BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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In the Matter of an Investigation of Union Electric Company, d/b/a AmerenUE's Storm Preparation and Restoration Efforts

Case No. EO-2008-0218

STAFF'S RESPONSE TO COMMISSIONER QUESTIONS

COMES NOW the Staff of the Missouri Public Service Commission (Staff) and for its Response To Commissioner Questions, respectfully states to the Missouri Public Service Commission (Commission) as follows:

1. On January 2, 2008, the Commission issued its Order Directing Staff To Investigate

AmerenUE's Storm Preparation And Restoration Efforts And Setting An Intervention Deadline. This Order directed Staff to "investigate the effectiveness of Union Electric Company, d/b/a AmerenUE's storm preparation and power restoration efforts and report its findings and recommendations to the Commission" not later than April 3, 2008.

2. On January 15, 2008, Commissioner Robert M. Clayton III issued a Concurring Opinion, requesting Staff's investigation include fourteen (14) specific questions not listed in the majority Order.

3. On April 3, 2008, Staff filed an initial report of the investigation as directed by the Commission's January 2, 2008 Order. The initial report contained a summary of progress made to date and indicated Staff's final report would be filed no later than June 17, 2008.

4. On June 17, 2008, Staff filed its Final Report Of Staff Investigation, which included in Attachment B, company responses to the fourteen (14) questions raised by Commissioner Clayton's Concurring Opinion.

5. Many of Staff's responses to the fourteen (14) questions were contained throughout the

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Report filed on June 17, 2008. Debbie Bernsen, Staff Utility Management Analyst III, prepared the report attached hereto, which contains a more direct and concise response to the questions, including references to the Report where applicable and additional information gathered since the Report was filed.

WHEREFORE, Staff respectfully submits its Response To Commissioner Questions.

Respectfully submitted,

/s/ Jennifer Hernandez

Jennifer Hernandez Legal Counsel Missouri Bar No. 59814

Attorney for Staff of the Missouri Public Service Commission P.O. Box 360 Jefferson City, MO 65102 (573) 751-8706 (Telephone) (573)-751-9285 (Fax) jennifer.hernandez@psc.mo.gov

Certificate of Service

I hereby certify that copies of the foregoing have been mailed, hand-delivered, or transmitted by facsimile or electronic mail to all counsel of record this 5th day of August 2008.

<u>/s/ Jennifer Hernandez</u>

Response to Commissioner Clayton's Questions in Concurrence

1) Analysis of the age, siting, durability and quality of the other utility's infrastructure, including the placement of distribution lines in light of the ice storm outages of 2007.

AmerenUE utilized the services of an engineering consultant, KEMA, to conduct a study of the Company's ability to prepare and respond to severe weather events. This study was undertaken to review the Company's response to the three events of 2006; the thunderstorms of July 19 & July 21 and the storm of November 30 through December 1. Included in the scope of work performed was an infrastructure review based upon a forensic study of the system's resilience under severe weather conditions. The consultants analyzed the existing data and made a recommendation for the Company to capture outage root causes and affected components better in order to support a more effective post-storm infrastructure analysis. The KEMA Report was finalized in December 2006. The Company has responded that it intends to develop a team in 2008 to identify the criteria necessary and how to capture and utilize the information most effectively. However, such an analysis was not performed on the results of the 2007 Ice Storm.

A recent rulemaking 4 CSR 240-23.020, Electrical Corporation Infrastructure Standards, became effective June 30, 2008, and the requirements of it will provide data and information that would enhance this type of analysis for future events. The first compliance report under this Rule is to be filed no later than July 1, 2009. However, the time frames for inspection of all of the electric utility's infrastructure may require 12 years due to the specific interval requirements contained in the Rule.

2) A comprehensive compliance review of Commission Orders stemming from prior storms and outages applicable to the utility.

The Staff did conduct a review of the prior reports and Commission orders stemming from prior outage reports produced by the Staff. The Staff's review included an analysis of past reports, as well as the status of recommendations made to the Company in these reports. The Staff also reviewed any Orders issued by the Commission and any formal correspondence available regarding the reports.

