

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

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**

**INITIAL REPORT OF STAFF**

COMES NOW the Staff of the Missouri Public Service Commission (Commission) and for its Initial Report states 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* (Order). In its Order, the Commission directed Staff to investigate the effectiveness of Union Electric Company d/b/a AmerenUE's (AmerenUE or Company) storm preparation and power restoration efforts regarding the ice storms of December 2007 and to file an initial report regarding the results of its investigation no later than April 3, 2008. Accordingly, the Staff submits its Initial Report to the Commission, attached hereto as Appendix A and incorporated by reference herein.

2. The Commission's Order set a deadline of January 22, 2008 for any interested party to file an application to intervene in this matter. No party has requested intervention.

3. On January 8, 2008, the Staff initiated its investigation in a Letter sent to the Company signed by the Commission's Executive Director. Staff's Letter (attached hereto as Appendix B, with supporting Attachment 1, and incorporated by reference), requested certain

information from the Company and outlined how Staff intends to proceed in its investigation of twelve separate operational areas. (See Attachment 1 to Staff's Letter to Company).

4. Staff's Initial Report is a broad overview and summary of the progress made to date using information on twelve operational areas provided by the Company. As this Report is a work in progress, the Staff provides no conclusions or recommendations at this time. Staff will provide these in its Final Report to be filed no later than June 17, 2008.

5. AmerenUE provided information in response to Staff's Letter on January 18, 25, February 15 and 29, 2008. On February 28, 2008, members of Staff and AmerenUE met at AmerenUE to discuss the progress of the investigation.

6. The Staff has also prepared a summary of all public comments received so far by the Commission related to AmerenUE in this case. (See Appendix C "Outage Customer Comment Summary Sheet" attached hereto and incorporated by reference herein.)

WHEREFORE, in accordance with the Commission's Order, the Staff submits its Initial Report.

Respectfully submitted,

/s/ **Robert S. Berlin**

Robert S. Berlin  
Senior Counsel  
Missouri Bar No. 51709

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### **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 3<sup>rd</sup> day of April 2008.

*/s/ Robert S. Berlin*

**Union Electric Company d/b/a AmerenUE**  
**Initial Report of Storm Preparation and Restoration Efforts**  
**Case No. EO-2008-0218**

**1) Weather Conditions and Severity of Storm**

Between Saturday evening and Wednesday morning of December 8-12, 2007, several waves of precipitation affected Missouri and Illinois bringing up to an inch of freezing rain accumulation as well as up to two inches of sleet in parts of central and northeast Missouri. Storms struck various parts of Missouri over a four day period from December 8-12, 2007.

Staff contacted Dr. Patrick Guinan, Missouri State Climatologist, and researched National Oceanic and Atmospheric Association (NOAA)/National Weather Service (NWS) internet sites regarding these ice storms in Missouri.

Dr. Guinan puts the severity of these storms in perspective in the January 2008 issue of the Missouri Ruralist:

Several weeks ago Missouri experienced its second major ice storm in less than a year with a large part of the state cocooned in ice. The storm reached historical proportions over parts of northwestern Missouri, where some communities in Buchanan, Andrew, Holt, Atchison and Nodaway counties reported ice as thick as 1-inch on trees, power lines, vehicles and just about everything that was exposed to the elements.

Winter storms that deposit a glaze of 0.75 to 1-inch of ice are rare and have about a 1 in 50 year recurrence interval for any given location in Missouri. Historical accounts of major ice storms of this magnitude in Missouri indicate the rarity of these events. According to archived storm reports from the National Climatic Data Center, National Weather Service reports, and various press clippings, only a handful of storms of this magnitude have impacted Missouri.<sup>1</sup>

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<sup>1</sup> Dr. Guinan compared these December 2007 storms in scope to those which occurred in 1848, 1924, 1930, 1937, 1957, 1987, and 2002.

The first outages that occurred in the Union Electric Company d/b/a AmerenUE (AmerenUE or Company) territory occurred early Sunday morning on December 9.<sup>2</sup> Approximately 96,981 AmerenUE Missouri customers were affected by the two waves of ice and sleet precipitation. For comparison purposes, the July 2006 summer storm affected approximately 646,111 AmerenUE Missouri customers. Staff has gathered information from the NWS and other sources and will present more detailed information on the extent and level of outages affecting AmerenUE customers in its final report.

