FRC Improvement Opportunities

Several post-storm reviews were held to identify process items that worked well, as well as improvement opportunities. Many items were process improvements "done on-the-fly" during the storm. These items were documented and added them to the storm manual. Also, system enhancements to ServiceOn and EOC/WEB were identified and meetings have been held with the support team to get commitments on these, as well as target completion dates. See system enhancement document below. These items center on improvements to system navigation, the call back process, and EOC/WEB updates.

2007 Ice Storms Enhancements

Enhancements	Priority	Fix	Time Estimated	Target Date
Download to Excel results from ticket screen query (individual tickets)	Medium		6 Hours	April 22, 2008
Download to Excel results from the History / Customer Count query	Low		6 Hours	April 22, 2008
Ability to rerun callbacks	Medium	Need to research (Authorized users only)	25 Hours	April 22, 2008
Select "All" functionality for callbacks	Medium	Need to research	20 Hours	April 22, 2008
Query by Device Tag and TX number to get individual tickets associated with that device	High	This query needs to be available on the Ticket Query Screen	6 Hours	April 22, 2008
TL that have more than 500 tickets - be able to query by times in order to view all the tickets	Low	Change query parameters to 1000	1 Hour	April 22, 2008
Electric Outage Center number of customers served in specific towns less than number of customers affected	High	Possibly change to percentages for # Customers Served?? Requires change of Summary Screen	80 Hours	March 19, 2008

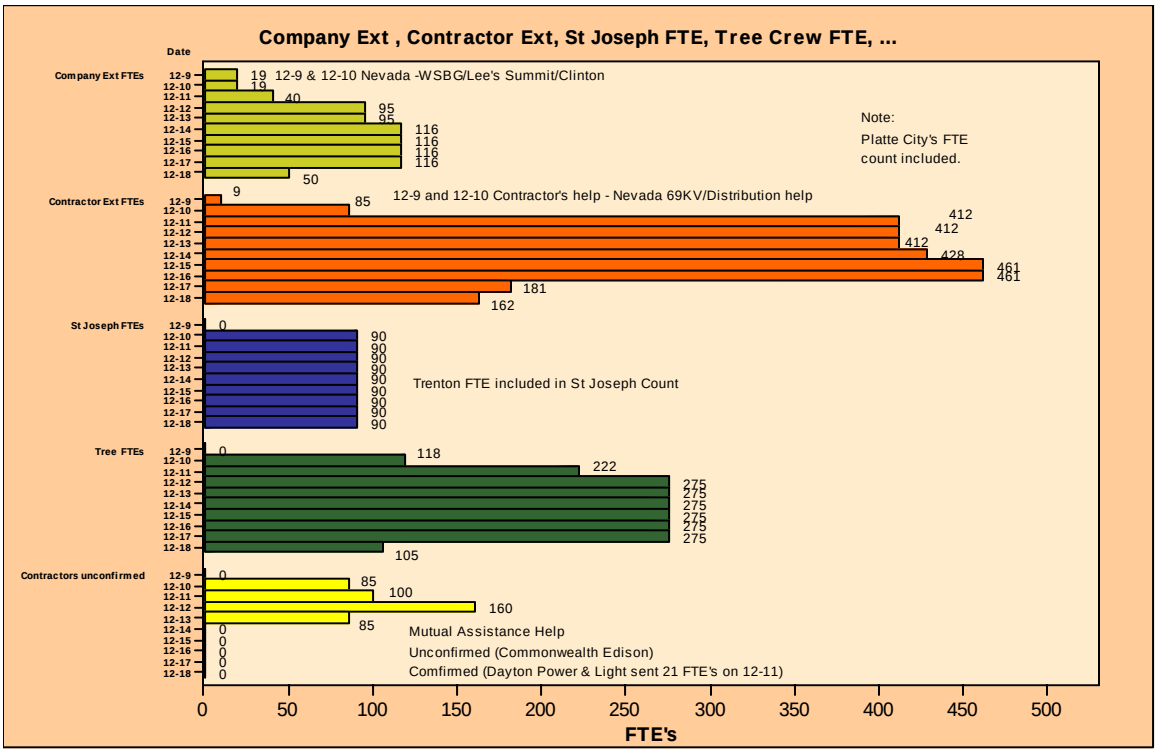
Resources Utilized

Weather forecasts called for a rain and ice mix during the weekend of December 8 and 9, near Aquila's South Region around Nevada, Missouri. This marked the onset of the Ice Storm. There was a pocket of warmer air flowing south to north encompassing most of our service territory. The South Region was experiencing cold rain, with temperatures hovering near the freezing point having a lesser impact on our facilities. The significance of the warm air masses over the areas mentioned would allow us to later move FTEs from those areas into the Liberty, Platte City, and Aquila's North Region to help with the restoration effort.

During the weekend of December 8 and 9, company and contract FTEs from other locations were dispatched to areas south of Nevada to restore service to customers who lost service due to ice build-up on our facilities. Aquila dispatched 19 company FTEs and 9 contract FTEs to repair the damage.

Chart 1 below illustrates the level of FTEs utilized throughout this ice storm. These are categorized by company, contractor, and mutual assistance FTEs who helped during this 10-day period.

Chart 1



On December 10, weather forecasts showed a changing weather pattern that split a warm air mass in the middle of our service territory moving farther north toward Aquila's North Region and also impacting our Liberty and Platte City facilities. At this time the well

established cold air mass was hovering over Aquila's North Region dumping rain turning to ice on to those facilities. The second call for additional outside help came early on the morning of December 10 for company and contract FTEs in Missouri and Colorado. Additional help was being sought from other parts of the country as well.

As the weather pattern became stationary over Aquila's North Region, external company FTEs deployed to other areas were gradually released during the day on December 11 and began reporting to the north. External company FTEs are employees who are assigned to another Aquila facility and don't work in this particular area.

At the same time that external company crews were being released to the North Region, the Forestry Department was also calling for additional resources from other Aquila locations and outside help from other states. The bulk of the FTEs were transferred to Aquila's North Region. FTEs were busy as well in the Liberty and Platte City areas.

The flow of FTEs throughout the ice storm shown in **Chart 1** depicts the level of FTEs by category and date from December 9 through December 18. FTEs were transferring into these areas on December 11 and were arriving throughout the day. Other FTEs, who traveled longer distances, were released to us on December 11, but were arriving on different dates due to length of travel time from their locations.

How Aquila monitored the resource utilization process is depicted in **Chart 2,** with changes made as relative information became available to field personnel working in the affected areas. Twice daily leadership meetings were usually where information became available and changes were made to the daily spreadsheet. **Chart 2** represents a moment in time, and at the end of the ice storm it documents the release and arrival home dates, including FTEs locations. The information on the chart shows the FTE mix at the height of the ice storm; Contract Personnel 49%, Tree Personnel 29%, and Company Personnel 22%.

Chart 2

Outside Resources
Final Review 12/20/2007 12:00:00 AM

Line Resources	FTE's	Dpart	From	Arrive	Status	Notes	Released	Arrived Home
Dayton Power & Light (Ohio)	21	12/12 am	Dayton, OH	12/12 pm	Confirm	Include Supervisors	12/17 pm	12/18 pm
Newkirk Electric (Michigan-Various Locations)	55	12/12 am	Detroit MI	12/12 pm	Confirm	Include Supervisors	12/18 am	12/19 pm
PAR	231	12/11 am	MO, CO, KS and WI	12/12 pm	Confirm	Include Supervisors	12/18 pm	12/20 pm
B&L Electric	7	12/11 pm	Clinton	12/12 pm	Confirm	Include Supervisors	12/18 pm	12/19 pm
Colorado Aquila	**12**	12/11 pm	Colorado	12/12 am	Confirm	Include Supervisors	12/18 am	12/18 am
Aquila MPS (Other Locations in MO)	**104**	12/11 am	Missouri	12/12 am	Confirm	Include Supervisors	12/18 pm	12/18 pm
KCP&L	12	12/14 am	Missouri	12/14 am	Confirm	Include Supervisors	12/18 am	12/18 am
KCP&L/Managers/Safety/Union Rep	5	12/14 am	Missouri	12/14 am	Confirm	Include Supervisors	12/18 am	12/18 am
NIPSCO (Henkel & McCoy)	130	12/12 am	Northern Indiana Illinois, Iowa	12/12 pm	Confirm	Include Supervisors	12/19 am	12/19-pm
Total	461	Confirm	All	12/14 pm	Confirm			

Tree Resources							Released	Arrived Home
St Joseph & Maryville Areas	275	12/11 am	Texas & CO & IN	12/12 pm	Confirm	Include Supervisors	12/18 am	12/19 pm
Total	736	Confirm	All					

Outside Resources BreakDown	Make Up	FTE Mixed %
Contractor Personnel FTE's	461	49%
Tree Personnel FTE's	275	29%
Company Personnel FTE's	116	22%
Total	852	
Aquila St Joseph FTE's	**90**	
Grand Total FTE's	942	100%

In summary, Aquila had 942 FTEs physically working in the field. In this mix, the remaining FTEs were communicating, investigating and leading the restoration effort, ensuring everyone worked quickly and safely. **Charts 2** and **3** represent a living document and changes constantly were made to it.