AmerenUE has had the greatest number of formal reviews conducted by the Missouri PSC Staff of its storm restoration efforts. These outage reports are 1) Staff Report on Restoration Efforts Following Major Ice Storm in Late January of 2002 (report reviewed the actions of Kansas City Power and Light, Missouri Public Service Company and Union Electric. 2) Missouri Public Service Commission Staff Report on Restoration Efforts of AmerenUE Following Severe Thunderstorms on July 5th, 2004, 3) Staff Report on AmerenUE's Storm Restoration Efforts Following the August 13, 2005 Severe Storm, 4) Report On AmerenUE's Storm Outage Planning and Restoration Effort

Following the Storms on July 19 and 21, 2006 and 5) Missouri Public Service Commission Staff Final Report of the Investigation of Union Electric Company d/b/a AmerenUE's Storm Preparation and Restoration Efforts Following the Major Ice Storm in December 2007. Of these five reviews, only the last two were assigned case numbers.

The Staff did review the January 2002 Report which made four recommendations to AmerenUE. The 2004 Report was issued on August 31, 2004. It was again filed in November 2004 in Case No. EW-2004-0583 as an attachment to the Staff report on vegetation management. A Staff status report regarding the Company's progress on recommendations was also filed on March 7, 2005.

The Staff Report on AmerenUE's Restoration Efforts subsequent to the August 13, 2005 storm included seven recommendations and the Company provided formal responses to the recommendations in this report.

A formal case was opened and assigned Case No. EO-2007-0037 in order to obtain and present information regarding the Company's storm restoration efforts in the July 2006 storms. Twenty-three recommendations were made by the Staff and the Company issued its formal responses to these in December 2006. An Order was issued on July 2, 2007 closing this case. The Staff continued ongoing communications and meetings with the Company regarding its actions over the next year.

The most recent storm report issued in June 2008 detailed the ice storm of 2007 and was assigned Case No. EO-2008-0218. Commission orders, concurrences and dissents were all reviewed during the Staff's development of its report. The Company is to provide its formal responses to the recommendations in this report by August 15, 2008.

The Staff's review of previous Commission orders stemming from the prior storms and outages and the Company's actions indicated that the Company was in compliance with these particular orders.

3) An analysis of all assistance requested or offered and whether the utility

accepted or denied the offers of assistance by other entities.

The Company first began mobilization of its own crews and on-property contractor resources Sunday morning, December 9. St. Louis metro crews were held there to assess the severity of the forecasted second storm coming to that area. The first Midwest Mutual Assistance Group (MMAG) call was held December 9 at 2:00 p.m.. Several utilities were willing to release contractor resources but were not inclined to release their own crews for assistance yet. AmerenUE did obtain commitments for contractor and utility resources from Duke, E-On US, Indianapolis Power and Light, and Vectren Energy. The second MMAG call was held December 10 at 1:00 p.m. Additional commitments were received from Xcel Energy for utility resources. In all, two mutual assistance utilities and 14 line construction contractors sent crews from Minnesota, Kentucky, Indiana, Ohio, Kansas, Illinois, Georgia, Tennessee, North Carolina, Oklahoma, and Mississippi. The Company utilized approximately 1,635 linemen, tree trimmers and support personnel from foreign crews during the 2007 Ice Storm.

The speed with which contractor or other utility crews can arrive in a utility's service area after a major storm can be influenced by the amount of damage to surrounding areas, the travel distance and the weather conditions. The Company stated

that it did accept assistance from any utility that could offer personnel and equipment within the time frame that was needed.

4) An analysis of the Call Center Operations during the storm and any

observations about customer service issues.

The Staff's reports following severe weather storms in 2004, 2005, 2006 and 2007 examined the operations of the Company's Call Center and its responsiveness to its customers during periods of major outages. These reports were all reviewed in conjunction with the development of the report detailing the response of the Company to the 2007 Ice Storm.

During a severe weather event, Company Call Center management provides detailed statistics regarding Call Center operations throughout the course of the storm. The Company also informs the Staff of technical issues it encounters that may affect the quality of service it is providing. This has occurred consistently when severe weather occurs and causes major outages over the last 3 years.

