri,
on this 6th day of March 2008.