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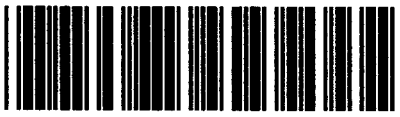

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PUC DOCKET NO. 32182

PUC INVESTIGATION OF METHODS TO IMPROVE ELECTRIC AND TELECOM INFRASTRUCTURE THAT WILL MINIMIZE LONG TERM OUTAGES AND RESTORATION COSTS ASSOCIATED WITH GULF COAST HURRICANES	§ § § § § § §	PUBLIC UTILITY COMMISSION OF TEXAS

AEP RESPONSE TO QUESTIONS POSED BY COMMISSION STAFF

NOW COMES Southwestern Electric Power Company ("SWEPCO") and AEP Texas Central Company ("TCC") (sometimes collectively referred to as the "AEP Companies")[1], and files the following responses to questions posed by the Public Utility Commission Staff ("Staff") regarding the Public Utility Commission's investigation concerning the appropriate infrastructure for electric utilities and telecommunication providers to deploy in the hurricane prone areas of the state.

I.

Introduction

The AEP Companies believe that it is important to learn from these experiences and after each major weather event, to conduct post-storm critique to ensure continuous improvement in the process and procedures used to restore electric service, as well as to evaluate the capabilities of its infrastructure in the aftermath of a storm. The AEP Companies would note that each storm event is inherently different with regard to intensity, size, time spent over a particular region, and rainfall. While each of these factors may cause damage to the electric system, it is the effect they have on trees, signs, and other structures in proximity to the system that cause even greater damage. As indicated in the AEP Companies' response to Question 11 in Section 2, most of the damage to SWEPCO's system was a result of trees falling and debris "flying" into distribution and transmission lines and structures. Although, "beefing up" the electric

[1] Although AEP Texas North Company was not directly affected by the effects of Hurricane Rita, it agrees with and supports the positions taken by its sister companies in this Response. Additionally, within this Response, reference is sometimes made to "AEP" positions and actions which are representative all the companies of the AEP System, Texas jurisdictional and otherwise.

system may help mitigate some of the damage sustained after a storm, the AEP Companies believe that the costs involved in doing so, may far outweigh the benefits. Further, because the effects of a storm may be felt miles inland, an issue of concern is how far inland the construction standards should be enhanced. Certainly SWEPCO is not a coastal utility but did experience a significant number of outages. Converting to an underground system also provides it own set of difficulties such as installation and maintenance costs, troubleshooting, etc. Notwithstanding, the AEP Companies are committed to ongoing study and analysis in achieving the best means possible for meeting many if not all these and other concerns Staff raises in its questionnaire. The AEP Companies endeavor to continue to provide the Commission with any further information relevant to such study and evaluation as they may discover.

AEP would suggest that along with investigating the proper infrastructure to deploy, that attention be given to issues related to restoration efforts and transmission redundancy.

II.

The AEP Companies' Response to Questions Posed by Commission Staff

The data provided in the responses below are representative of the Texas portion of SWEPCO's service territory. SWEPCO was the only AEP company directly impacted by Hurricane Rita.

Section 1

Question 1: If your company provided service in the areas affected by Hurricane Rita, please provide your company specific information on the number of customers affected, the minimum, maximum and average outage duration for the customers affected.

Response to Question 1:

Number of Texas customers affected	87,733
Total customers served by AEP SWEPCO in NE Texas	166,347
Percentage of Texas customers Affected	52.74%
Duration of outages	
Maximum duration	81 hours
Minimum duration	6 minutes
Average duration	21 hours

Question 2: Please provide information on additional non company resources deployed in the area for restoration.

Response to Question 2: In preparation for Hurricane Rita, AEP began securing resources from all of its system operating companies regardless of jurisdiction, as well as resources from AEP contractors. The table below represents distribution personnel sent to SWEPCO to assist with restoration efforts, as well as those secured but not utilized.

AEP Personnel Excluding SWEPCO	363
Additional non-AEP personnel (contractors)	171
Total non SWEPCO Personnel	**534**
Additional outside resources secured but not utilized by SWEPCO.	789

Question 3: Please provide information on the type and physical quantity of facilities affected by the hurricane in your area.

a) What percent of those facilities were replaced using existing inventory?
b) What percent of those facilities had to be newly procured?
c) Are the facilities replaced meet the existing standards or the standards to ensure reliability in the event of another hurricane of category 4 or higher?