The Staff reviewed a wide range of procedures and practices pertinent to customer service during a major outage. This review included methods available to the customer to report their outage, as well as the ability of the customer to obtain information regarding the progress of restoration. Details on these practices can be found on pages 29-45 of the Staff's report.

The Staff reviewed the Call Center performance statistics during the period of the December 2007 Ice Storm outage. Performance statistics from prior storms were also reviewed to determine if the Company's attempts to resolve issues that had occurred during previous major storms had been successful. Various technical issues have surfaced over the last several major outages and these issues have caused a greater focus upon the participation of the Information Technology Department in resolving problems. The Storm Report details the specific information regarding the Call Center on pages 29-35.

Website information has become an increasingly valuable source of assistance and communication for the customer. Changes to the Company's website that were recommended by Staff in prior audit reports were implemented. These revisions both increased the ease of utilization of the website and the amount of information available. Media communications were initiated early in the storm and continued throughout the restoration.

Additional detailed information is provided in the Staff's report along with recommendations for improvement on pages 29 through 39.

5) An analysis of the utility's current tree trimming schedule and input on whether there is the need to amend the current program or consider alternative programs suggested through other Commission cases.

Under the requirements of Case No. EW-2004-0583, In the Matter of an Investigation into the Tree Trimming Policies of Union Electric Company d/b/a

AmerenUE, the Company filed quarterly reports on the status of its vegetation management program. The Company's latest report was filed on May 14, 2008 detailing its progress during the first quarter of 2008. As of March 29, 2008, the Company had completed 24.4% of the total distribution line miles scheduled for the year.

The Commission's Electrical Corporation Vegetation Management Standards and Reporting Requirements 4 CSR 240-23.030 became effective on June 30, 2008. The Company filed documentation concerning its Missouri Vegetation Management Standards on July 1, 2008 pursuant to the requirements of this Rule. The new rule will provide data and empirical information that will enhance analysis of future events. The first compliance report is to be filed no later than April 1, 2009. It should be noted that the completion of the first vegetation management cycle will not be achieved until four years following the effective date of the rule for urban areas and six years following the effective date of the rule for rural areas, due to the specific vegetation management interval requirements.

4 CSR 240-23.010 Electric Utility System Reliability Monitoring and Reporting Submission Requirements becomes effective July 30, 2008. This rule will require reporting of worst performing circuits and actions taken (or planned) to improve the performance of these circuits. Additionally, reporting will include reliability improvement programs that are being implemented by the utility.

As utility compliance reports are filed in accordance with these new rules, Staff will be able to evaluate if the current programs are effective or if rule amendments/alternative programs should be recommended.

6) An evaluation of the communication, cooperation and assistance between the affected utilities, citizens and city, county and state officials.

Communication with individual customers is addressed in the response to Question 4. Information regarding the Company's interactions with other utilities is provided in responses to Questions 3 and 9 in this document.

The response provided here will focus on the communication, cooperation, and assistance between AmerenUE and local, city, county and state officials. All formal communications regarding restoration efforts were handled by the AmerenUE Emergency Operations Center (EOC). These formal efforts included media releases and contacts with the State Emergency Management Agency (SEMA). AmerenUE did participate consistently in the daily SEMA conference calls. SEMA activated its EOC on December 9, 2007 and returned to normal operations December 18.

City and county officials had been encouraged in the past to ensure that they had established contact points with AmerenUE in the divisions that serve them. As a result of recommendations made by Staff in the 2006 Storm Report, the Company held a number of meetings with community leaders, mayors and municipal officials. The Company also met with representatives from the Department of Health and Senior Services (DHSS) on February 23, 2006 to discuss concerns regarding the nursing home and care facilities during periods of extended outages. These meetings helped to establish a point of communication during severe weather.

The Commission's Energy Department indicated that the Company could be relied upon to notify them when a large outage occurred and subsequently continue to provide status information to the Staff regarding the restoration efforts and any difficulties encountered.

Staff also contacted a number of city and county officials from the areas affected by the December 2007 storm. These officials believed the Company's assistance was critical in providing them with timely information regarding local services and restoration efforts. The Commission received several letters from city officials in affected areas formally recognizing the efforts taken by AmerenUE during the December 2007 storms to maintain communications with them.