Clean-up Efforts

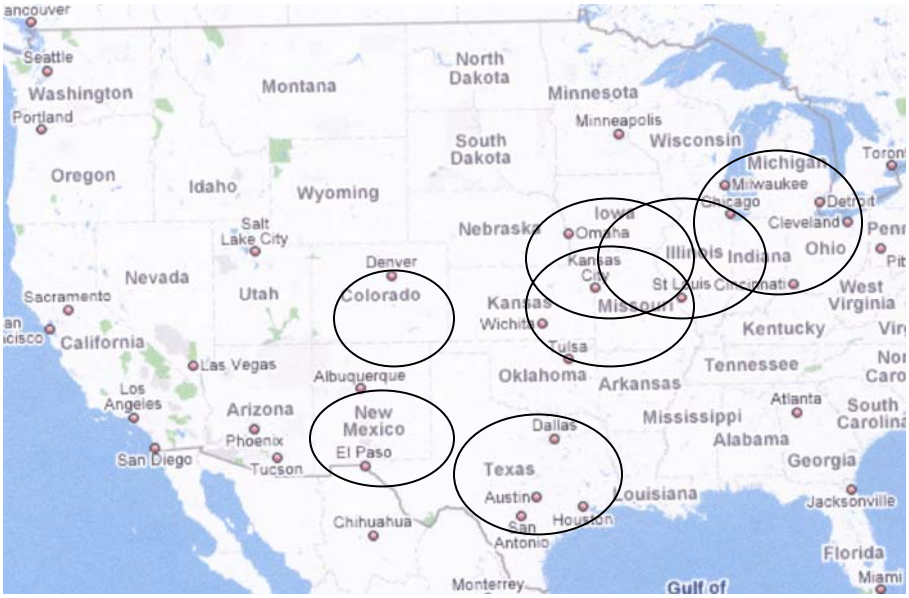
After the initial restoration was complete, internal company and external contractors were used to make temporary repairs permanent. Aquila had 81 contract FTEs in the North Region until December 23, stopping for Christmas, and continuing on December 26.

Mutual Assistance

In its search for additional outside help, Aquila relied on assistance from other utilities belonging to the Mutual Assistance Organization. Some of these utilities were nearby, and others traveled from a distance. The rainy and icy conditions impacted parts of Texas, Oklahoma, Kansas, Arkansas, and Illinois before affecting Aquila's territory. It was apparent that the search for additional help had to extend beyond those boundaries and into Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Missouri, New Mexico,

Ohio and Wisconsin. Aquila obtained help from each of these areas on December 11 as shown in **Chart 3**. Neighboring utilities were of great assistance in providing information and securing additional help.

Chart 3



Additional information regarding resources utilize for the restoration effort can be found in Appendix B.

Aquila Communications

Communications Team

As part of its emergency response, Aquila convenes a communications team to communicate with customers and with appropriate public officials. Working with the area news media is a key part of this strategy. For the December 2007 ice storm, the Communications Team consisted of the following:

- Aquila senior Management — Ivan Vancas
- Communications department — Jan Zimmers, Al Butkus and Bob McKeon
- Missouri External Affairs — Judy Ness and Debbie Leonard
- Missouri Legislative Services — Steve Murray
- Local Management — Tom Kelley and appropriate supervisors

Methods of Communication

Aquila used a wide variety of methods of communication, depending on the target audiences. These methods included:

- News Releases/Media Advisories/Responses to Media Inquiries
- EOC/City/Emergency Services Contacts/Briefings
- Media Briefings
- TV Interviews
- Radio
  - Update Calls
  - Talk Shows
- Public Official Contacts
- Website

News Releases/Media Advisories/Responses to Media Inquiries

Aquila believes it is important to communicate frequently to customers (typically through the media) in outage events. The company maintains a distribution list of newspapers, radio stations and television stations in the company's service area. Aquila distributes news releases both by e-mail and fax. (Copies of News Releases can be found in Appendix C.)

Aquila distributed information to the media throughout the storm duration, and, in fact, starting before the storm system actually arrived.

- As it became apparent that there was the potential for a major ice storm, Aquila began its communications effort. On Friday, December 7, we distributed to service area news media and city halls, a "we're prepared" news release, letting customers know how Aquila is preparing for the storm and including safety information and tips on dealing with outages.

- The company issued news releases with information on the impact of the storm and restoration efforts on December 10, 11, 12, 14, 16 and 18.
- E-mail advisories and calls invited media to regular briefings.
- Aquila Communications contacted media in St. Joseph, Maryville, Mound City and Savannah by telephone twice daily to provide updates.
- Ivan Vancas, Operating Vice President – Missouri Electric, and Bob McKeon, Aquila Communications, met with the St. Joseph News Press Editorial Board on December 13.
- The Communications Team responded to all media inquiries from newspapers and TV and radio stations.

EOC/City/Emergency Services Contacts/Briefings

Two separate storm systems moved through the company's service area. One affected the southern portion of Aquila's Missouri service territory primarily on Sunday, December 9. The other moved through the northern portion of the company's service area starting on the evening of December 10, with the heaviest ice accumulation and damage occurring on Tuesday, December 11.

During emergencies, Aquila believes it is important to communicate with its public officials and emergency services organizations during the events. In December, the company used a variety of methods to keep in contact with public officials, emergency operations centers and emergency services groups.

Southern service area

- External Affairs scheduled a conference call on December 11 to update city officials on the impact of the storm and restoration progress.
  - 12 city officials from 7 cities participated. All who participated were from the south part of Aquila's service area, where service had been restored.

St. Joseph area

- Verbal contact with appropriate city personnel (Public Works, emergency services, etc.) night of December 10 and day of December 11, particularly in responding to dangerous situations such as downed lines, sparking wires and other safety hazards.
- Aquila representatives began meeting with the St. Joseph/Buchanan County Emergency Operations Center on a regular basis, starting on Wednesday, December 12. The EOC included city administration; emergency services organizations, such as police and fire; the Air National Guard; and other members of the team. After the EOC "disbanded" on Saturday, December 15, Aquila provided updates daily to the city's Communications Manager, who shared information with other EOC members. The schedule of EOC meetings/briefings was as follows:

Date	**Time**	**Event**
12/12/07	1:30 p.m.	St. Joseph/Buchanan Co. EOC
12/13/07	1:30 p.m.	St. Joseph/Buchanan Co. EOC
12/14/07	1:00 p.m.	Maryville City Officials
12/14/07	3:30 p.m.	St. Joseph/Buchanan Co. EOC

12/15/07	2:00 p.m.	St. Joseph/Buchanan Co. EOC
12/16/07	1:00 p.m.	St. Joseph Communications Manager
12/17/07	9:00 a.m.	St. Joseph Communications Manager
12/18/07	11:00 a.m.	End of storm EOC briefing – St. Joseph Presented contribution to American Red Cross for shelter services

- Provided information on number of customers out, locations most affected, workforce levels, safety information, etc.
- Coordinated activities with the EOC as appropriate.

Maryville area

- Local supervisor communicated with area public officials as needed.
- In addition, Ivan Vancas, Operating VP – Missouri Electric traveled to Maryville to meet with public officials and the local media. The schedule was as follows:

Date	**Time**	**Event**
12/14/07	1:00 p.m.	Maryville City Officials
12/18/07	2:00 p.m.	End of storm public official briefing – Maryville

- Operations supervisors and field personnel made contact with local public officials in some of the other communities.

Media Briefings

Area news media can be a great asset in informing customers about the severity of an event, conveying safety messages and keeping customers apprised of the progress being made in the restoration effort. To help provide regular information to the media, Aquila held several media briefings. Many of these were held jointly with the St. Joseph/Buchanan Co. EOC and the American Red Cross, in order to provide important information from all these groups in a timely manner.

Date	**Time**	**Event**
12/12/07	3:00 p.m.	Joint media briefing – Aquila, St. Joseph/Buchanan Co. EOC
12/13/07	2:30 p.m.	St. Joseph joint media briefing
12/14/07	1:30 p.m.	Maryville media briefing
12/15/07	2:30 p.m.	St. Joseph joint media briefing
12/18/07	11:00 a.m.	End of storm media briefing – St. Joseph
12/18/07	2:00 p.m.	End of storm media briefing – Maryville

Television Interviews/Report

Because of the severity of the storm, the restoration effort was covered by the St. Joseph-based television and cable stations; but also Kansas City-area and even national media.

Aquila regularly contacted the video media, responded to all requests for interviews, arranged for media to film crews at work and to interview workers.

- The first interview was conducted mid-day, Tuesday, December 11.
- TV media that covered the storm included KQ2, St. Joseph Cable Vision, Fox 4, NBC (National), KMBC, KCTV, KSHB, The Weather Channel.
- Numerous on-site interviews were conducted with a member of the Aquila Communications Team or operations personnel.
- TV crews were escorted or directed to several locations where line crews were making repairs.
- The TV stations were invited to all the media briefings.

Radio

Radio provides one of the most effective methods for providing timely information to customers. Because of the severity of the storm, Eagle Radio suspended its regular schedule and broadcast storm coverage only. This provided an opportunity to get information to a large portion of the most severely affected area.

- Eagle Radio's coverage area includes much of Aquila's northwest Missouri service territory.
- Between December 13 and December 18, Aquila VP Ivan Vancas and others from the company spent more than six hours on Eagle Radio in six separate appearances.
- Two of the appearances were simulcast on four local radio stations.
- The appearances enabled the company to provide outage and safety information.
- The programs had a call-in format, so Aquila representatives were able to answer questions directly from customers.
- The call-in shows provided a great tool for addressing rumors and misconception.
- Many callers said it served as a "lifeline" for them.

Area radio stations were invited to all the media briefings.

Public Official Contacts

Public officials are a key audience during emergency situations. They need information to be able to respond to their constituents and to coordinate government and emergency services.

Missouri Public Service Commission

- The Aquila VP spoke daily with the PSC contact, who attended SEMA meetings.

Cities/Counties

- Communications Team members responded to phone calls and helped obtain information for city and county officials.
- News releases were faxed to city halls on December 7, 11 and 12.
- A conference call was held on December 11:
    - Invited all service area cities that could reach to participate in the conference call

- 11 people participated – representing 7 cities
- All were from south part of service territory

- Direct contact was made by local supervisors and workers with cities where it was difficult to communicate by fax or e-mail.

