BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of an Investigation of Aquila Inc.'s Storm Preparation and Restoration Efforts	)))	Case No. EO-2008-0220

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 Aquila's Storm Preparation And Restoration Efforts And Setting An Intervention Deadline. This Order directed Staff to "investigate the effectiveness of Aquila'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

Report filed on June 17, 2008. Lisa Kremer, Staff Manager of Utility Management Analysis, prepared the report attached hereto, which contains 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
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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 5th day of August 2008.

/s/ Jennifer Hernandez

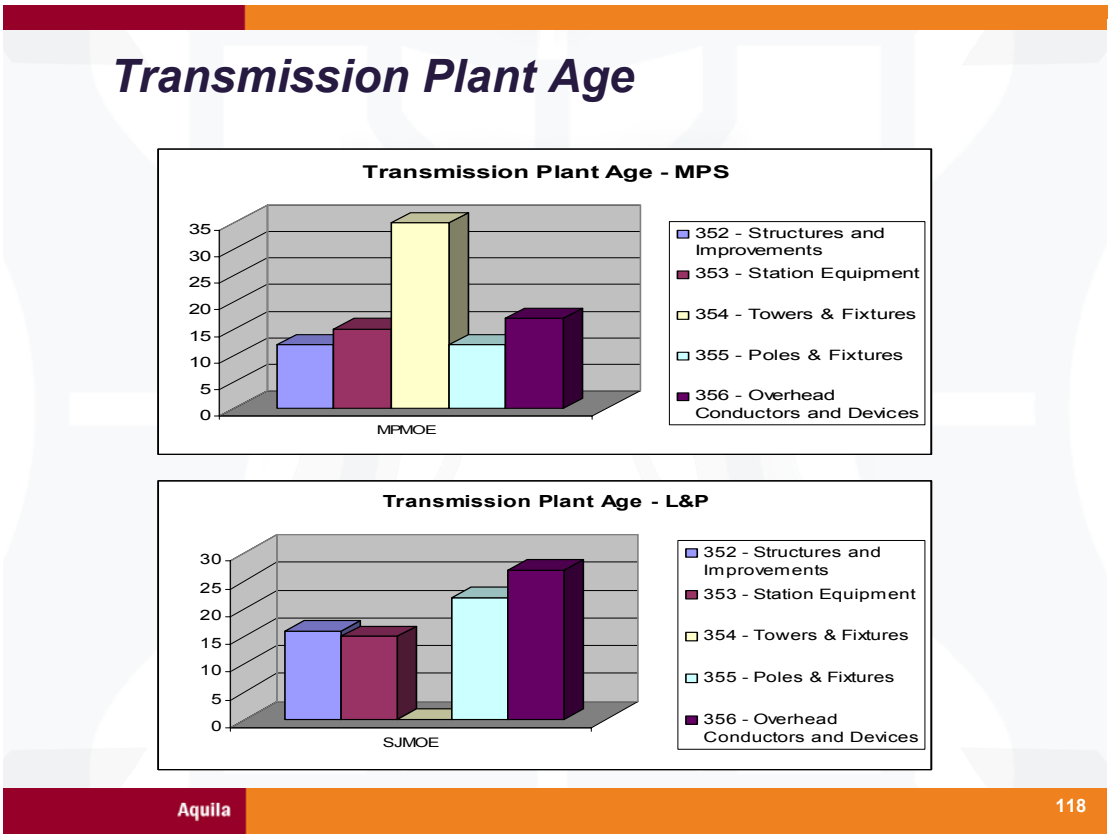
Commissioner Questions

Aquila

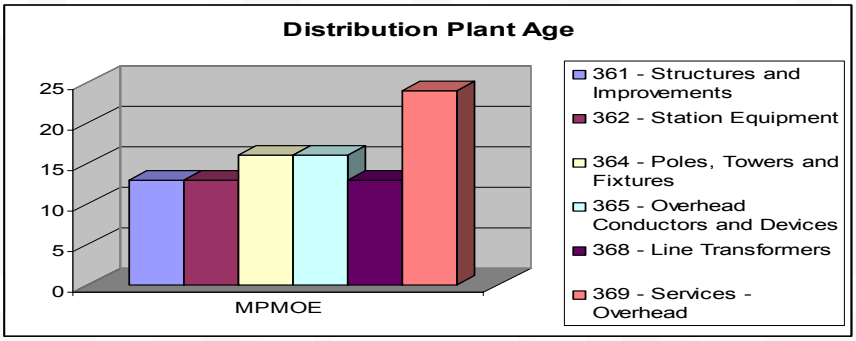
1. Analysis of the age, siting, durability and quality of the utility's infrastructure, including the placement of distribution lines in light of the ice storm outages of 2007.