The Staff report identified a potential for improvement in the coordination, consistency and effectiveness of the messages being sent to the media and customers. These concerns for the Company's corporate communications area are consistent with those identified in the KEMA Report. The Staff included a recommendation on page 45 of its Report.

7) If any of the utility's service area lost electrical service for a prolonged

amount of time, provide an analysis of what caused the prolonged outage.

AmerenUE customers were affected by the storm from early morning December 9 until December 12, when restoration was determined to be completed. A total of 96,891 customers were without electric service over the course of the ice storm outage. The majority of these customers were in the Central Ozarks and Boone Trails divisions of AmerenUE.

Almost half of all of the total customers out were restored by the end of the second day. In spite of a second wave of ice on the second day, almost 80% were restored by the end of the third day.



The Centertown area suffered a particularly extensive outage with all of its 500 customers losing power for approximately four days. There was an immense amount of damage to the area. As other nearby restorations were completed, the Company was able to free up a number of employees to concentrate on Centertown. Over 300 Ameren employees were sent to the area on Thursday to handle the massive damage to the system there. Restoration was completed that day.

8) An assessment of the coordination of efforts to ensure that critical operations facilities such as hospitals, residential care facilities, police and fire department buildings had temporary electric needs satisfied until service from the grid could be restored.

Most critical care facilities such as hospitals are required by state and federal regulation to have standby emergency generation for certain circuits and functions. For example, the Department of Health and Senior Services, Division of Regulation and Licensure, has regulations for hospitals in 19 CSR 30-20 that require standby emergency generation for certain circuits and functions with sufficient fuel on site to ensure

continuous operation for 24 hours. However, many residential care facilities do not have similar requirements and do not have standby emergency generation.

AmerenUE's Restoration Plan places a priority on addressing transmission, subtransmission, substation and feeder outages to establish service to the largest number of customers quickly. Outage orders for any facility that has been designated as "critical" are manually reviewed by the EOC and the division when they are called in. These orders are "worked" into the schedules as soon as possible and assigned to a crew. Outages to critical facilities that are part of a feeder or subtransmission outage are moved to the top of the priority list. Critical loads include hospitals, police and fire stations, civil authority communication centers, water plants, sewer plants television and radio stations.

The Public Service Commission Staff participated in the emergency management efforts of SEMA during the December 2007 Ice Storms. This included having a Commission Staff member onsite at SEMA's Emergency Operations Center (EOC) for an average of 10 hours on a typical day. The Staff also participated in twice daily conference calls that included many state agencies, county EOCs, municipal EOCs or officials, federal agencies, and non-government/volunteer organizations. One of the topics that is frequently dealt with at SEMA's EOC and during the conference calls is the need for emergency generation or fuel for emergency generation. Requests for emergency generation needs are typically raised during the conference calls or are directly requested from the county or municipal agency where the need occurs. During the first 48 to 72 hours of a major storm event, such as the December 2007 Ice Storm, significant resources of the state emergency management function are devoted to the need for and the transportation of electrical generators. Typically, the need for fuel for generators occurs after the first 24 hours. State agencies that are involved in the electrical generator work include SEMA, National Guard, Office of Administration, and the Department of Natural Resources. In addition, the Staff coordinates requests for restoration of critical facilities throughout the storm restoration process.

9) An assessment of the interdependence among all PSC certificated utilities as well as with utilities not certificated by the PSC in the affected area.

The Staff for purposes of addressing this issue will use the term "utilities" to refer to electric utilities. However, Staff would note that other utilities: telecommunication companies, water and sewer companies, gas companies, cable companies, and even cell phone companies require coordination efforts by the electric utility during a storm restoration effort. All four of the certificated electric companies' (Investor-owned utilities or IOUs) restoration plans include contract crews and mutual assistance crews from other electric utilities during major outages. Staff is not aware of any electric utility, in Missouri or in the continental United States, that does not include contract crews and mutual assistance crews in its staffing during a major outage.