## **2) Storm Restoration Planning Process / Company Response**

Staff is reviewing how quickly AmerenUE recognized the severity of this winter storm and the methodologies it utilized for requesting outside assistance. The timing of the requests and types of assistance requested is being evaluated. Staff is aware that other areas of the mid-west United States were also affected by the two separate waves of precipitation. Crew needs determination (including outside crews requested and released), mutual assistance agreements, and infrastructure repairs are being reviewed by Staff. All Missouri customers were restored by Friday, December 14.

## **3) Outage Tracking and Field Dispatch Coordination**

Staff is reviewing how AmerenUE's Emergency Operation Center (EOC) performed and how AmerenUE utilized its Outage Analysis System (OAS) to track and coordinate restoration efforts. Staff is reviewing if the EOC was able to use the OAS to effectively and efficiently move resources to the areas with the most damage.

## **4) Prioritization of Outage Repairs**

Staff will review the prioritization process defined in AmerenUE's Emergency Restoration Plan (ERP). As part of a roundtable discussion conducted in June 2007, AmerenUE presented the structure and objectives of its ERP. Staff is examining the implementation of AmerenUE's ERP. Staff is reviewing how these priorities are utilized by crew dispatching personnel. Communications with prioritized customers are also being reviewed.

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<sup>2</sup> All dates in this summary will be 2007 unless otherwise noted.

## **5) Call Center Operations**

AmerenUE provides customers with an 800 number, as well as a local number in metropolitan St. Louis, to contact its Call Centers for a variety of services and questions. The customer first reaches a Voice Response Unit (VRU) and is routed to the appropriate group of options available to handle the call. The first option is to report an outage or gas leak. The customer may hear a script in an upfront message to inform the customer of the current extent of the outage.

Staff is reviewing the volume and types of calls received by the Call Center, as well as the Call Center's use of technology to handle escalating calls. Various performance indicators, including the Average Speed of Answer (ASA) and the Abandoned Call Rate (ACR), will also be reviewed and compared to indicators from prior storms.

Ameren does not provide a specific estimate of restoration time via its VRU when it has a major outage. Customer Service representatives are able to access status information via the OAS which collects and generates statistics relating to customer outages. Customers may be given this information to help them determine an estimate of their restoration time. Automatic call backs are made to out of service customers once AmerenUE believes it has service restored to that customer. Staff is performing further detailed analysis in this area, as well as determining the status of prior recommendations made to the Company by the Staff in prior storm reports.

## **6) Web Site**

AmerenUE has utilized its Ameren.com website since 2004 to provide the customer with progress reports on service restoration efforts. The Staff has made several recommendations in past reports regarding improvement to the web site information and its presentation. The Service Outage page has been expanded and improved to include information on the number of customers still out of service by zip code. In addition, customers can register their specific service address to obtain greater detail on when the outage occurred and if a cause has been determined. The Company has continued to publicize the existence of this web site and as a result, its use during an outage has

increased. During the peak day of the December ice storm, there were 147,768 hits on the outage map. Staff is reviewing the use of the web site since it is a useful tool to the customers during an outage.

## **7) Customer Comments and Complaints**

The Commission's Electronic Filing and Information System (EFIS) received 21 public comments from AmerenUE's Missouri customers regarding storm outage restoration and repair issues. The comments addressed tree trimming inadequacies, customer communications and storm response. It also included a number of positive comments regarding the Company's actions in response to the ice storm. Staff is reviewing these public comments. A summary listing of the breakdown of the public comments is attached to the filing of this initial report.

## **8) Medical and Special Needs Customers**

Customers with electrically-powered medical equipment may register with the Company's medical equipment registry. The form includes information that is to be completed by the customer's physician. The letter clearly states that the Company cannot guarantee the provision of uninterrupted electric service and that the customer needs to develop a back-up plan to ensure their own safety and welfare. A confirmation letter is sent to the customer to confirm their registration. On an annual basis, these customers are sent a notice asking if they need to continue on this registry. At the present time, 2,243 customers are currently enrolled in the program. These customers, once enrolled, are given a special phone number to call to report an outage.

There are also customers who might be termed "high risk" in the event of a major outage. Staff made a recommendation in the 2006 Storm Report for there to be a coordinated effort between AmerenUE and local citizen groups to identify and contact these customers during an extended outage to ensure their safety. This area is being reviewed further.