State Legislators

- Aquila's Legislative Services Manager made regular contact with area legislators starting on the 2nd day of storm. Communications methods included:
  - Telephone/voice mail
  - E-mail – Status report sent twice each day, following morning and afternoon internal conference calls
  - Personally visited secretaries on Day 4 to alert how to handle constituent calls and show access to website
- Legislators (or their staff) contacted:
  - Senators Charlie Shields, Brad Lager, Luann Ridgeway, Matt Bartle
  - Representatives Mike Thomson, Jim Guest, Jason Brown, Martin Rucker, Ed Wildberger, Tim Flook, Brian Yates

Aquila Web site

- Customers used the Aquila.com Web site to check outage statistics. (This is covered in more detail in another section of the report.)
- The Web site includes other information useful to customers in times of storms:
  - Electric Safety Tips
  - Preparing for Storms
  - The Restoration Process
  - Outage Reporting
  - And, more

Shelter and Other Services

- The American Red Cross provided shelter services in the northern Aquila Service area:
  - Several shelters throughout NW MO
  - Covered most of Aquila communities
  - Shelter locations provided to Call Center staff to pass on to customers
- Red Cross participated in media briefings at the St. Joseph EOC.
- Aquila cooperated with Red Cross on special needs situations.
- The company contributed $10,000 to Red Cross to help with shelter expenses.

Customer Feedback

Aquila received numerous expressions of appreciation:

- More than 80 e-mails and calls were documented.
- Notes were written on bill statements.
- Poems were sent to Aquila or printed as a Letter to the Editor.
- "Thank You" signs appeared all over St. Joseph.
- Many acts of kindness occurred throughout the event:
  - Customers brought workers:
    - Coffee
    - Hot chocolate
    - Cookies
    - Sandwiches
    - Hugs

Copies of e-mails, poems and expressions of appreciation are included in this report as Appendix D.

Aquila also received comments that were sent directly to the Missouri Public Service Commission in Aquila's storm investigation docket. Those comments, along with Aquila's responses to each customer, are included in this report as Appendix E.

Vegetation Management

As previously described in this report, trees contacting power lines was a major factor in the Ice Storm. In many instances trees were bent and pushed by the weight of the ice into areas in which they would not normally grow.

Aquila has a vegetation management program that has been in place since the early 1980s. This program has defined cycles for both the distribution and transmission system. A copy of this standard is found in Appendix F of this report. Following is an overview of these requirements:

Distribution

The current planned cycle is three years for three-phase lines and five years for lateral taps. Clearances obtained are based on species type and rate of re-growth to provide at least six feet of clearance from all conductors. Typically, 10 to 15 feet of clearance is obtained. All overhang is removed from the primary lines. Aquila's current rate of removal for trees totally within the utility easement is 30 percent.

Rural R-O-Ws are maintained with mechanical trimming, hand cutting, and herbicide applications.

Trimming of service lines is the responsibility of the customer.

Beginning in 2006, all cycle work is preplanned prior to assignment to crews by Aquila foresters.

Transmission

The current planned cycle is three years in urban areas and five years in rural areas.

Rural R-O-Ws are cleared of all tall-growing trees the total width of the easement. Rural R-O-W maintenance includes mowing, hand cutting, mechanical trimming and herbicide applications.

Urban R-O-Ws are maintained to provide a minimum of 12 feet of horizontal clearance from the conductors and six feet below the lowest conductor.

An annual aerial patrol is made of all transmission facilities to identify any possible tree problems.

Funding for the Vegetation Management Program has increased each year since 2003 with an average increase of 10.6% excluding the $2,000,000 added to the 2008 budget to start compliance with the PSC's proposed Vegetation Management Rule. The following table lists actual tree trimming dollars spent for 2003 through 2007 and the 2008 budget:

Year	Tree-Trimming Expenditures
2003	$5,184,000
2004	$5,254,000
2005	$6,281,000
2006	$6,982,000
2007	$7,595,000
2008 Budget	$10,573,000

Aquila is generally on schedule for trimming of the distribution facilities as indicated in the table below:

Total Missouri Distribution

	2005	2006	2007	2008 (est)
Pole Miles Cleared	1,128	1,304	1,490	1,973
% of System Pole Miles	15%	17%	19%	25%

Aquila's Vegetation Management Program is on schedule for the transmission facilities. The urban and rural cycles are on schedule. An aerial patrol is completed annually, which identifies trees encroaching within the easements and brush growth. Spot trimming is then completed for trees encroaching on the easement, and herbicide applications are made where required.

In 2006 Aquila completed a Six Sigma Project that reviewed all current vegetation management work practices. This study established a base line of average footage trimmed per crew/day.

This study recommended adding three additional foresters to preplan the cycle trimming and increase supervision to improve the productivity of the tree crews. The result of adding these positions has increased the footage trimmed per day from 279 feet to 358 feet which is a productivity increase of 28%. This closer supervision and planning has also decreased hotspot trimming from 16% to 7%.

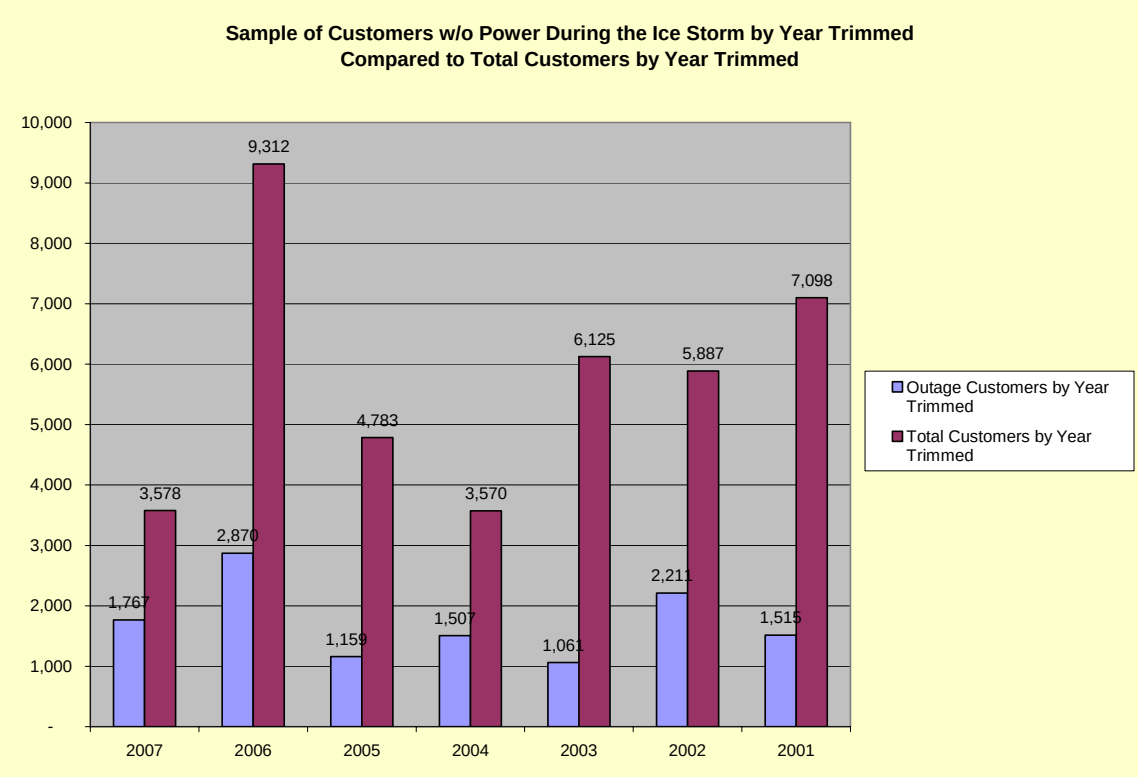
Aquila has already started making adjustments for the new vegetation rule by adding an additional $2,000,000 to the 2008 tree trimming budget. This was in addition to the previous increase of approximately $1,000,000. In order to be in compliance with this rule, Aquila will have to change its trim cycle to four years, implement a two-year inspection of facilities in urban areas, and three years in rural areas and start a customer notification program. The total annual estimated increased cost to implement all of these requirements is approximately $3,000,000/year.

The Ice Storm resulted in only one tree-related outage on the transmission system. This outage occurred when a tree located outside the ROW fell into the transmission line.

Numerous outages occurred on the distribution system. A large number of those outages were due to individual service lines. Many of the tree-related primary outages were caused by trees and tree limbs falling into the overhead conductors from outside the distribution ROW.

Savannah, Missouri is an example of numerous tree related outages occurring even when much of the distribution has been recently trimmed. Prior to the ice storm two feeders affecting 79% of the customers served were trimmed in 2007. Yet Savannah was one of Aquila's hardest-hit areas.

In order to try and determine to what extent vegetation management played a role in the outages during the Ice Storm, Aquila performed a statistical analysis of a sample of circuits in the St. Joseph area. In this analysis, Aquila identified the year in which each circuit was last trimmed, how many customers lost service on that circuit during the Ice Storm, and how many total customers are served by that circuit. The graph below shows the results of that analysis.



This analysis shows that there is little, if any, relationship between the number of outages on a circuit and when it was last trimmed. For example, the circuits that were trimmed most recently, in 2007, had the greatest percentage of customers out, 49% (1,767/3,578),

while the circuits trimmed in 2003 had the lowest percentage of customers out, 17% (1,061/6,125).

Lessons Learned

As with any major event, Aquila was able to learn many valuable lessons from this Ice Storm. Some of these lessons were in regard to things that Aquila did for the first time that worked well, while others were things that Aquila recognizes could be done better in the future. Many of these were listed in individual sections of this report, but are restated here in order to provide a comprehensive list.

What went well?

The items listed below are areas in which Aquila believes that it did a good job. Many of these items were added or substantially enhanced as compared to previous storm events. Aquila will continue to focus on these areas in the future.