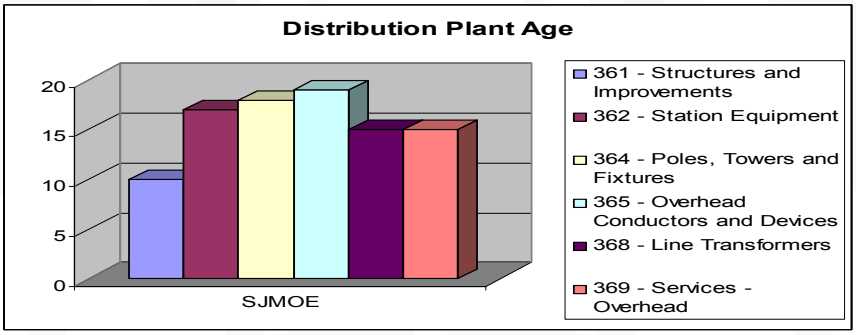
Aquila's February 7, 2008 presentation to the Staff provided limited information regarding the age of its infrastructure including distribution and transmission plant. The pages from Aquila's presentation that address age of the Company's transmission and distribution plant are provided below.

Specific analysis regarding the age, siting, durability and quality of Aquila's infrastructure in light of the 2007 ice storm was not conducted. The recent rulemaking (4 CSR 240-23.020. Electrical Corporation Infrastructure Standards, effective June 30, 2008) will provide information and empirical data that will 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 the rule contains.



Distribution Plant Age





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

Staff is not aware of any specific Commission Orders from prior storms that would be applicable to Aquila. The most recent Aquila storm event, which was reviewed and reported on by Staff, occurred in January/February 2002. Staff issued a report that contained six recommendations for Aquila in its report and those recommendations were reviewed relative to Aquila's performance during the December 2007 storm. Staff's review and analysis determined that the Company had appropriately addressed the recommendations with the exception of one that was identified on page 24 of Staff's report filed in the present case: Case No: EO-2008-0220. Specifically in Staff's 2002 report, the Company was requested to "Contact city officials and agencies impacted by extended electric outages twice a year to update telephone and personnel changes." The Company indicated in the February 7, 2008 on-site visit by the Staff that it had not complied with that recommendation. A similar recommendation was made in Staff's current report with a description of a specific circumstance where communication could have been improved had the recommendation been implemented.

3. An analysis of all assistance requested or offered and whether the utility accepted or denied the offers of assistance by other entities.

Prior to and during this storm event, there were limited outside assistance resources available as this storm and earlier storms had affected large portions of the central United States. Aquila relied upon assistance from other utilities belonging to the Midwest Mutual Assistance Group as well as some limited resources outside this group. Some of these utilities were near Aquila and others were required to travel. The Company indicated that because Texas, Oklahoma, Kansas, Arkansas and Illinois were impacted by ice, it had to reach into Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, New Mexico, Ohio and Wisconsin as well as Missouri for assistance. The Company reported that 461 line resource personnel were utilized from these areas during the December 2007 ice storm.

4. An analysis of the Call Center operations during the storm and any observations about customer service issues.

Aquila utilizes numerous methodologies for customers to report outages and obtain information. Aquila provides customers with two 800 or toll-free numbers. One serves for any matter that needs to be addressed and the other is an emergency number. All calls, outage or otherwise, are initially answered by the VRU (Voice Response Unit) which provides a menu of options. Customers that call Aquila to report an outage will either report information through the VRU which routes outage calls to a third party contracted service, Twenty First Century, or callers may elect to speak to a customer service representative. Customers can also report outages via Aquila's Website.

The Company utilized verification calls after service restoration had occurred to receive confirmation from customers that their service had been restored. Customers receiving such a call-back were asked to confirm or disagree that their service had been restored by using the keypad on their telephone.