## **9) Communications With Customers and City, County and State Officials**

The Staff has made recommendations to AmerenUE in the past regarding improvements to its communications efforts with the general public and city, county and state officials. Improvements were made particularly with respect to city, county and state officials, including the Company's coordination with the State Emergency Management Agency (SEMA). The Company has also increased the amount of communication it has had with the media and officials prior to an expected large outage. Workshops have been held during the course of the year to provide education to media, city and county officials about storm procedures and restoration practices. Staff continues to evaluate the Company's communication efforts with its customers and city, county and state officials.

## **10) Vegetation Management**

AmerenUE has reported that it is on track to eliminate the vegetation management backlog by the end of 2008. Staff will review how well AmerenUE is adhering to the vegetation management schedule previously approved by the Commission in Case EW-2004-0583. In addition, Staff and AmerenUE have recently been involved in recent rule-making activities on this topic. Staff is looking at the impact of the Commission's vegetation management rule, which will soon be in effect, on AmerenUE's vegetation management program.

## **11) Infrastructure Maintenance**

To the extent that data is available, Staff is evaluating the impact of infrastructure maintenance on storm damage and/or storm damage prevention. Staff is also reviewing actions that AmerenUE has taken to improve the reliability of its electrical transmission and distribution systems. Staff and AmerenUE have also been involved in recent rulemaking activities on this topic. Staff is looking at the impact of the Commission's infrastructure rule, which will soon be in effect, on AmerenUE's infrastructure maintenance program.

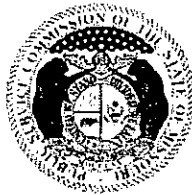


## **12) Evaluation of Restoration Effort and Recommendations**

Staff is performing a review of all Missouri electric investor owned utilities, since all four were impacted by the December 2007 storms. Staff sent a letter to all Missouri electric utilities on January 8, 2008. This letter requested specific information from the utilities regarding the December winter storm. AmerenUE's responses to that letter have been received. Staff is compiling the information received through the responses to the Staff letter, meetings, and other communications.

Staff conducted a formal review and filed a report on the Company's storm restoration efforts after severe storms in July of 2006 (Case No. EO-2007-0037). The Company's implementation of the Staff's recommendations in the 2006 Storm Report is also being reviewed and will be included in this final report.

After the repeated severe weather experienced by AmerenUE's service territory in July and December of 2006, the Company engaged an outside consultant (KEMA) to conduct a study of the adequacy of the Company's ability to prepare for and respond to weather events. Staff was provided with a copy of this report on January 11, 2008. It is anticipated that the Company will develop a presentation to the Commission distinct from this docket to address the specific recommendations and their anticipated responses to the KEMA report.



**Commissioners**

**JEFF DAVIS**  
Chairman

**CONNIE MURRAY**

**ROBERT M. CLAYTON III**

**LINWARD "LIN" APPLING**

**TERRY JARRETT**

**Missouri Public Service Commission**

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**NATELLE DIETRICH**  
Director, Utility Operations

**COLLEEN M. DALE**  
Secretary/Chief Regulatory Law Judge

**KEVIN A. THOMPSON**  
General Counsel

January 8, 2008

Mr. Zdellar  
Union Electric Company  
Mail Code 202  
1901 Chouteau Avenue  
St. Louis, MO 63103

Dear Mr. Zdellar:

The Commission recently opened cases and issued orders directing Staff to investigate the effectiveness of utilities' storm preparation and power restoration efforts for the December 2007 Ice Storms and report its findings and recommendations to the Commission (Case Numbers EO-2008-0215, EO-2008-0218, EO-2008-0219, and EO-2008-0220 for The Empire District Electric Company, Union Electric Company d/b/a AmerenUE, Kansas City Power & Light Company, and Aquila, Inc., respectively). The orders direct Staff to file an initial report regarding the results of its investigation no later than April 3, 2008. Staff anticipates filing an initial report by the date specified followed by additional reports as necessary at a later date. Staff will also consider scheduling a roundtable discussion (or similar forum) to review the results of these reports and analysis on a state-wide basis.

Since all investor-owned utilities in Missouri were affected, Staff is requesting the following information from each of the individual utilities by the dates listed.