- **Public outreach**
  - Most extensive we've ever done
  - Very good feed back from the communities
- **Early preparation and manpower commitment**
  - Internal and external resources
  - More skill levels, better organization of resources, better planning
  - Tactical Management – integrated briefings, end-of-day assessments, next-day work planning, twice-daily state-wide calls
- **Working the plan – Defined roles and centers of expertise**
  - Executive Disaster Coordinator
  - Public Outreach
  - Materials Management
  - Field service coordination
  - Customer Service
  - Reporting
  - Logistical Support – Meals, rooms, etc.
- **Community-Based Emergency Response Planning**
  - Many local governments and National Guard well prepared
  - Emergency plans, shelters, supplies, wellness checks etc.

What could be improved?

As a standard practice and as identified in Aquila's Emergency Storm Restoration Plan, Aquila Missouri holds a post-investigation of each major event to gain additional insight to improve future restoration plans. The Ice Storm that struck the majority of Aquila's North Region was no exception. Following is a list of improvements that Aquila intends to make in order to be even more effective in its future restoration projects.

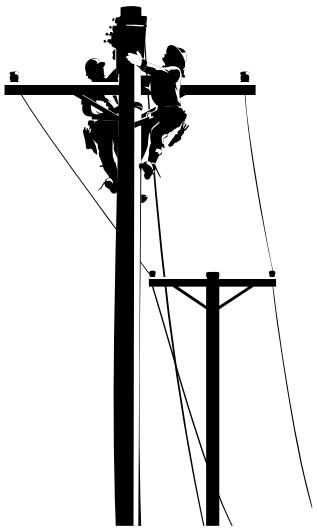
- Download to Excel results from ticket screen query (individual tickets)
- Download to Excel results from the History / Customer Count query
- Better ability to rerun callbacks
- Select "All" functionality for callbacks
- Query by Device Tag and TX number to get individual tickets associated with that device
- TL that have more than 500 tickets - be able to query by times in order to view all the tickets
- Electric Outage Center number of customers served in specific towns less than number of customers affected
- Add HVCA toll-free number to list of numbers to monitor/report during high call volume events
- Centralized approach for outside resources
- Shift restoration priorities to include nursing homes, hotel/motels catering services to support internal and external resources during major events
- Work with critical load customers, such as water/sewer treatment plants on the benefits of installing backup generation. Provide a listing of accessible generators for the cities
- Provide additional training for support resources
- Establish Field Resource/Call Center resources in the field to ensure open, effective communication between the central storm restorations centers and the field
- Establish multiple staging/material lay-down areas to decrease congestion and increase productivity
- Develop specific language around individual responsibilities to ensure a consistent approach across all four Missouri regions
- Utilize radio and TV to openly communicate with customers
- Develop a process to provide open communication with County disaster Coordinators and SEMA on a daily basis
- Add message to HVCA informing the customer what needs to be done if their power line and meter can have been pulled away from the house.
- Have cell phone numbers entered in ServiceOn in the area for additional notes and have the customer contacted through cell if possible.
- Have a representative from FRC come in and give a quick briefing on what is on the agenda for the day - i.e. customers restored, customers still to be restored and provide answers to some of the most commonly asked questions.

- CSAs should be able to see when callbacks have been made and service is restored.
- Local office to update/document accounts on customers who have damage that will require an electrician.
- Communicate areas where we were having success.
- Improve the ServiceOn ticket process for duplicate call-ins.
- Provide more information on where the crews are working and what had been completed.

Appendix A

Emergency Storm Restoration Plan

EMERGENCY SERVICE RESTORATION PLAN



Aquila Networks

Missouri

Rev. 2007

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Overview

The Emergency Service Restoration Plan addresses the tasks necessary to return our electrical system to a normal operating condition when our ability to deliver electricity to the customer is lost during a Class II or Class III disaster as defined on Page 6. Events that may interrupt the delivery of electricity include but are not limited to:

- Severe weather such as high wind conditions, tornados, snow storms, ice storms or floods.
- Events caused by man such as hazardous material spills, acts of terrorism, transportation accidents or fire. NOTE: In the event of an act of terrorism, John Breckenridge, Corporate Security, shall be notified. He will then facilitate the initial response.

Our service restoration efforts will follow this philosophy:

- Safe practices on the part of all employees, contractors and others responding to the disaster are required in all operations. Aquila desires to provide a safe work place, safe equipment, proper materials, and to establish and insist upon safe methods and practices at all times. At no time is safety to be sacrificed for speed.
- Upon recognition of a public safety hazard that does not impact our facilities, steps will be taken to notify the proper emergency authorities.
- Employees who are named as members of the Emergency Service Restoration Team will have the ability to make necessary decisions in the field. Team members and their responsibilities are listed on Page 8 of this plan.
- Electric service restoration is the top priority and will be the responsibility of the Emergency Service Restoration Team members until all customers are back in service.

Scope

The Emergency Service Restoration Plan provides guidelines for service restoration during times of a major system disturbance.

The efficiency of restoration of the company's electric service depends on the maximum utilization of the people and facilities available to management. The extent of the damage from a storm or disaster will dictate our level of response and approach to service restoration. Local Network Operations Management and personnel must obtain accurate assessment of transmission, distribution, substations and other facility needs as soon as possible.

It is always our intent to take proactive measures to prepare for a disaster rather than underestimate the severity.

Emergency Service Restoration Team Conference Call Number

The conference call number for the Emergency Service Restoration Team members will be **1-866-737-9152.** The Executive Disaster Coordinator will schedule the first call as soon as possible after the disaster is declared. Subsequent scheduling of calls will occur at intervals to be determined based upon the severity of the disaster.

Conference Call Number	1-866-737-9152
Leader Passcode	9047430
Participant Passcode	5478242
Confirmation Number	2481150

This Emergency Service Restoration Plan may be accessed at all times as follows: http://wow.ucu.com/ (WOW Page), Departments, Missouri Electric Emergency Service Restoration.

Representatives from Par, Asplundh and Capital Electric will also be asked to participate in these conference calls.

Aquila State-Wide Disaster Planning Meeting

To guarantee awareness of this Emergency Service Restoration Plan and the procedures contained herein, a representative from each service center and resource group will be required to attend a meeting facilitated by the Director – Business Operations (Executive Disaster Coordinator) to be scheduled semi-annually during the months of March and September. The purpose of this meeting will be to update and review the Emergency Service Restoration Plan and promote discussion for learning from previous disasters and further preparation for future disasters. Representatives from PAR, Asplundh and Capital Electric will also be asked to attend this meeting.

Sr. Administrative Assistant Networks – Distribution Services – Checklist
Primary – Alexa Nunnery 816-737-7903
Secondary – Laura Hillman 816-251-2643
Lori Wessley 816-737-7777, ext 4902

PLEASE NOTE: These tasks will be the responsibility of the Sr. Administrative Assistant in order to ensure that the Missouri Emergency Service Restoration Plan is up to date as preparation for disaster recovery.

	Task	Initial	Date/Time
	Acquire a designated conference call number and supply each manager/designated participant with laminated call information card.		
	Schedule the state-wide disaster planning meeting for the 2nd Thursday of each March and September to review the Emergency Service Restoration Plan.		
	Update the Missouri Electric Operations Contacts file on a quarterly basis.		
	Update the Missouri Extended Support Team list on an annual basis.		
	Test the designated conference call number each 6 months to ensure that it is working properly.		
	Update the Emergency Service Restoration Plan as needed.		
	Provide a hardcopy of the Emergency Service Restoration Plan with updated appendices at each March and September meeting.		
	Ensure the link to the plan is always updated and available from the WOW Page.		

Pre-emergency Planning

At all times each area shall have on hand the following so that an emergency kit can be put together during times of major system disturbance.

a. Minimum of 10 copies of service territory maps (county and city road maps) for use by damage assessment and restoration personnel. This number will need to be increased to accommodate your service territory size and ensure an adequate number of maps are available.
b. Electric distribution maps by area, pre-gridded to define proposed restoration areas. These are to be reprinted every two years.
c. A list of your district's substation and feeder numbers.
d. Missouri Electric Operations Contacts list and the Missouri Extended Support Team list. These files are located at http://wow.ucu.com/ (WOW Page), Departments, Missouri Electric Emergency Service Restoration. Copies of the updated lists will be distributed each March and September at the training/update meeting held prior to peak storm seasons.
e. Customer priority restoration list for that area (hospitals, police departments, fire departments and local designated emergency shelters).
f. List of motels, restaurants and other food providers within the area where lodging and meals for crews may be obtained, in addition to a list of local tow truck companies for wrecker services. (Refer to Fleet Coordinator Section on Page 10 for list of state wide wrecker services available.)
g. List of fuel dealers within the area where vehicle fuel may be obtained during and after hours. Priority should be given to bulk fuel dealers who will refuel vehicles at service centers after hours.
h. Knowledge of the Emergency Service Restoration Plan and who fills what roles during an emergency.
i. Minimum of 10 Contractor Daily Time Sheet booklets. Each General Foreman will be given a book of Contractor Daily Time Sheets for use during the storm restoration process. These forms must be completed daily and signed by an Aquila supervisor or their designee or Aquila will not be responsible for any payment associated with that day's work. **There are no exceptions to this provision.**
j. Sufficient quantity of Emergency Storm Restoration Plan Appendices D & E for damage tracking.
k. Current listing of public officials, legislators and local emergency coordinators. This list will be obtained from Judy Ness at the semi-annual training meetings.
l. List of contracted retirees to be utilized for high level assessment.
m. Contractor packets that contain common Aquila Construction Standards, area specific contact information (assigned supervisor) and communication methods.
n. Each area will have identified three facilities that may be utilized in the event of destruction of our service center and verify with that property owner the availability of their facility for our use should the need arise.
o. Each area is responsible for predetermining numbers of computers, telephones and other equipment that may be required in the event an off-site facility is needed.
p. Kits are to be updated prior to the State Wide Disaster Planning Meeting.

