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Addendum StartPage: 0

PUC PROJECT NO. 32182 PECEIMEN

PUC INVESTIGATION OF METHODS	§	2000 254 29 PM 3: 48
TO IMPROVE ELECTRIC AND	§	PUBLIC UTILITY COMMISSION
TELECOM INFRASTRUCTURE THAT	§	PUBLIC UTILITY COMMISSION
WILL MINIMIZE LONG TERM	§	
OUTAGES AND RESTORATION	§	OF TEXAS
COSTS ASSOCIATED WITH GULF	§	
COAST HURRICANES	§	

RESPONSE OF AEP TEXAS NORTH COMPANY, AEP TEXAS CENTRAL COMPANY AND SOUTHWESERN ELECTRIC POWER COMPANY TO THE COMMISSION STAFF'S REQUEST FOR A WRITTEN DESCRIPTON OF VEGETATION MANAGEMENT AND GROUND BASED INSPECTION PROGRAMS

NOW COME AEP Texas North Company (TNC), AEP Texas Central Company (TCC), and Southwestern Electric Power Company (SWEPCO), (hereinafter referred to as AEP or the Companies) and file this Response to the Staff of the Public Utility Commission of Texas (Staff) memo dated August 22, 2006 in the matter captioned above which requesting a description of the following:

- 1) Vegetation management program for overhead facilities; and,
- 2) On-going cyclical, ground-based inspection program for overhead facilities.

For the purpose of clarity, AEP has organized its Response in two general sections. Section I, includes AEP ground-based inspection and vegetation management programs for transmission facilities. Section II, contains a description of these programs as they relate to distribution facilities.

I. <u>AEP Transmission</u>

a. Vegetation Management Program for AEP Transmission Facilities

Within their transmission rights-of-way (ROW), the Companies conduct a vegetation management program, which is an integrated program utilizing a variety of management techniques. Maintenance of transmission ROW does not occur on a rigid "cycle" basis in which

maintenance of transmission ROW is scheduled based on the time since last trimming in that ROW; rather, the maintenance is through the implementation of a comprehensive, systematic integrated vegetation management (IVM) program designed to ensure that the vegetation along each transmission line is managed at the proper time, and in the most cost-effective and environmentally sound manner.

Vegetation on AEP's transmission system is managed on a prescriptive basis. Ongoing evaluation of the transmission system through ground and aerial inspections by both Transmission Line and System Forestry personnel, together with guidance from the program objectives, provides the basic information used by AEP to develop its annual vegetation management plan. For example, circuit criticality, line voltage, location of the line, vegetative inventory information and land use are among the items considered when developing the annual vegetation management plan. These plans are dynamic during the year as a result of transmission ROW inspections and changing conditions.

As succession occurs within the plant communities along the ROW, these annual work prescriptions will change based on the sizes and types of vegetation present. Specific annual prescriptions may also address isolated locations requiring "yard tree" trimming and the removal of "danger trees" (unhealthy trees outside of AEP's ROW that have the potential of falling into the electric system) outside the maintained ROW or control of fast growing brush before the transmission line is again maintained in its entirety. AEP's Forestry Operations staff and its contractors continuously work to ensure the appropriate prescription is utilized to maximize effectiveness and efficiency.

AEP's Forestry Operations is a centralized organization, both in reporting and budgeting, and employs and/or contracts degreed foresters. Certified utility line clearance contractors provide the labor force for the ground based clearing and herbicide applications. FAA-licensed aerial contractors provide patrol services. Contract work is designated and inspected by AEP foresters to ensure that the work is complete, performed in a timely manner, adhere to AEP and industry standards, at reasonable cost, and with courtesy to property owners and to the public. Foresters travel throughout their assigned regions of the AEP companies to accomplish these tasks.

b. AEP Transmission Overhead Line Inspection Program.