Contract crews are independent contractors that work for electric utilities. Typically, at any given time, contract crews will be working on an electric utility's system. For lineman crews, the contractors normally work on large projects such as replacing a 5-mile section of distribution line while the day-to-day tasks are carried out by the utility's in-house crews. For tree-trimming crews, almost all of the work, day-today or larger projects, is carried out by contract crews. Contract crews that are working on the system at the time of the outage offer two advantages over other assistance options. First, the crews are on-site. Since a crew is not just manpower, it is also the trucks and equipment, avoiding the initial travel time required for out-of-state crews to respond can significantly reduce the duration of the outage. During some recent storm restoration efforts, some crews have traveled as much as 48 hours to reach the utility's system and while a utility truck is an excellent work platform, it is not the most comfortable vehicle to travel in. Second, contract crews that are working on the system are already familiar with the utility's procedures, parts of the service territory, and some of the utility's personnel. All of these factors make an on-site contractor a valuable asset during storm restorations.

For crews that come from other utilities, either contractors or utility crews, coordination with other utilities must take place. The primary way that this coordination takes place is through mutual assistance organizations like the Midwest Mutual Assistance Group (MMAG). In addition to twice daily conference calls during major outages, the MMAG also provides the utilities with valuable contact information to discuss the availability of crews with other utilities.

Contract crews that are working for other utilities are another resource during a major storm outage. Since most contract crews work for various utilities, the contract crews typically have an easier time adapting to a utility's specific procedures. This can have benefits in both the speed of the restoration process and the safety of the process. However, since a storm often strikes multiple utilities in the same geographical area, contract crews that are working on neighboring utilities are often supporting that utility's restoration efforts and are not available.

Due to the scenario for the December 2007 ice storms, the interdependence of the utilities (certificated and non-certificated) was limited. Since all certificated utilities and most non-certificated utilities were affected, their ability to provide local mutual assistance was limited. The rural electric cooperatives were able to provide some mutual assistance within their member organizations since some of their service areas did not experience as severe icing conditions. Mutual assistance from adjacent states was limited due to either utilities being directly affected by the same winter storms or utilities committed to provide assistance to locations that were affected earlier by the storms. Some examples of adjacent states being affected include: Oklahoma Gas & Electric, 300,000 customers interrupted (762,000 total customers) from December 9 through December 20 and Westar Energy, 360,000 customers interrupted (674,000 total customers) from December 10 through December 20.

10) An analysis that includes a comparison of utility performance with other utilities that had significant outages during the same time period.

All four Missouri investor-owned electric utilities, many municipal electric utilities, and rural electric cooperatives were affected by the December 2007 ice storms.

Over 300,000 electrical customers were interrupted statewide. The State Emergency Operations Center was activated from December 9 to December 18.

The ice storms varied across the state in their level of intensity and ice accumulations. Details on the course of the storms are presented in the section of the Staff's report on the weather condition and severity of the storm.

Utility	Total Missouri Customers	December 2007 Storm Customer Interruptions	Percent of Total Customers Interrupted	Start of Interruptions	End of Interruptions (Note 1)
AmerenUE	1,180,000	97,000	8.2%	12/09/07	12/13/07
Aquila	308,000	84,000	27.3%	12/09/07	12/18/07
Empire	144,000	65,000	45.1%	12/09/07	12/19/07
KCP&L	271,000	54,558	20.1%	12/10/07	12/13/07
Total	1,903,000	284,058	14.9%	12/09/07	12/19/07

The following table provides summary information on the four electric utilities. Some figures have been rounded.

Note 1: Some customer interruptions may have lasted longer due to customer restoration responsibility.

11) If damage was caused by vegetation, a detailed overview of the type and extent of damage caused by various scenarios including whether the vegetation was located in the easement or right of way, whether the vegetation fell from outside the right of way, whether the vegetation was diseased or particularly weak, whether the vegetation fell vertically from above the electrical conductors and whether the vegetation had been appropriately addressed prior to the storm in accordance with the utility's vegetation management plan. Further, what percentage of the damage would have been prevented by the utility strictly adhering to its vegetation plan? What percentage of the damage would have been prevented by the utility if strictly adhering to the vegetation management plan proposal attached to this Opinion?

Detailed information is not available to support an analysis of this type. 4 CSR 240-23.030, Electrical Corporation Vegetation Management Standards and Reporting Requirements, became effective June 30, 2008.