Preliminary Response

1. When possible, the Field Resource Center will advise local operations management by phone if the probability of severe weather exists or severe weather is moving into or toward the area. This information will be derived from the National Weather Service.

2. The local operations management will notify their key people of the possibility of approaching severe weather. At this time the Emergency Restoration Plan and local personnel assignments need to be reviewed.

3. If the forecast appears to be on target the Executive Disaster Coordinator will arrange for a meeting/conference call with the Missouri Vice President of Operations, Director of Transmission and Director of Engineering Services to review the weather forecast and determine whether to initiate the mutual assistance plan and contact third party contractors for outside assistance before the storm hits the area. If the decision is made to call for outside assistance, the Executive Disaster Coordinator will be responsible for doing so.

   If, at this time, the decision is made to not call for outside assistance, continual monitoring of the storm will determine the need for additional meetings/conference calls to reevaluate the situation.

4. Operations Supervisors and Field Engineers are expected to monitor the storms hitting their areas and go to their service centers without being called if the local storm situation is severe.

5. As outages begin occurring, the Field Resource Center will proceed with crew callout. Upon determination that the situation exceeds a Class I disaster the Field Resource Center will turn the restoration efforts over to local field management who will then dispatch employees to the affected area to complete a detailed damage assessment and start developing the restoration. (These will generally be the first responders such as servicemen or local maintenance men, then others as needed and will hereafter be termed Damage Assessment Teams.)

6. The System Operations Center will keep the Field Resource Center and local Network Operations informed of the status of transmission lines and substations that affect the region.

7. Those employees sent to affected areas will make a preliminary damage assessment, listing the number of circuits out, number of poles down, spans of wire down, number of services down and estimated number of customers out of service. In case of continuing storms or those storms moving across a region, this information will need to be updated continually.

8. From information received from the Damage Assessment Teams the local operations management will determine the class of disaster as follows:

    a. **Class I** – Outage can be handled by normal operations -
        1. No out of area support required.
        2. Existing area operations personnel can manage the disaster.
        3. Customer Service Center will not require additional staffing.

    b. **Class II** – Limited assistance is required from other regions -
        1. Additional crews and service personnel will be required from other regions within the state.
        2. Network Operations (CSA, Call Center employees, etc.) employees will be required to answer phones, log outages, prioritize handoffs from Customer Service Center and record restorations.
        3. Additional supervisor support may be required to patrol and supply actual damage assessment of the transmission and distribution system. Engineering may be called upon at this point to supply this support.
        4. State Community Services Director or designee will be notified to issue news releases, ensure timely internal communication, conduct media interviews, etc.
        5. Storeroom personnel will be needed to procure material from other areas, haul material and issue materials to crews.
        6. Customer Service Center will require additional staffing.

    c. **Class III** – Major damage has been sustained to the area, region or state -
        1. Regional Disaster Coordinator and/or Executive Disaster Coordinator will be called to take the lead on providing support personnel.
        2. A substantial number of out-of-area crews, contractors, office operation personnel, supervisory employees, communication employees, purchasing employees and storeroom employees will be needed.
        3. Damage is such that an area or region may be divided into disaster areas and remote staging locations will be established for crews reporting and distributing material.
        4. Customer Service Center will adjust staffing/scheduling requirements to handle added call volumes.

Once local supervision determines that they have experienced a Class II or Class III disaster, the Emergency Service Restoration Plan will be activated.

High Level Assessment

This is our **first** and **most critical** responsibility when a disaster occurs. We need to utilize all available personnel to perform a high level assessment of the damage in the field based upon actual observation of physical damage and reports via the Field Resource Center.

All available resources shall be called upon to begin a high level assessment. In addition to available active personnel, contracted local retired employees should be called upon to help.

Damage needing to be reported includes:

- Number of poles to be replaced
- Number of feeders down
- Spans of primary wire down
- Major equipment damage (transformers, reclosers, regulators, switches)
- Approximate number of services down

Appendix D (Aquila Repair List) can be utilized to record this information if desired.

A quick assessment is the most important factor in ensuring that enough outside resources are brought in for quick and efficient restoration of service to our customers.

Transmission and Substation Restoration

Once a high level assessment has been performed, it is the responsibility of the Disaster Coordinator to contact Lee's Summit System Operations Center to report their field findings and then the Transmission/Substation Department will put their Emergency Plan into action. This contact with System Operations may occur prior to complete damage assessment if the scope of the disaster is determined to be beyond local personnel's assessment capabilities.

In the event Transmission/Substation personnel are not required to fulfill their normal duties, they have been pre-assigned to designated areas for distribution service restoration. Refer to Missouri Extended Support Team list.

Restoration Process Responsibilities

The Emergency Service Restoration Team members and their responsibilities are listed below with a more detailed checklist of responsibilities provided on the pages that follow:

Field Restoration Coordinator - Page 13

The Field Restoration Coordinator will generally be an Operations Supervisor, or their designee, who is working in the field during the restoration process and will report directly to the Disaster Coordinator. This role will be responsible for initially helping to perform damage assessment and then will supervise crews involved in the restoration efforts. There will be multiple Field Restoration Coordinators involved in each disaster recovery effort; the number will be determined based on the severity of the disaster and the number of crews assisting in restoration.

Disaster Coordinator - Page 14

This role will generally be filled by the local Operations Supervisor who is working in the service center during the restoration process and will report directly to the Regional Disaster Coordinator. This person is responsible for the overall management of the restoration efforts and will need to be familiar with the service territory where the disaster has occurred. Primary and Secondary Disaster Coordinators for each service center have been determined and are listed on the Missouri Extended Support Team List located at http://wow.ucu.com/ (WOW Page), Departments, Missouri Electric Emergency Service Restoration.
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Regional Disaster Coordinator – Page 16

This role will generally be filled by the Regional Manager over the affected disaster area. The role will activate and manage the Emergency Response Team listed below and will report directly to the Executive Disaster Coordinator. This person will participate in the disaster recovery update conference calls.

Executive Disaster Coordinator – Page 17

This role will be filled by the Missouri Director - Business Operations. The role is that of overall disaster coordinator for the state and will coordinate communication between all disaster affected areas, making decisions based upon a state level perspective. This person will lead the disaster recovery update conference calls. They will also facilitate the March and September disaster planning meetings.

State Vice President – Operations – Ivan Vancas
(No checklist has been developed for this position)

The State Vice President of Operations will be responsible for keeping corporate leadership aware of status of restoration efforts. This person may desire to participate in the disaster recovery update conference calls.

Electric Extended Support Team Resource Coordinator
(No checklist has been developed for this position)

Primary	*Alexa Nunnery*	*816-737-7903*
Secondary	*Shari Greife*	*816-737-7617*
	Tara Horton	*816-737-7687*
	Patty Austin	*816-737-7655*

It is the primary responsibility of this person to oversee the contacting and assignment of personnel by area as listed on the Missouri Electric Extended Support Team list and requested by each Regional Disaster Coordinator. This will be accomplished by utilizing all other Senior Administrative Assistants at her disposal.

Administrative Coordinator – Page 18

This role will generally be filled by a Network Operations Administrator or Customer Service Associate working in the service center. They will take their direction from the Disaster Coordinator and it will be their responsibility to monitor completion of all tasks on the checklist.

Materials Coordinator – Mike Spencer – Page 20

Each area will call the storekeeper responsible for the day to day materials management for that area. Please refer to the Missouri Electric Operations Contacts List for this contact. Once determined that the disaster is a Class II or Class III and the local storekeeper needs additional resources to adequately address the needs of the storm restoration process, they will contact Senior Materials Manager and proceed with their Supply Chain Management Business Continuity Plan. The Senior Materials Manager or their designee will need to participate in the disaster recovery update conference calls.

Each Materials Coordinator will communicate directly with the Disaster Coordinator and will be responsible for material availability, acquisition, delivery and inventory tracking.

Community Relations Coordinator – Judy Ness – Page 20

This role will generally be filled by the Senior External Affairs Manager. It will be this person's responsibility to communicate with local public officials and community leaders. This person needs to participate in the disaster recovery update conference calls.

Communications Coordinator – Jan Zimmers – Page 20

This role will generally be filled by the Senior Director of Customer & Marketing Communications. It will be this person's responsibility to coordinate all internal and media communications.

Regulatory Communications Coordinator – Gary Clemens – Page 21

This role will be filled by the Director of Regulatory Services for Missouri or their designee. It will be the responsibility of this position to communicate all pertinent data directly to the Public Service Commission. This person will participate in the disaster recovery update conference calls.

Legislative Services Coordinator – Steve Murray – Page 21

This role will be filled by the Manager of Legislative Services. It will be the responsibility of this position to communicate all pertinent data directly to any and all legislative offices that he deems appropriate.

Fleet Coordinator – David Hostetler – Page 21

The Fleet Coordinator may be called upon to secure the use of any additional vehicles for service restoration. This may include contacting all company locations for use of their vehicles that are not currently being used or contacting a rental agency. Please refer to the Missouri Electric Operations Contacts List for this contact.

Statewide contracts in place for towing and tire repair:

ABC Tow, Lee's Summit	Contact Tammy	816-524-9688
Walker Tire & Tow, Odessa	Contact Dave Walker	816-230-5752
TCI Tire Repair, Kansas City	Contact Dave Post	816-483-4141 (contract pending)

Forestry Coordinator – John Norris – Page 21

The Forestry Coordinator will be called upon to secure the services of all available third party tree trimming contractors. It will be the responsibility of the Forestry Coordinator to manage all tree trimming personnel. This position will need to work closely with the Disaster Coordinator. Please refer to the Missouri Electric Operations Contacts List for this contact. This person may participate in the disaster recovery update conference calls.