AEP seeks to ensure through inspection and maintenance of its transmission system that the transmission lines perform their functions safely and provide optimum service and reliability to our customers. AEP utilizes periodic line inspections to observe and report the present physical condition of the transmission line and ROW. AEP's inspection program, as shown in the table below, provides information on the general condition of the transmission system, in addition to indicating areas requiring immediate corrective action. Items found during routine inspection that appear to require urgent attention are scheduled as soon as possible for repair. Inspections can also reveal certain trends, such as increasing structure or hardware deterioration that are taken into consideration for future planning, budgeting and scheduling of resources.

AEP's line inspection program for its transmission facilities utilizes the following guidelines:

Inspection Program	Facilities Included	Recommended Interval
Routine Aerial Inspection	All Lines	At least once per year
Comprehensive Climbing Inspection	Non-Wood Structures in Non- Coastal Areas	Every 12 years
	Wood Structures in Non-Coastal Areas	Every 10 years
	Non-Wood Structures in Coastal Areas	Every 10 years
	Wood Structures in Coastal Areas	Every 8 years
Comprehensive Helicopter Inspection	Performed in lieu of a climbing inspection where climbing inspections are not economical.	Same as comprehensive climbing inspection
	Non-Wood Structures in Non- Coastal Areas	Every 12 years (See Note 1)
VV 11 '- I	Wood Structures in Non-Coastal Areas	Every 10 years (See Note 1)
Walking Inspection	Non-Wood Structures in Coastal Areas	Every 10 years (See Note 1)
	Wood Structures in Coastal Areas	Every 8 years (See Note 1)
Ground-Line	Semi-tropical Areas	Every 10 years
Inspection/Treatment (AEP West Only)	Arid Areas	Every 15 years

Note 1: Staggered from the Comprehensive Inspections

II. AEP Distribution

a. Distribution Vegetation Management

As part of AEP's commitment to delivering safe and reliable power, AEP conducts a vegetation management program that includes the clearing of electric utility easements and ROW of vegetation that may create a hazardous situation or impair service reliability. Instead of a cycle-based approach that requires vegetation to be trimmed based on a time continuum without regard to actual performance/reliability, AEP has adopted a performance-based approach which is an efficient, flexible and cost effective process allowing for improved reliability on a greater number of circuits.

AEP's vegetation management program includes work plans that are long-term (more than a year or two) and contain specific work prescriptions. An effective prescription will include:

- The type of treatment (mechanical, manual, herbicide) to be used based on tree types and environmental conditions;
- A priority and schedule of treatment by line/circuit; and,
- Consideration of the cost of the treatment prescribed.

As the plan progresses over time, these work prescriptions will evolve based on changes in the size and type of vegetation. The initial prescription for clearing an easement may include several types of activity such as trimming, removing, mowing, and spraying. In four or five years, that same easement's work prescription may only include spraying. The AEP Forestry staff and AEP's contractors continuously work to ensure that the appropriate prescription is utilized to provide effective and efficient vegetation management.

AEP Forestry utilizes specialized line clearance and herbicide application contractors to clear easements and ROW. The work activities provided by these crews and their respective performance are audited by AEP foresters or third party contract foresters. It is the forester's responsibility to ensure that the line clearance work is performed following NESC standards in a timely manner, and at a reasonable cost, with consideration of customers and the general public.

b. Distribution Overhead Inspection Program

AEP has in place, a Cyclic Overhead Circuit Facilities Inspection and Maintenance Program. The objective of this program is to visually identify and correct deficiencies necessary for the safety of employees and the public under the conditions specified in the NESC and for system reliability.

Overhead facilities are inspected on a 5-year cycle. The program consists of a visual inspection of poles, conductors, and pole-mounted equipment (transformer, regulators, reclosers, capacitors, etc.) and related materials (insulators, brackets, terminations, cutouts, surge arresters, etc.). It includes inspection of foreign attachments (CATV, telephone, etc.) to the Companies' poles for any safety related electrical or mechanical defects. Electrical and mechanical defects observed are identified and the information is collected so appropriate corrective action can be taken.

III. Conclusion

AEP appreciates the opportunity to provide the foregoing responses to the Staff's request and looks forward to participation in future activities in this project.

Dated: September 29, 2006

RESPECTFULLY SUBMITTED,

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