

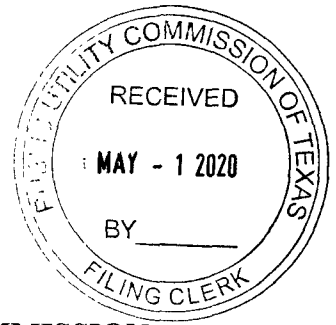


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PUC PROJECT NO. 38068

**REPORT ON INFRASTRUCTURE
IMPROVEMENT AND
MAINTENANCE PURSUANT TO
SUBSTANTIVE RULE §25.94**

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**PUBLIC UTILITY COMMISSION
OF TEXAS**

INTRODUCTION

P.U.C. SUBST. R. 25.94, Report on Infrastructure Improvement and Maintenance, requires each utility to file with the Public Utility Commission of Texas (“Commission”) by May 1st of each year a report that provides a description of the utility’s activities, for the previous calendar year, related to: (1) identifying areas in its service territory that are susceptible to damage during severe weather and hardening transmission and distribution facilities in those areas; (2) vegetation management; and (3) inspecting distribution poles. Further, the report is to include a summary of the utility’s activities related to preparing for emergency operations. Lone Star Transmission, LLC (“LST” or the “Company”) submits the following report pursuant to the Commission’s rules.

LST presently owns approximately 624 circuit miles of 345 kV transmission lines, on approximately 330 miles of transmission line right of way (“ROW”) located in West and North Central Texas, far from coastal hurricane-prone areas. The Company owns no distribution facilities. LST operates transmission lines, high-voltage switching stations, control centers, and data centers. The primary and backup control centers are in Austin, Texas; the primary energy management system is in Miami, Florida; and the backup energy management system is in Daytona Beach, Florida.

I. P.U.C. SUBST. R 25.94(c)(1) Areas Susceptible to Damage and Hardening Activities

LST's storm hardening activities are summarized in its report to the Commission filed on December 15, 2012 in Project No. 39339, 2011 Reports of Storm Hardening. Though LST's transmission facilities are not located in hurricane-prone areas, it is possible for LST's transmission lines and facilities to be damaged by extreme weather events outside the scope of the National Electrical Safety Code ("NESC") requirements. In addition to electrical clearances and other requirements, the NESC specifies structural loads (*e.g.*, wind speeds and resulting wind pressures) from weather events based on a 50-year return period, meaning a 2% annual probability of occurrence. Even so, 50-year events can occur more frequently than once every 50 years or even more than once in any given year. Further, it is also possible that an even more extreme event, with far greater structural loads, could occur in any given year (*e.g.*, a 100- year event with a 1% annual probability of occurrence) and potentially cause damage. There are also other events, outside the scope of the NESC, which can damage transmission lines including but not limited to tornadoes, dust storms, flying debris from storms, extreme floods, icing, and extreme temperatures. Moreover, events with several-hundred-year return periods can cause widespread damage.

II. P.U.C. SUBST. R 25.94(c)(2) Vegetation Management

1. LST has established its vegetation management program to inspect and manage the vegetation along the entirety of LST's ROW.
2. The basic philosophy of the program is to target only vegetation that is incompatible with LST's use of the land with the following objectives:
 - a. Transmission Reliability – Ensuring the reliability of electrical service through vegetation control regardless of accessibility or workability.

- b. Minimizing Fire Hazards – This is done through first identifying potential problems and then by reducing fuel levels to acceptable limits.
 - c. Compliance – Ensuring that LST is compliant with all governmental vegetation related regulations and restrictions. Adherence to North American Electric Reliability Corporation (“NERC”) Standard FAC-003-4, Transmission Vegetation Management, and state statutes is paramount.
 - d. Resource Management – The ability to control resources by identifying work load. Treatments will be applied only on an as-needed basis.
 - e. Improving/Maintaining Accessibility – Promoting accessibility to structures and ROW by controlling vegetation on and around structure pads and patrol roads where practical.
3. LST uses an inspection process to schedule work. Routine vegetation management and clearance inspections are accomplished utilizing ground and/or aerial inspection methods. The purpose of these inspections is to inventory vegetation conditions that may impact access and/or the safe reliable operation of the transmission lines, identify and prioritize work appropriate to species and site specific conditions, and identify vegetation that has grown faster than predicted and prevent encroachment. The Company performed vegetation management and clearance inspections from August through October 2019. All transmission circuits subject to FAC-003-4 are inspected at minimum annually with no more than 18 months between inspections. The timing and number of inspections is flexible in order to respond to changing conditions such as drier than normal conditions. Other conditions resulting in adjusted schedules could include heavy rain falls, high winds, landowner intervention and tree mortality caused by drought, disease outbreaks or