A. Description of the event, including statistics related to number of customer outages, duration of outages, infrastructure affected, call center performance data that includes metrics considered by the utility to be most critical during the outage, use of internal and third parties to provide personnel and facilities, and any other relevant information. Submit to Staff by January 25, 2008.

B. Description of remedial actions taken by the utility to recover from the event, including resources utilized (manpower, material, financial expenditures, etc.), outage tracking, crew dispatching, restoration prioritization, customer communications, public official communications, special circumstances encountered, and any other relevant information. Submit to Staff by February 15, 2008.

C. Description of actions taken (since the December 2007 storms) and planned actions to be taken by the utility to prevent or mitigate the effects of future events such as the December 2007 ice storms, including policy/procedure modifications, communications enhancements, vegetation management, reliability monitoring, infrastructure modifications, and any other relevant information. This item should include a review of any previous corrective actions (due to similar events) taken prior to December 2007 and an analysis of the success of those actions relative to this event. Submit to Staff by February 29, 2008.

D. A complete copy of all procedures, policies, guidelines, plans, or other documents that existed prior to December 1, 2007, that were utilized during the December 2007 ice storm events, specifically

relating to Items A and B above. If the Company had a consolidated document such as a "Storm Restoration Plan", please provide it. Submit to Staff by January 18, 2008.

E. A complete copy of any revisions made since the storm, to any of the documents listed in item D. Submit to Staff by January 18, 2008.

F. A copy of all reports and other documentation provided to Company management regarding the Company's operations immediately prior to and during the storm restoration activities. Submit to Staff by January 25, 2008.

G. Copies of all documentation defining the Company's methodology and data collection process to generate statistics (e.g. customer outages, costs, etc.) related to the impact of the storm on the Company's operations and financial conditions. Submit to Staff by February 15, 2008.

Staff has designated storm investigation coordinators for each of the utilities. Please feel free to contact the appropriate person with any questions or comments.

Staff Lead	Lena Mantle	573-751-7520	lena.mantle@psc.mo.gov
Empire	Dan Beck	573-751-7522	dan.beck@psc.mo.gov
AmerenUE	Debbie Bernsen	573-751-7440	debbie.bernsen@psc.mo.gov
KCPL	Mike Taylor	573-526-5880	michael.taylor@psc.mo.gov
Aquila	Lisa Kremer	573-751-7441	lisa.kremer@psc.mo.gov

An outline of the proposed topics and activities that Staff is proposing to be utilized is attached for your information. Please let us know if you have any suggestions for additional topics or activities.

If you have any questions regarding this information, or can't meet the timelines listed, please provide a written explanation why the timeline can't be met and when the information will be available for Staff review. You may contact Lena Mantle at 573-751- 7520 or me at 573-751-7435.

Sincerely,



Wess Henderson  
Executive Director

Attachment

cc: Blane Baker  
Bob Berlin  
Nathan Williams  
James Swearingen  
Renee Parsons  
William Riggins  
Thomas Byrne  
Natelle Dietrich  
Bob Schallenberg  
Lena Mantle  
Dan Beck  
Lisa Kremer  
Debbie Bernsen  
Mike Taylor  
Warren Wood

**Review of Storm Restoration Efforts**  
**Proposed Topics & Outline of Activities**

- 1) Storms / Arrival Times / Outages by Day - Morning & Evening (w/maps)  
*Staff will examine how severe these storms were compared to typical winter storms and if this was a contributor to the severity of the outages. Staff will discuss with the electric utilities the operation of their Outage Analysis Systems (OAS) during and following these storms if such system exists for the utility.*
- 2) Crew Needs Determination  
Mutual Assistance Agreements  
Search for Outside Crews  
When Crews Called In  
Any Delays in Crew Availability/Arrivals  
How Long Crews Were Kept  
*Staff will review how quickly the utilities recognized the severity of the outages and how quickly they sought outside assistance. The timing of requests for different levels of assistance will also be looked into as these outages were the result of two major ice storms. Staff will also study if the utilities did not ask some utilities for help or turned down any offers for assistance and if so, why. These factors will be looked at in conjunction with the utilities' Mutual Assistance Agreements to assess if they played a significant role in extending the timeframe of restoration in this outage.*
- 3) Outage Tracking & Field Dispatch Coordination  
*Staff will look at how all of the utilities dispatch crews using their systems and how they establish what type of crews need to be at a particular site as well as how they determine the next site each crew is dispatched to when they are done with their current job.*
- 4) Prioritization of Outage Repairs  
Priority Treatment Groups (fire, medical, police, water, sewer, etc...)  
Prioritization of Remaining Customers  
*Staff will review the current priority of service procedures and look into how the utilities track these customers in terms of when they lose service and how crews are dispatched to give them priority restoration service.*
- 5) Call Center Operations During Storm  
Customers Calling In To Report Outages  
Overflow Provisions  
Estimated Restoration Times  
Customers Wanting Estimate But Not Being Provided  
Automated Call Back Functions  
*Staff will review each utilities customer call capability. If it is determined that there were problems with the customer call capability, Staff will look into how*