This Rule will provide information that would provide data and empirical information that would enhance analysis of this type for future events. The first compliance report required by this Rule will be filed no later than April 1, 2009. However, it should be noted that under the requirements of this Rule, the completion of the first vegetation management cycle will not be completed until four years following the effective date of the Rule for urban areas and six years following the effective date of the Rule for urban areas and six years following the effective date of the Rule for urban areas and six years following the effective date of the Rule for rural areas, due to the specific vegetation management interval requirements.

Additionally, Staff intends to facilitate a workshop to discuss the storm reports filed for all four electric utilities. An expected topic of that workshop will be enhanced acquisition of forensic data during storm recovery efforts. This forensic data, in conjunction with the data obtained via the Electrical Corporation Infrastructure Standards and Electrical Corporation Vegetation Management Standards and Reporting

Requirements Rules, will enable the electric utilities and Staff to perform a more rigorous analysis of the damage incurred due to storms of varying magnitudes.

12) If the damage was caused by infrastructure failure aside from vegetation contact, identify more detailed reasons how and why the infrastructure failed, i.e., age, design, etc., and what can be done to strengthen the infrastructure.

Detailed information is not available to support an analysis of this type. 4 CSR 240-23.020, Electrical Corporation Infrastructure Standards, became effective June 30, 2008.

This rule will provide data and empirical information that would enhance analysis of this type for future events. The first compliance report required by this Rule will be filed no later than July 1, 2009. However, it should be noted that under the requirements of this Rule, the inspection of all electric utility infrastructure may not be completed for 12 years, due to the specific inspection interval requirements.

Additionally, Staff intends to facilitate a workshop to discuss the storm reports filed for all four electric utilities. An expected topic of that workshop will be enhanced acquisition of forensic data during storm recovery efforts. This forensic data, in conjunction with the data obtained via the Electrical Corporation Infrastructure Standards and Electrical Corporation Vegetation Management Standards and Reporting Requirements Rules, will enable the electric utilities and Staff to perform a more rigorous analysis of the damage incurred due to storms of varying magnitudes.

13) An analysis of the economic impact on customers who experienced a

disruption of power during the ice storms.

Due to the complexity, unavailability of statistical data and numerous quantitative issues, Staff did not perform a specific analysis of the economic impact on AmerenUE customers. However, this is not to imply that customers did not suffer economic hardship. It is obvious that many customers did experience some financial loss associated with food spoilage. Other customers may have suffered economic loss due to their business being unable to operate without power. Customers also may have decided to incur lodging expenses at hotels due to a lack of electrical service at their homes. An outage of any significant duration can produce an economic impact upon the customers who must endure it. Such impacts can cause extreme financial hardships upon families. However, such impact is difficult to accurately quantify.

A severe weather incident of this type impacts a wide variety of "customers". City and county government operations experience costs associated with the restoration of public facilities as well as debris removal. A March 10, 2008 press release from FEMA (Federal Emergency Management Agency) indicated that as of that date, \$6,941,209 had been committed to the State of Missouri to reimburse local governments and various nonprofit entities for their December 2007 ice storm related expenses. Estimated ice storm damage for public facilities was approximately \$35 million.

AmerenUE had approximately 1,180,000 retail customers at the time of the December 2007 storm. Of these customers, 96,891 (or 8.2%) of these customers experienced outages. Almost half of these customers who experienced outages were restored by the end of the second day. As an outage extends beyond 48 hours, the costs and inconveniences associated with it increase.

Based on a review of information from customer comments filed, it appears that while AmerenUE customers did experience economic impact, they did not make that specific impact known through the Missouri Public Service Commission consumer complaint or public comment data bases. The Staff analyzed public comments filed in the Commission's Electronic Filing and Information System (EFIS) in Case No. EO-2008-0218. A total of 26 public comments were filed regarding the outage and restoration. Of this total, only two customers mentioned economic hardships associated with lost work from home or spoiled food.

14) Any and all recommendations to improve utility response to weather related

and day to day electric outages in the future.

Staff included eight specific recommendations for AmerenUE in the Staff Report filed in Case No. EO-2008-0218. These recommendations are listed on page 47 of that Report.