The Company also placed special emphasis on communications with its 543 registered medical needs or Life Support customers. The Company made outbound calls twice daily during the outage period to its Life Support customers to provide pertinent information regarding their specific outage and to encourage customers to plan accordingly.

The Commission's Electronic Filing and Information System (EFIS) received 26 public comments from Aquila's Missouri customers. A number of public comments addressed tree trimming concerns. A variety of comments were also positive regarding Aquila's storm performance.

Media communications began on Friday, December 7, and continued through the storm event and restoration. Such communications included news releases, media advisories and responses to media inquiries, Emergency Operations Center contacts and briefings, television interviews, radio update calls and talk shows. Communications were also provided to public officials and through the Company's Website.

Staff provided additional details on this topic in the main body of its report and included recommendations for improvement.

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

Aquila stated that its revised vegetation management program is aligned with the recently adopted 4 CSR 240-23.030. Electrical Corporation Vegetation Management Standards and Reporting Requirements, which became effective June 30, 2008. The Company indicates its vegetation management is on schedule for transmission facilities including its urban and rural cycles being on schedule, annual aerial patrol has been completed, spot trimming is completed for trees identified during the aerial patrol as well as herbicide applications. The Company has scheduled approximately 1,973 pole miles to be cleared in 2008 (approximately 25% of its distribution system miles) compared with 1,128 miles in 2005 (15% of pole miles) and indicates it is generally on schedule for trimming of its distribution facilities. The Company indicates that expenditures have increased each year from 2003 for vegetation management.

The new rule will provide information and empirical data that will enhance analysis 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 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 the 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.

Communications with individual customers is addressed in the response to Question 4 (above). Responses to Questions 3 and 9 (in this document) provide information relative to interaction with other utilities.

The response to this question will focus on the communication, cooperation, and assistance between Aquila and local (city and county) and state officials. Page 23 of Staff's investigation in Case No. EO-2008-0220 indicated that Aquila could be relied upon to consistently notify the Commission's Energy Department when a large outage occurs and then subsequently provide information to the Staff at least twice daily regarding the outage. Aquila has been able to be depended upon to provide the Staff with a variety of storm and outage information and to respond to questions from the State Emergency Management Agency (SEMA) when that agency has had questions. The State Emergency Management Agency activated its Emergency Operations Center on December 9, 2007, and returned to normal operational status on December 18.

Following the January/February 2002 ice storm, Staff prepared a report for the three affected utilities which contained a number of recommendations. One recommendation for Aquila was: "Contact city officials and agencies impacted by extended electric outages twice a year to update telephone and personnel changes."

In reviewing Aquila's performance during the December 2007 storm relative to this 2002 recommendation, the Company indicated that this contact had not occurred. Further, when the Staff made contact with a number of city and county officials to determine the Company's response and communication during the December 2007 ice storm, this area arose again as an opportunity for improvement. One city contacted by the Staff indicated that a secondary phone number for Aquila personnel, that did not require electricity such as a cell phone, would have been useful. The Staff made a recommendation to address this particular situation, which included that current Company phone numbers and personnel be provided to city and county officials. In its February 7, 2008 meeting with the Staff, Aquila indicated that opportunities for improved communications with public officials and emergency management personnel existed.

The Missouri counties in Aquila's service area that were primarily impacted by the December 2007 storm included: Atchison, Nodaway, Holt, Andrew, DeKalb, Buchanan, Clinton, Platte and Clay.

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.

The December 2007 ice storm first began impacting Aquila customers on December 9 but the most significant portions of the storm began on the evening of December 10 when approximately 2.25 inches of precipitation occurred in the St. Joseph area of the Company's service territory. This precipitation caused ice of approximately 1 inch. The ice storm had its greatest impact in Aquila's North Region, which includes St. Joseph, Maryville, Mound City and Tarkio as well as other communities. In the North Region, approximately 90% of the Company's customers lost power. The Company indicates that 61,677 customers were without service in its North Region territory. A total of 83,649 Aquila customers were without power for some period during the storm.