*this situation occurred, how it was fixed, and what steps are being taken to prevent recurrence in future major outages. This portion of Staff's review may bring to light issues outside of the utilities' planning/infrastructure support process and any of these observations will be looked into by Staff.*

6) Internet Linkage Problems

*Three of the four of the Missouri IOU utilities give outage information on their internet sites. Staff will look into internet problems, how these situations occurred, how they were fixed, and what steps are being taken to prevent recurrence in future major outages. This portion of Staff's review may bring to light issues outside of the utilities' planning/infrastructure support process and any of these observations will be looked into by Staff.*

7) Consumer Services Specific Issues/Observations

*Staff will review all public comments and complaints submitted to the Commission regarding the outages. Any additional comments that the Commission receives will be included in this investigation.*

8) Medical Needs Customer Registration and Notifications

*Staff will review the registration, education and notification processes of the utilities.*

9) Communication with Customers and City, County & State Officials

*Staff participated in the SEMA/EOC phone calls during this outage. Staff will also review the utilities' normal process for maintaining contact with the media and officials and agencies in preparation for future outages.*

10) Vegetation Management

*Status of Trimming?*

*Any Need to Accelerate Trim Schedule?*

*Any Need to Consider Additional Programs?*

*Any Special Contracts/Initiatives*

*Years for Transmission vs. Distribution*

*Service Lines in Yards*

*Types of Trees & Clearance Distances*

*Replacement of Problem Trees / Incentives (Ornamentals)*

*Staff will examine the topics listed above for all of the utilities in this review.*

*Staff will also again look at types of vegetation contributing to the majority of damage in recent storms and factors contributing to this situation. Factors contributing to extent of damage like backyard routing vs street side routing and overhead vs buried circuits will be considered.*

11) Grid Reliability Standards Issues & Infrastructure Maintenance

*Staff will review the utilities' pole inspection & treatment programs, worst performing circuits and outage reports processes. Staff will also review what steps the utilities have taken to improve the reliability of their power delivery*

*system through installation of sectionalizing devices, reclosers, fuses and loop schemes.*

**12) Evaluation of Restoration Effort & Recommendations**

*Staff will compile the information received through meetings, utility responses, and data request responses. To the extent possible, Staff will provide a comparison of the IOUs' restoration efforts to the restoration efforts of co-ops in the affected areas. Staff will then summarize its concerns and provide its recommendations on how best to deal with these concerns.*

# Outage Customer Comment Summary Sheet

## December 2007

AmerenUE EO-2008-0218

Total Customers Commenting		Total Number of Comments		Number of Comments Per 1,000 customers		
Utility	Amount	Utility	Amount	Utility	Customers	Customers
AmerenUE	21	AmerenUE	29	AmerenUE	1,170,738	0.02

Comment Totals																				
Utility	Positive feedback	Storm outage concern	Infrastr maint.	Repeat outages	Storm response	Tree trimming	Tree cleanup	Repair quality	Credits	Bill amount	Safety	Bury lines	Call center	Medical registry	ERT	Web	Concern with merger	Cust. comm.	Exec mgmt.	Total
AmerenUE	10	1	0	2	3	6	2	0	0	0	0	0	1	0	0	0	0	4	0	29

Percent of Comments Per Outage Category																				
Utility	Positive feedback	Storm outage concern	Infrastr maint.	Repeat outages	Storm response	Tree trimming	Tree cleanup	Repair quality	Credits	Bill amount	Safety	Bury lines	Call center	Medical registry	ERT	Web	Concern with merger	Cust. comm.	Exec mgmt.	Total
AmerenUE	34.5%	3.4%	0.0%	6.9%	10.3%	20.7%	6.9%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	13.8%	0.0%	100%