Informational Update Coordinator – ServiceOn and HVCA – Brett Williams – Page 22

This role is filled by the Director – Field Resource Center. It is the Director's responsibility, or their designee, to keep the public apprised of the status of the disaster recovery through messaging in High Volume Call Answering and posted updates on the Electric Outage Center at

www.aquila.com . This person shall participate in the disaster recovery update conference calls. Please refer to the Missouri Electric Operations Contacts List for this contact.

Hot Lines – Support Departments

Environmental Services – Frank Weaver
(Refer to Environment Disaster Plan)

Environmental Services should be called upon to assist in the event of oil spills or other environmental situations associated with the disaster. Call Environmental Hotline **(1-800-789-9181)** and they will implement their callout procedures.

Information Technology Support – Scott Buchholz
(Refer to Information Technology Escalation Process)

When a disaster occurs and IT support is needed, call IT Help Desk **(1-800-828-4605)**. They will record your needs and put their escalation process into place at that time. You will need to be specific as to what your needs are.

Safety – William Moore
(Refer to Corporate Safety Disaster Plan)

In the event a safety related incident occurs in the course of disaster recovery efforts, the Safety Department should be contacted by calling the Safety Hotline **(1-800-789-9181)**.

Security – John Breckenridge
(Refer to Corporate Services Disaster Plan)

Security shall be contacted to provide manning of remote material staging areas and/or other off-site areas as necessary. Security Department shall also be contacted in the event security intervention becomes necessary at a local office or other company site. The Security Department shall be contacted by calling the Security Hotline **(816-467-8102)**.

Media Hotline – 816-467-3000

Other Support Areas

Customer Service Center Support – Robin Souder
(Refer to Central Services Disaster Plan)

The Director – Customer Service Center or their designee may need to participate in the conference calls in order to communicate effectively to their employees the status of the disaster and disaster recovery.

Radio Communications Department Support – Leroy Lutes
(Refer to System Operations Disaster Plan)

Each radio repeater has a generator. When the field offices become aware that a radio repeater site is without power and operating on a generator, the Communications Department should be notified through the Lee's Summit System Operations Center.

In the event that a repeater is rendered inoperable during a time of disaster, the field offices will need to utilize their back-up repeater location if available. If neither repeater is operable, the field offices will need to rely on emergency procedures for radio communications.

- Desk sets will need to be set to Channel F3.
- Trucks radios will need to be set to that area's Emergency Channel.
- Motorola Handhelds – press the red button on the top of the radio and this automatically sets to the emergency mode.
- Midland Handhelds –a chart located on the battery of these radios gives the emergency channel for each area.

NOTE: This is only to be done if the repeater is rendered inoperable. Moving communications to the emergency channels allows us to talk from service center to trucks and from truck to truck only. We will no longer be able to communicate with the Field Resource Center or the Lee's Summit Operations Center via company radio.

Facilities / Corporate Services – Chris Anderson
(Refer to Corporate Services Disaster Plan)

In the event that service centers are damaged or destroyed in the course of the disaster, Corporate Services will need to be contacted. They will secure an alternate facility to be utilized as the center of the storm restoration process. Please refer to the Missouri Electric Operations Contacts List for these contacts (Appendix A-1).

Restoration Process Responsibility Checklists

Field Restoration Coordinator – Responsibilities Checklist

	Task	Initial	Date/Time
	Conduct initial damage assessment (Appendix D).		
	Give Disaster Coordinator best estimate of damages and number of additional resources needed for service restoration. This communication needs to continue frequently within the assessment process.		
	Communicate requirements for specialized equipment and personnel.		
	Communicate which damage reported affects customers who are identified as being critical load.		
	Communicate with Disaster Coordinator recommendations of need for and proposed location of local staging area for materials, meals, etc.		
	Continual reevaluation and prioritization of restoration work remaining.		
	Assist Disaster Coordinator to allocate crews to designated areas dictated by severity of damage.		
	Each Field Restoration Coordinator will be responsible for ensuring that the Aquila personnel under his/her supervisor will have time sheets completed for them and forwarded to their appropriate time keeper.		
	Hand out contractor packets to general foremen who haven't received them yet.		
	Assign/supervise/track crews working service restoration (Appendices F & J). Establish ground rules with all field personnel for reporting service restoration information, i.e. time restored, device tag # restored.		
	Gather and approve contractor daily time sheets.		
	Recommend release of resources and equipment from your area to other areas as needed. Coordinate this with the Disaster Coordinator.		
	Participate in post-event critique.		

Disaster Coordinator – Responsibilities Checklist

	Task	Initial	Date/Time
	In the event of loss of service center facilities, notify the Regional Disaster Coordinator of need to establish an offsite Disaster Operations Service Restoration Center.		
	Notify Regional Disaster Coordinator of status of high level assessment and need for securing additional assessment and restoration personnel (third party contractors, department heads and volunteers located on Missouri Extended Support Team list). This step is ongoing.		
	Contact contracted retirees to help with high level assessment.		
	Contact Administrative Coordinator and Storekeeper.		
	Notification to the FRC regarding their contact during the disaster.		
	Make initial estimate of the magnitude of the disaster utilizing Field Resource Center data, trouble order tickets, Field Restoration Coordinator reports (Appendix D), field personnel reports, ServiceOn data and System Operations data. This step will be a continual process of reviewing all information to keep up on the geographic extent of the disaster. Work closely with the Administrative Coordinator on this step. This information will be communicated to the Regional Disaster Coordinator for their use during the disaster recovery update conference calls.		
	Communicate with Field Restoration Coordinator(s) to determine need for remote staging areas for material, food, etc. Secure areas for these purposes as needed.		
	Notify Regional Disaster Coordinator of computer and telephone needs.		
	If remote staging area is needed, notify Materials Management once location has been determined. Secure individuals to man this site 24/7 (see Security).		
	Notify Regional Disaster Coordinator of remote staging areas.		
	Possible notification of municipal emergency services (911 centers) regarding handling of disaster.		
	Make decision as to which crew(s) would need to work during the night if needed for emergencies.		
	Dispatch internal and contract personnel as needed utilizing a grid map methodology and assign skilled/knowledgeable personnel to supervisor in the grid as well. Set up and maintain a mechanism to track the location of these assigned personnel and work to be performed. Obtain updates and record progress as made.		
	As third party contractors/other utilities arrive at initial show up, verify receipt of Aquila Storm Restoration Request Form (Appendix C) from Regional Disaster Coordinator. If not yet completed, this must be completed for all third party contracting personnel at this time.		
	Distribute Contractor Daily Time Sheet Books to each general foreman as they arrive. Emphasize expectations regarding completion of these time sheets.		
	As third party contractors/other utilities arrive, ensure each is issued a contractor packet that communicates Aquila's common operational standards. These are in each area's emergency kits.		
	Assist Corporate communications as local community and media contact.		

	Address labor relations issues as they occur. Communicate all labor relations issues to Regional Disaster Coordinator.		
	Task	Initial	Date/Time
	Recommend release of resources and equipment from your area to other areas as needed. Coordinate this with the Field Restoration Coordinator.		
	Participate in post-event critique.		
	Reconcile all contractor/vendor invoices with appropriate support records; i.e., time sheets, motel/restaurant bills, etc. Work with Administrative Coordinator and Field Restoration Coordinator to ensure proper documentation.		

Regional Disaster Coordinator – Responsibilities Checklist

	Task	Initial	Date/Time
	Notify Executive Disaster Coordinator of need to activate of Emergency Response Team, declare the class of the disaster and secure additional outside resources for storm restoration.		
	In the event of loss of service center facilities, contact Corporate Services to initiate the establishment of an offsite Disaster Operations Service Restoration Center.		
	Notify IT Help Desk of each area's computer and telephone needs as communicated by Disaster Coordinators.		
	Secure additional storm restoration personnel as available, i.e., other Aquila crews and third party contractors already working in your area. Contact the Extended Support Team Resource Coordinator (see Page 9) to secure additional support personnel.		
	Consider the need for additional administrative support personnel by area.		
	Review Assistance Expectations Form with third party contractors (Appendix B).		
	Fax Assistance Expectations Form to each third party contractor.		
	Fax Aquila Storm Restoration Request Form to each contractor (Appendix C). When this step is not possible, Disaster Coordinator will complete this step at the local level.		
	Work with Communications Coordinator to identify who their point of contact is for each area. Recommend that they communicate directly with Regional Disaster Coordinators unless scope of disaster dictates the necessity to branch further to Disaster Coordinators.		
	Compile information provided by each Disaster Coordinator utilizing Appendix D format to share during storm update conference calls.		
	Frequently analyze personnel needs and reassign crews to each affected area as needed.		
	Assist Corporate Communications as local community and media contact.		
	Daily reevaluate work shifts.		
	Address labor relations issues as they occur to ensure consistency throughout all affected areas.		
	Recommend release of resources and equipment from your area to other areas as needed. Coordinate this with the Disaster Coordinator.		
	Participate in post-event critique.		

Executive Disaster Coordinator – Responsibilities Checklist

PLEASE NOTE: This person is responsible for overall coordination of statewide storm restoration efforts, including but not limited to the tasks listed below.