Response to Question 3: While AEP SWEPCO did sustain some damage to its transmission system; most of the damage was to its distribution system. As indicated in the AEP Companies' responses to questions in Section 2, a number of transmission and distribution poles were replaced, along with wire and necessary appurtenances.

a) Approximately 90% of the equipment replaced was done so utilizing existing inventory.

b) Approximately 10% of the equipment replaced had to be newly procured.

c) The facilities replaced meet AEP's current standards which comply with the National Electric Safety Code ("NESC").

Question 4: What lessons were learned in the process that would improve restoral time or reduce cost of restoral in the future?

Response to Question 4: In its post-storm critique, SWEPCO identified:

a) A need for more radios and monitors in its Distribution Dispatch Center;

b) A need to identify new staging areas which are not known Emergency Shelters; and,

c) During a major event, a need to assign additional employees to assist with logistical support, as well as the necessary training to accomplish this task.

Question 5: What, if any, additional Costs would be associated with improvements from lessons learned identified above? To what degree, if any, might they be offset by more timely restoral of service?

Response to Question 5: The only additional cost to implement the "lessons learned" is associated with the purchase of two additional radios and the necessary monitors to add two dispatch work stations. The cost of these radios is estimated to be about $150,000 and will improve communications with work crews during a major event and thereby improve restoration times. Work related to this issue has already begun.

Question 6: How might your company's physical infrastructure be modified or replaced to enhance its ability to withstand severe hurricanes?

Response to Question 6: Much of the damage sustained in SWEPCO's territory was as a result of both the direct and the consequent effects of Hurricane Rita – including but not limited to fallen trees and flying debris from damaged buildings, business signs and, other non secured items. The AEP Companies could upgrade their facilities infrastructure to standard that exceeds that of the NESC. However, AEP does not believe that building its facilities to a higher standard or even burying electric distribution and transmission facilities would substantially mitigate the damage or improve restoration times.

Question 7: How does the cost of the modifications and replacements identified above compare with that of replacing storm damaged infrastructure in the past?

Response to Question 7: In Texas, SWEPCO spent $2,000,000 to repair its facilities and a total of $5,000,000 for the entire company. Although no specific

estimate has been made, it would take hundred's of millions of dollars or more to re-build our infrastructure to a higher standard or place it underground.

Question 8: Has your company modified the planning, engineering and construction practices since Hurricane Rita for deploying within the Texas Gulf coast region? If so, how? Please provide details.

Response to Question 8: SWEPCO and AEP have made no changes to its planning, engineering and construction practices as a result of Hurricane Rita.

Question 9: How should the cost identified in the responses to the previous questions be recovered? Should the cost be recovered from general body of ratepayers, from the ratepayers in the affected areas, or from some other source?

Response to Question 9: The AEP Companies believe that it is imperative for utilities to be allowed a sufficient level of disaster reserve to be included in utilities' rate bases, notwithstanding that major disasters are generally non-recurring in nature. The recent, devastating effects of Hurricanes Rita and Katrina along the Gulf Coast further underscore the serious need for sufficient disaster reserve. The AEP Companies suggest that costs be recovered through a non-bypassable surcharge. This would allow for recovery of these expenses outside of a general rate case, expedite their recovery and isolate these types of non-recurring costs. A non-bypassable surcharge would allow for recovery timely recovery of restoration expenses.

The non-bypassable surcharge should be designed to recover both O&M and Capital expenses. The current catastrophic reserve for TCC includes only O&M expenses. Because of this, a non-bypassable surcharge would be needed to recover the Capital expenses incurred. The non-bypassable surcharge should also allow for recovery of O&M expenses when the catastrophic reserve is depleted.

As evidenced by Hurricane Rita, Katrina and others, the area affected by a hurricane is not limited to the coast and in fact extends hundreds of miles inland. While the maximum wind speed of a hurricane may decrease, the threat of severe thunderstorms and tornados continues. Further, restoration costs resulting from a storm can be significant; therefore recovering those costs from all of the ratepayers of an affected utility makes sense. To only recover from the ratepayers

in the affected areas would place an unreasonable burden on ratepayers in that area in addition to the devastation of the disaster.

An alternative to recovering from the general body of ratepayers would be for the State or Federal government to pay for these costs through a fund established specifically for this purpose.

Question 10: What changes in depreciation practices are appropriate?

Response to Question 10: Should a decision be made to implement a cost recovery mechanism, then no changes to depreciation practices are necessary. However, should the Commission decide to change depreciation, an adjustment to the expected life and changes in removal costs would need to be factored into the depreciation study.

Question 11: Should utility standards of construction in the coastal area be upgraded? Has your company provided input or planning to participate in the activities of standard setting organizations? If so provide detail.