insect infestations.

4. LST's vegetation management practices represent a system of managing plant communities through identifying compatible and incompatible vegetation. LST evaluates, selects, and implements the most appropriate control method or methods. The choice of the most appropriate control method or methods are based on environmental impact and anticipated effectiveness, along with site characteristics, security, economics, current land use and other factors. Methods include but are not limited to pruning, removal, herbicide application, and mowing.

III. P.U.C. Subst. R 25.94(c)(3) Inspecting Distribution Poles

Not applicable, since LST owns no distribution facilities.

IV. P.U.C. Subst. R 25.94(d) Preparing for Emergency Operations

1. Black Start.

- a. LST has no generating plants, distribution lines, and does not serve customer loads.

In a black start event, LST's focus will be energizing transmission line connectivity and building redundancy for the loss of any one transmission component taking the system back down. LST will work collaboratively with neighboring Transmission Operators ("TOP"): CenterPoint, AEP/ETT, Oncor, and Golden Spread Electric Cooperative in meeting this goal. LST's stations were not included as part of an Electric Reliability Council of Texas ("ERCOT")-defined synchronization corridor for those resources awarded black start contracts by ERCOT for the 2018-2019 contract period. If and when LST responsibilities change, the Company's role could become more involved.
- b. Black Start training for LST System Operators occurs twice annually: (1) in-house

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- b. Black Start training for LST System Operators occurs twice annually: (1) in-house

specific to LST responsibilities and its local Black Start Plan; and (2) a simulated exercise at ERCOT with neighboring TOP and ERCOT.

2. Emergency Operations

- a. At the direction of ERCOT, LST System Operators will take necessary actions to mitigate risks and maintain the integrity of the Bulk Electric System. The actions taken and coordinated with ERCOT and adjacent TOPs may include but are not limited to:
 - i. Switching actions to disconnect or re-energize equipment;
 - ii. Controlling actions to affect voltage profile; and
 - iii. Actions to affect changes in transmission flows.
- b. As a NERC Continuing Education Provider, LST developed and delivered severe weather training specific to LST operations for 2019. LST's drill scenarios included simulated responses to: communication failures, line trips, equipment malfunctions, and ERCOT Alert Notifications.
- c. LST's primary and backup system control and energy management system functionality, as well as redundant communications paths between and among these facilities and its stations, enable LST to continue the monitoring and operation of the electrical equipment under its control. LST's system operators are trained annually to ensure familiarity with contingency implementation plans for the loss of functionality and a safe and efficient transfer of operational systems and personnel to enable LST's system operators to continue the monitoring and operation of the electrical equipment under its control.

- d. LST has procedures for proactive and reactive responses to storm effects across the LST system of transmission lines and stations to ensure readiness at all times to assess damage and respond with restoration efforts. These procedures include both proactive and reactive actions for LST's personnel, including pre-storm preparations and post-storm assessment of damage, prescribing temporary and/or permanent restoration methods, and describing system control activities.
3. LST participated in the following annual operations, emergency operations, and response training activities:
- a. Participated in ERCOT Black Start training from February 26 through April 18, 2019.
 - b. Participated in ERCOT Operations Training Seminar from August 27 through October 1, 2019.
 - c. Participated in a Severe Weather and Emergency Operation Plan Drill specific to LST operations on December 5, 2019.
 - e. Participated in LST Black Start Training specific to LST responsibilities from November 26 through December 17, 2019.

Respectfully submitted,



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