	Task	Initial	Date/Time
	Pre-notification to third party contractors and other utilities regarding the possibility of needing their assistance if predicted disaster occurs.		
	Notify State VP – Operations of activation of Emergency Response Team.		
	Mandate work shift hours. Initial recommendation: 16 on / 8 off.		
	Schedule and facilitate the emergency service restoration team conference calls utilizing the MO Disaster Resource Tracking & Reporting Template.xls and MO Disaster Outages Tracking by Town Template.xls files located at http://wow.ucu.com/ (WOW Page), Departments, Missouri Electric Emergency Service Restoration.		
	Contact third party contractors and other utilities from Midwest Mutual Assistance roster if needed.		
	Review Assistance Expectations Form with other utility companies (Appendix B).		
	Fax Assistance Expectations Form to each utility.		
	Fax Aquila Storm Restoration Request Form to each utility company (Appendix C). When this step is not possible, Disaster Coordinator will complete this step at the local level.		
	Assign personnel to each affected area based upon information provided by the Regional Disaster Coordinators.		
	In conjunction with Corporate and Community Relations, determine media and customer communications.		
	Consider the need for utilization of any outbound call notification functionality to communicate directly with customers.		
	Organize and lead post-event critique.		
	Write post-event PSC report.		

Administrative Coordinator – Responsibilities Checklist for Administrative Duties

PLEASE NOTE: It is imperative that this person works closely with and takes their direction from the Disaster Coordinator.

	Task	Initial	Date/Time
	THIS COORDINATOR ACTS AS AN ADVISOR FOR ALL RESOURCES ASSISTING IN COMPLETING THE ADMINISTRATIVE TASKS LISTED BELOW		
	Pull Emergency Kits, make more as necessary.		
	Working in conjunction with the Field Resource Center, manually sort trouble orders to ensure they are all investigated and repaired as needed. Take special care in tracking areas that are not in the immediate vicinity of the disaster and those that are especially critical in nature.		
	Monitor ServiceOn for outages that are coming in or have been resolved. Immediately close out tickets as they are completed in the field and generate automated/manual callbacks as needed.		
	Set up STORMS job to obtain work order tracking numbers for the storm. Communicate work order numbers to all affected personnel in charge of time keeping.		
	Call in emergency locates to MO1Call as needed.		
	Assist Disaster Coordinator in tracking customers' repairs needed before we can restore their service (Appendix E).		
	Work with disaster Coordinator to determine need for mobile fueling if available. Secure services as needed.		
	First consideration should be given to buffet breakfasts and buffet dinners at or near the show-up sites, and lunch delivered to a staging area. This could include delivery to staging areas by Aquila personnel or by caterers.		
	Communicate with local restaurants our needs, including approximate number of personnel, and arrange for billing.		
	NOTE: Many motels have restaurants and meals may be obtained at these locations. Clearly defined expectations regarding prices are expected to be communicated in writing before these meals are obtained.		
	Purchase snacks, drinks and personal necessities as needed and make available at the remote staging areas prior to the beginning of each day.		
	Immediately upon receipt of completed Request for 3rd Party Contractor (Appendix C) from Disaster Coordinator, begin making reservations at local motels (utilizing Appendix I). Ensure cancellation requirements are clear and obtain reservation/cancellation numbers for our records. Arrange for billing. NOTE: Maximum one person per bed. **Be sure and block incidentals such as movies and mini bars.**		
	Check out of town personnel into motel rooms by assigned names per third party contractor request forms; hand out room keys at arrival.		
	If there are more workers than motel rooms available, make alternate accommodations as needed. These accommodations can include: local university dorm rooms, bed and breakfasts or other locations such as churches and schools (air mattresses and cots).		

	Task	Initial	Date/Time
	Work with Corporate Facilities to secure portable toilets at remote staging areas as needed.		
	Obtain meter readers from other areas as available to ensure accurate and timely billing of meter routes. If no meter readers available, communicate with Central Services.		
	Ensure input of time sheets for your area's personnel.		
	Distribute applicable time sheets to each Aquila office sending support personnel as appropriate for time entry purposes.		
	Arrange for laundry service for out of town personnel to be delivered to service center prior to next day's work shift.		
	Follow up with all service providers (motels, restaurants, mobile fuel companies, tow companies, etc.) to ensure accounts were closed and final receipts were issued.		
	Post disaster recovery, contact Document Center at 20W9th via e-mail to reorder Contractor timesheet booklets to replace ones used. Charge new ones to storm work order.		

Materials Coordinator – Responsibilities Checklist

	Task	Initial	Date/Time
	Activate Supply Chain Management Business Continuity Plan when determined to be necessary.		
	Upon communication from Disaster Coordinator, arrange for material delivery to remote staging area(s) of disaster.		

Community Relations Coordinator – Responsibilities Checklist

	Task	Initial	Date/Time
	Provide all areas with up-to-date public officials, legislators, as well as local and county emergency coordinators list at the March and September training meetings.		
	Determine department's participants for restoration update conference call during a disaster and notify them of call schedule.		
	Make personal contact with local and community leaders as needed.		
	Make personal contact with local emergency coordinators as needed.		
	Respond to all calls received on Community Relations toll-free line.		
	Obtain list of local emergency shelters in each area. Communicate this list to FRC and all affected areas.		
	Participate in post-event critique.		

Communications Coordinator – Responsibilities Checklist

	Task	Initial	Date/Time
	Determine department's participants for restoration update conference call during a disaster and notify them of call schedule.		
	Activate Corporate Communications Emergency Plan.		
	Coordinate with each Regional Disaster Coordinator as to who each area's point of contact is.		
	Mobilize department employees to designated field locations.		
	Post all news updates to the website.		
	Emphasize safety issues to news media; i.e., downed lines, etc.		
	Participate in post-event critique.		

Regulatory Communications Coordinator – Responsibilities Checklist

	Task	Initial	Date/Time
	Contact appropriate personnel including Government Services Manager, notifying them of the extent of the disaster.		
	Determine department's participants for restoration update conference call during a disaster and notify them of call schedule.		
	Contact Public Service Commission as deemed necessary.		
	Participation in post-event critique.		

Legislative Services Coordinator – Responsibilities Checklist

	Task	Initial	Date/Time
	Participate in restoration update conference calls during a disaster.		
	Communicate with state government officials as deemed necessary.		
	Participation in post-event critique.		

Fleet Coordinator – Responsibilities Checklist

	Task	Initial	Date/Time
	Contact power plants, other field offices, fleet maintenance and/or rental agencies to secure the use of additional fleet vehicles for storm restoration.		
	Provide door magnets for unmarked vehicles being utilized during storm restoration efforts.		

Forestry Coordinator – Responsibilities Checklist

	Task	Initial	Date/Time
	Contact available tree trimming crews according to the number requested by each Disaster Coordinator.		
	Cover Appendices B&C with contractors and forward them to Disaster Coordinator.		
	Work with Disaster Coordinator to assign crews to specific work locations.		
	Field supervise all contract tree trimming personnel.		
	Gather and approve Contractor Daily Timesheets and forward to Disaster Coordinator.		
	Recommend release of crews to Disaster Coordinator upon completion of work.		
	Participate in post-event critique.		

Informational Update Coordinator – Responsibilities Checklist

	Task	Initial	Date/Time
	Communicate status/extent of disaster with all FRC personnel.		
	Contact Director – Customer Service Center regarding communication recommendations for Call Center CSA's. Maintain communications to ensure current information regarding restoration efforts is continuously updated to CSC.		
	Based on information obtained from Community Relations regarding local emergency shelter locations, contact Director – Customer Service Center to give communication recommendations involving these locations to Call Center CSA's.		
	Monitor trouble orders (non-outage) in MobileUp and escalate to local office as needed. Assure completion of these trouble orders, including master trouble orders, in the system.		
	Monitor ServiceOn outage tickets detail. Read comments on each and every one and escalate valuable information to local office.		
	Answer fire, police and principle account phone lines and escalate to local office as needed. Follow up as appropriate.		
	Utilize ServiceOn to identify life support/sensitive load customers who are out of service, including making outbound calls to these customers to keep them apprised of the outage situation and advise them accordingly. Escalate to local office as needed.		
	Periodically update ServiceOn summary tabs and publish information on the Electric Outage Center on Aquila's external website.		
	Periodically update area specific messages in the HVCA system.		
	Monitor ServiceOn for outages that are coming in or have been resolved. Immediately close out tickets as they are completed in the field and generate automated/manual call backs as needed. FRC provides assistance as needed with ServiceOn and will/can provide call backs as requested.		
	Participate in the disaster recovery update conference calls.		

Restoration Process

As each disaster will be different and have unique characteristics, the restoration process must be designed for each instance. The following will be general guidelines.

Restoration Priorities

1. *Transmission Lines* - When more than one transmission line serves an area or substation, the one with the least amount of damage should be restored first if that line will have the capacity to serve the system needs. When making this decision the local Network Operations management, Transmission and Substation Manager and District Operations Manager should consult with each other.

2. *Substation* - Responsibility for substations will vary depending on whether the substation is a transmission or distribution substation. When damage occurs in substations the Substation Maintenance Manager for the state will be immediately notified and will be in charge of repair and restoration of that facility. Equipment and labor resources from Network Operations will be available to restore substations if needed. The system dispatch will be informed of damage, status of repairs and estimated time of restoration of substation facilities.

3. *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, fire, will be the first to be restored. As additional crews are available local management shall assign them to other main feeder circuits or sub-feeders and laterals. Before and during rebuilding of main feeder circuits, sub-feeder and lateral lines that have sustained damage shall be disconnected from the main feeder circuit. When these sub-feeders and laterals are disconnected from the main feeder lines it shall be reported to local Network Operations or those in charge of logging outages and restoration. When the main feeder has been rebuilt and restored it shall be reported.

4. *Sub-feeder Circuits and Laterals* - As crews are available, they will be assigned to the rebuilding and restoring of sub-feeders and lateral lines. Those with priority customers will be scheduled for restoration first. As service is restored, care will be taken to disconnect any services that have apparent damage so as not to create unsafe conditions which would cause injury to people or damage property. As sub-feeder and lateral lines are repaired and restored, it shall be reported to local operations management or those in charge of logging outages and restorations.