Response to Question 11: The standard AEP currently uses for new facilities meets those of the current NESC. AEP does not believe that the construction standards in the coastal areas should be upgraded since other factors, such as flying debris and fallen trees have proven to be the greater threat to reliability during a hurricane.

With regard to transmission related outages, the AEP Companies would suggest that in development of a long term transmission plan, transmission redundancy (alternate paths) should be considered as a method to improve reliability of the grid, as well reduce congestion.

AEP currently has five representatives on four NESC Subcommittees that review and participate in proposing recommended revisions to the NESC standards.

Section Two

Question 1: Please provide the following information regarding transmission lines damaged by Hurricane Rita:

Total Number of lines in the system and the number of lines sustaining damage.
Total Number of structures in each type before the hurricane and the number of structures repaired or replaced by voltage class.

Wood single-pole
Wood (other)
Steel single–pole
Steel lattice
Steel (other)
Concrete single-pole
Concrete (other)
Total number of feet/miles of conductor and amount repaired and amount replaced by voltage class.

Response to Question 1: SWEPCO has a total of 91 transmission lines in Texas, with 11 of those sustaining damage. Damage to these lines consisted of 3 damaged 69kv single wood poles and 500 feet of 69kV conductor.

Question 2: Please provide the following information regarding distribution lines (feeders) damaged by Hurricane Rita:
Total Number of lines in the system and the number of lines sustaining damage.

Total Number of structures in each type before the hurricane and the number of structures repaired or replaced by voltage class.
Wood single-pole
Wood (other)
Steel single–pole
Steel lattice
Steel (other)
Concrete single-pole
Concrete (other)
Total number of feet/miles of conductor and amount repaired and amount replaced by voltage class.

Response to Question 2: SWEPCO has 273 distribution circuits in Texas and had 234, or 85.71%, sustain damage. Damage to the distribution system consisted of 102 broken single wood poles (data by voltage class is unavailable).

Question 3: Please provide the following information regarding transmission only substations damaged by Hurricane Rita.
Number of substations sustaining damage and total number of substations in system.
Number of substations sustaining control house damage due to:
Flooding
Wind
Flying debris
Other
Number of substations sustaining damage to other equipment (including underground wiring) due to:

Flooding
Wind
Flying debris
Other

Response to Question 3: In Texas, SWEPCO has 36 transmission only substations; none sustained damage as a result of Hurricane Rita.

Question 4: Please provide the following information regarding distribution substations damaged by Hurricane Rita.

Number of substations sustaining damage and total number of substations in system.
Number of substations sustaining control house damage due to:
Flooding
Wind
Flying debris
Other
Number of substations sustaining damage to other equipment (including underground wiring) due to:
Flooding
Wind
Flying debris
Other

Response to Question 4: There were no SWEPCO Texas distribution substations damaged by Rita.

Question 5: Please provide the number of distribution substations that were:
Unable to serve load due to damage to the station from Hurricane Rita
Unable to serve load solely because of transmission line outage from Hurricane Rita

Response to Question 5: In Texas, there were no distribution substations that were unable to serve load due to damage from Hurricane Rita. However, SWEPCO did have 3 substations unable to serve load due to a transmission line outage. Those were: Tenaha, Big Sandy and Baldwin Substations.

Question 6: Please describe the extent of any damage sustained by each utility power plant (if applicable).

Response to Question 6: None of SWEPCO's power generation facilities sustained damage from Hurricane Rita.

Question 7: Please describe any damage sustained by the transmission distribution control center.

Response to Question 7: SWEPCO did not sustain damage to its Transmission or Distribution Dispatch Centers.

Question 8: Please describe any damage sustained by the communication system (voice and data) that impacted the restoration after the storm.

Response to Question 8: SWEPCO did not sustain damage to its communication system as a result of Hurricane Rita.

III.

Conclusion

The AEP Companies appreciate the opportunity to respond to these questions and look forward to participating in this project as it moves forward.

Dated: January 17, 2006

RESPECTFULLY SUBMITTED,

American Electric Power
400 West 15th Street, Suite 1520
Austin, Texas 78701
Jerry N. Huerta
State Bar No. 24004709
Telephone: (512) 481-3321
Facsimile: (512) 481-4591

Attorney for the AEP Companies

By _____
Jerry N. Huerta

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document was served on the Staff of the Public Utility Commission of Texas by hand-delivery, overnight delivery, facsimile transmission, or U.S. first-class mail on the 17th day of JANUARY, 2006.

_____
Jerry Huerta