In the February 7, 2008, meeting with Staff, Aquila provided a summary of outages and restoration in the Maryville and St. Joseph areas which is presented below:

Outages by Day – St. Joseph & Maryville

Date	Time	Maryville Cust Out	St. Joseph Cust Out	Cum. Restored
11-Dec	1530	Combined Total 59,000		0
13-Dec	2000	Combined Total 36,500		22,500
14-Dec	1000	Combined Total 13,000		46,000
15-Dec	700	2,900	7,208	48,869
	1530	2,300	5,870	50,807
16-Dec	700	1,446	3,843	53,688
	1130	1,250	2,981	54,746
	1645	1,000	2,287	55,690
17-Dec	700	715	1,703	56,559
	1600	100	653	58,224
18-Dec	900	40	113	58,824

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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 and the 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 twenty-four (24) hours. However, many residential care facilities do not have similar requirements and do not have standby emergency generation.

Pages 24 and 25 of Aquila's Emergency Storm Restoration Plan establishes priorities for service restoration. This section of the Company's plan begins by acknowledging that each disaster will be different and have unique characteristics. Therefore, the restoration process must be designed for each instance. However, seven general guidelines for restoration are presented in Aquila's plan. With respect to distribution feeder circuits, main feeder circuits will be the first to be restored under normal circumstances. Those feeders that will restore service to the largest number of high priority customers, i.e. hospitals, police and fire will be the first to be restored.

The Public Service Commission Staff participated in the emergency management efforts of SEMA during Aquila's storm restoration of 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 topic that is frequently addressed 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, Department of Natural Resources and the Public Service Commission. 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, other utilities: telecommunication companies, water and sewer companies, gas companies, cable companies and even cell phone companies require coordination efforts by electric utilities. 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. The Staff is not aware of any electric utility, in Missouri or in the Continental United States, which does not include contract 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 can be found working on an electric utility's system. For lineman crews, contractors normally work on large projects such as replacing a long section of distribution line, while the day to day tasks are performed by the utility's in-house crews. For tree trimming crews, almost all of the work, day to day or larger projects, is carried out by contract crews.

Contract crews working on electric utility's system at the time of an outage offer advantages over other assistance options. First: the crews are on-site, including needed trucks and equipment. Reduced travel time can significantly reduce outage duration time. During some recent storm restoration efforts, some crews traveled as much as 48 hours to reach the utility's system. Second: contract crews that are working on the system have familiarity with the utility's procedures, service territory and personnel. All of these factors make an on-site contractor a valuable asset during storm restoration.

The speed with which off-site contractor and utility crews can arrive in a utility's service area after a major storm is primarily influenced by the amount of damage to surrounding utilities and therefore, the travel distance. However, other factors such as road conditions and forecasts for near-weather can also influence the speed of the response and a neighboring utility's decision to release crews.

For crews that come from other utilities, either contractors or utility crews, coordination with other utilities must take place. The primary way that such 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 utilities

with valuable contact information to discuss the availability of crews with other utilities. Page 11 of the Staff's Aquila report provides more information regarding mutual assistance and references pages 30-31 of the "Aquila Report On December 2007 Ice Storm Restoration". Aquila's report is presented as attachment D to Staff's report.

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 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) over a period from December 9 through December 20 and Westar Energy, 360,000 customers interrupted (674,000 total customers) over a period 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 many 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 following table provides data (some numbers rounded) for the four utilities:

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	300,558	15.8%	12/09/07	12/19/07

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 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 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 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.

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13. An analysis of the economic impact on customers who experienced a disruption of power during the ice storms.

Due to the complexity and magnitude of numerous undetermined factors, Staff did not perform a specific analysis of the economic impact on Aquila customers. However, based on review of information, it appears that many Aquila customers did experience some degree of economic impact due to the December 2007 ice storm and subsequent power outages. In the Company's Missouri service territory, 83,649 customers were without power at some time during the ice storm with 61,677 of those customers being in the Company's North Region. Without question, an electrical outage for any period of time during winter weather can produce a significant economic impact on customers even if that impact is not able to be quantified.

Many factors affect economic impact during an electrical outage for customers. Such factors include: alternative shelter sources such as motel or hotel accommodations, travel to shelter if not in the immediate area, additional food costs such as eating out or convenience foods, absences from work, businesses being unable or limited in their ability to provide goods or services, food spoilage, use of commercial laundry facilities when unable to use home washers and dryers and other unanticipated expenses.

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.

14. Any and all recommendations to improve utility response to weather related and day to day electric outages in the future.

Staff included eighteen (18) specific recommendations for Aquila in the Staff Report filed in Case No. EO-2008-0220. These recommendations are presented in their entirety on pages 27 and 28 of that report.