5. *Individual transformers and mainline secondaries*

6. *Services* - As employees become available, servicemen, installers, linemen and other qualified employees will be assigned to repairing and restoring service drops. Priority customers shall have their service drops repaired first. If damage to any part

of the service drop occurs that is the customer's responsibility to repair, the customer shall be informed of his responsibility. This can be done by the employees on site or by phone from the operations center. A record of these notifications will be kept for later reference and follow up (Appendix E). Employees shall report individual restorations to the local operations center to ensure accurate logging of outages and restoration times.

7. *Street lights and private area lights*

Aquila Storm Restoration for Other Utilities

When Aquila sends personnel to work storm restoration for neighboring utilities, the guidelines below will be followed.

The Executive Disaster Coordinator (Director - Business Operations) will be the Aquila point of contact for other utilities. Once a request has been made by another utility, the Operating VP - Electric Distribution will be notified. Conference calls will be facilitated by the Executive Disaster Coordinator and will include the Regional Managers, Manager-Training & Safety and Sr. Manager-Fleet, along with any others who are deemed necessary to participate.

After the request for Aquila personnel is communicated, each call participant will contact their respective areas to determine number of personnel and equipment (Aquila and contractor) that can be released and sent.

A second conference call will be conducted two hours later to list all Aquila restoration personnel and vehicle numbers. A Disaster Coordinator will be named from Aquila personnel on the list and will report directly to the Executive Disaster Coordinator.

The Executive Disaster Coordinator will contact the requesting utility and communicate the number of personnel/equipment Aquila personnel will be sending. The Executive Disaster Coordinator will also set up the initial meeting between the Disaster Coordinator and the other utility.

The Disaster Coordinator will be the main point of contact in the field for the utility that we are assisting. The Disaster Coordinator will be responsible for all Aquila personnel working the storm restoration.

Field Restoration Coordinators (usually Operations Supervisors) will report directly to the Disaster Coordinator. They are responsible for all field employees under their supervision during the restoration process.

Expectations / Items to be recognized:

- **Motel Accommodations** – Only one person to a bed.

- **Meal Accommodations** – Identify what the neighboring utility will allow/reimburse for meals and communicate approved meal plans to all field employees.

- **Start/Stop Times** – Clearly identify to all field employees. If changes should occur, ensure all employees are notified. No one should be left unaccounted for if all others have left the area.

- **Vehicle Mileage** – To report vehicle mileage, use DOT start (as we leave our parking lots) and DOT stop (as we return to our parking lots) and report total mileage on the last time sheet turned in so all mileage can be captured.

- **Time Sheets** – Utilize Aquila Storm time sheets which can be found at http://wow.ucu.com/ (WOW Page), Departments, Missouri Electric Emergency Service Restoration. Prior to leaving for storm restoration the Aquila Disaster Coordinator will fill in employee names, job titles and vehicle numbers. Separate time sheets will be created for each Aquila area sending storm restoration personnel.

  Special instructions regarding time sheets should be relayed during the conference calls, i.e. when they will be sent, who they will go to. This will be determined by and then communicated by the Disaster Coordinator.

APPENDIX A-1

Insert the Missouri Electric Operations Contacts List here.

APPENDIX A-2

Insert the Missouri Extended Support Team List here.

APPENDIX B

AQUILA ASSISTANCE EXPECTATIONS
GENERAL INFORMATION FORM

This form outlines Aquila expectations from outside contractors or mutual assistance agencies. It is to be completed by the Executive Disaster Coordinator with information provided by the Disaster Coordinator.

Clearly state the following expectations and/or services:

Assistance Expectations Form

Expected duration of restoration	
Number of crews requested	
Number of linemen per crew	
Number of apprentices/operators per crew	
Number of general foremen per number of crews	
Maximum number of vehicles per crew	
Types of vehicles needed	
Additional equipment needed	
Additional personnel needed	

Projected work hours	6 a.m. to 10 p.m. recommended
Meal arrangements	
Housing arrangements – 2 per room / 1 per bed	
Laundry arrangements – after ___ days	
Aquila personnel perform all switching	
Safety is top priority **"If it's not grounded, it's not dead"**	
Damage to customer property is to be reported immediately to the Aquila Field Restoration Coordinator in charge of that area	
Vehicle repairs for all contractor personnel are the responsibility of that contractor	

APPENDIX C

Please complete this form and return via fax to:

AQUILA STORM RESTORATION
REQUEST FOR THIRD PARTY CONTRACTOR

ATTENTION _____
FAX Number _____

CONTRACTOR _____ **CONTACT** _____ **PHONE** _____

PLEASE NOTE: *Aquila will only reimburse you for employees and vehicles listed on this form. This form must be received and approved by Aquila prior to any work being performed by your employees. Additions of personnel or vehicles can only be done with the written approval of the Aquila contact listed above prior to those personnel performing any work for us or those vehicles being used on our property. Failure to comply with this provision will result in Aquila not being responsible for reimbursement of wages for the personnel not listed nor for the vehicles not listed.*

Third Party Contractor – Employee / Vehicle List **Page _____ of _____**

Employee Name	EEID / SSN	Job Title	Cell Phone	Pager	Emergency Phone	Vehicle #	Vehicle Type

APPENDIX D

AQUILA REPAIR LIST

TOWN _____ SUPERVISOR _____

Location	Repairs Needed / Comments	Poles	Hardware	Wire Size/ Footage	Equipment Type & Size	Tree Crew Needed

APPENDIX E

CUSTOMER REPAIRS NEEDED

TOWN_____

Location	**Repairs Needed**

APPENDIX F

CONTRACTOR GENERAL STORM RESTORATION INFORMATION

SAFETY is our top priority. If it's not grounded, it's not dead.

Your Local Field Restoration Coordinator is:	
Local Field Restoration Coordinator phone number:	
Your Disaster Coordinator is:	
Disaster Coordinator phone number:	
The town that you are working in is:	
Aquila Service Person in charge of this town is:	
Aquila Service Person phone number:	
The primary voltage in this distribution system is:	
Work Hours will be:	
Laundry Arrangements – After _____ days:	

Other crews in this area:	**Where they are working:**

Aquila's responsibility for distribution system repairs is: Primary, Secondary and Service up to the meter. This includes the mast (if not through the roof), meter can and house knobs.
Customer responsibility for service repairs include: Masts through the roof, Service Entrance Cables and Disconnects.

Use the Customer Repairs Needed form (attached) to record all addresses where customer's service cannot be restored until they make repairs on their side of the meter. This form needs to be handed in daily to your Aquila Field Restoration Coordinator.

Points to remember:

ALL substation switching will be performed by Aquila personnel.
You must complete a timesheet daily and turn it in to your Aquila Field Restoration Coordinator daily.
All contractors are responsible for their own equipment repairs.

When performing repairs on de-energized circuits those circuits must be physically disconnected from their source, grounded and a DANGER tag hung at the source. A supply of DANGER tags has been given to each contractor.

Notify your Field Restoration Coordinator of any damage to customer property that was caused by you or your crews.

As you restore service to customers, please record the device number restored and the time restored. Report all restoration information to your Field Restoration Coordinator in a timely manner.

IF CONTACTED BY ANY MEDIA, PLEASE REFER THEM TO THIS NUMBER: 816-467-3000

(To be used in contractor packets – placed in each area's emergency kits)

APPENDIX G

AQUILA EMPLOYEE STORM RESTORATION INFORMATION

SAFETY is our top priority. If it's not grounded, it's not dead.

Aquila Supervisor in charge of your area is	
Aquila Supervisor phone number is	
Your Aquila Administrative Assistant is	
The town that you are working in is	
Aquila Service Person in charge of this town is	
Aquila Service Person phone number is	
Other Contractors in this area are	
The primary voltage in this distribution system is	
Work Hours will be:	
Laundry Arrangements – After _____ days:	

Aquila's responsibility for distribution system repairs is: Primary, Secondary and Service up to the meter. This includes the meter can and house knobs.
Customer responsibility for service repairs include: Masts, Service Entrance Cables and Disconnects.

Please use the Customer Repairs Needed form (attached) to record all addresses where customer's service cannot be restored until repairs are made on their side of the meter. Contractors and other field personnel will be handing this form to you daily. In turn, hand them in to your local office daily.

Notify your Aquila supervisor immediately of any of the following:

- ***Any public safety hazard, even if it does not impact our facilities.***
- ***Any damage to customer property that was caused by you or your crew.***

Points to remember:

ALL substation switching will be performed by Aquila personnel.
Collect all contractor timesheets daily.
Contractors are responsible for their own vehicle repairs.

When performing repairs on de-energized circuits, those circuits must be physically disconnected from their source, grounded and a DANGER tag hung at the source.

Report all restoration information (device, customer count, and restoration time) to the local office in a timely manner.

IF CONTACTED BY ANY MEDIA, PLEASE REFER THEM TO THIS NUMBER: 816-467-3000

APPENDIX H

Contractor Daily Time Sheet

(This time sheet is to be completed daily and given to Aquila Representative)

Date _____ Day _____ Page _____

Storm Name _____ Contractor _____ Work Order Number _____

Work Location _____ Aquila Rep _____ Approved Signature _____

Foreman

MUST BE SIGNED BY AQUILA REP TO RECEIVE PAYMENT

Employee Time					Work Hours			Mobilization or Demobilization			Vehicle #	Usage
	Employee	Position	Start	Stop	Reg	OT	DT	Reg	OT	DT		
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

APPENDIX I

AQUILA MASTER MOTEL SHEET

Dates _____ through _____

Work Order Number _____ Aquila Rep _____

Name	Company	Motel	Room #	Key Given?

APPENDIX J

FIELD RESTORATION COORDINATOR CREW SHEET

Use this form to help you track all crews and service personnel working under your supervision during the storm restoration process

Dates _____ through _____

Work Order Number _____ Aquila Rep _____

Crews names and/or number	**Location where they are working**