

Control Number: 50595



Item Number: 89

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## Public Utility Commission of Texas

### Employee Training Report Required by 16 Texas Admin. Code § 25.97(d)



**PROJECT NO.** 50595

**AFFECTED ENTITY:** Central Texas Electric Cooperative

#### General Information

Pursuant to 16 Texas Admin. Code § 25.97(d)(2), not later than the 30th day after the date an affected entity finalizes a material change to a document or training program, the affected entity must submit an updated report. The first report must be submitted not later than May 1, 2020.

#### Instructions

Answer all questions, fill-in all blanks, and have the report notarized in the Affidavit.

#### Affidavit

A representative of the affected entity must swear to and affirm the truthfulness, correctness, and completeness of the information provided by attaching a signed and notarized copy of the Affidavit provided with this form.

#### Filing Instructions

Submit four copies (an original and three copies) of the completed form and signed and notarized Affidavit to:

Central Records Filing Clerk  
Public Utility Commission of Texas  
1701 N. Congress Avenue  
P.O. Box 13326  
Austin, Texas 78711-3326  
Telephone: (512) 936-7180

1. Provide a summary description of hazard recognition training documents you provide your employees related to overhead transmission and distribution facilities.

NESC Clearance Review of Existing Transmission Lines (one-day C•O•R•E course)  
HB 4150 Section 38.102(2) requires utilities to submit a report on training related to the NESC for the "construction of transmission and distribution facilities." This training will concentrate on NESC Section 232-Vertical Clearances. Further, the training will provide the skill sets necessary to inspect transmission lines. The target audience for the class was operations personnel and staking technicians.

Course Outline:

1. Rule 232B Sag and Tension Definition
2. Rule 232 Vertical Clearance above Ground and Water Surfaces
3. Rule 233 Vertical Clearance from Other Utilities
4. Identification of Activity below the Utility Line
5. Example Problems Using Sag10
  - a. Effect of Long and Short Spans
  - b. Effect of Grade along the Line
6. Determining the Tension of an Existing Line
  - a. Sag Measurements
  - b. Calculation of Tension Based on Sag
7. Use of Software to Determine Ground Elevations
8. Example problems

2. Provide a summary description of training programs you provide your employees related to the National Electrical Safety Code for construction of electric transmission and distribution lines.

**INTRODUCTION**

In accordance with the William Thomas Heath Power Line Safety Act, HB 4150, and PUCT Substantive Rule 25.97, Central Texas Electric Cooperative is providing a summary description of training programs provided to employees related to overhead transmission and distribution lines. Among other things, this training includes hazard recognition, adherence to NESC guidelines for construction, operation and maintenance of transmission and distribution lines. Training also includes NESC Rule 232, clearance requirements over any of the 178 lakes listed in the Act. Included herein are summaries of the current training modules Central Texas Electric Cooperative provides to employees.

**Summary of TEC Safety Meeting HB4150 Training (two- to four-hour course)**

The training will include an overview of HB 4150 with an explanation of requirements for the utilities operating in Texas. It will also include hazard recognition training as it applies to the requirements of compliance with the National Electric Safety Code (NESC). This will include clearance requirements for lands, roadways, and waterways. The employee training will define to whom, when and how the bill applies. As well as explanation of guidelines, requirements, and deadlines for filing reports. A portion of the course will include hazard recognition and an explanation of clearance guideline requirements preparing employees to proactively recognize and report hazards and clearance related issues on their utilities' system.

**Course Outline:**

1. HB 4150 Review
2. Hazard Recognition
3. NESC Clearance Guideline Requirements

**Course Materials:**

1. Power Point Presentation
2. Presentation Material Handouts
3. NESC Clearance Handouts
4. HB 4150 Law

**Summary of Transmission Webinar for PURA §38.102 (one-hour course to accompany TEC Safety Meeting)**

PURA §38.102 requires electric utilities including electric cooperatives and municipally owned utilities to provide training to employees related to the National Electric Safety Code (NESC) for construction of electric transmission and distribution lines. This webinar discusses the requirements for transmission facilities which are defined as facilities operating above 60 kV. The webinar will not include discussions regarding distribution lines. This training will focus on transmission clearances, strength issues, and access of overhead transmission lines.

**Course Outline:**

1. Maximum Operating Temperature and Sag Requirements for Transmission Conductors
2. Additional Ground Clearance Requirements for Transmission Lines
  - a. Maximum Operating Voltage
  - b. Elevation above Sea Level
  - c. Electrostatic Effects to Vehicles below the Line.
3. Additional Clearances from Building/Signs
  - a. Deflection of Insulators
  - b. Deflection of Structures
  - c. Clearance Based on Maximum Operating Voltage
  - d. Limited Electrostatic Effects to Buildings and Signs below the Line
4. Mid-span Conductor Clearances
5. Power Lines and Phone Lines Crossing below Transmission Lines
6. Grade of Construction for Voltages Over 22kV

Affected Entity: Central Texas Electric Cooperative

PROJECT NO. 50595

## AFFIDAVIT

I swear or affirm that I have personal knowledge of the facts stated in this report or am relying on people with personal knowledge, that I am competent to testify to them, and that I have the authority to submit this report on behalf of the affected entity. I further swear or affirm that all statements made in this report are true, correct, and complete.

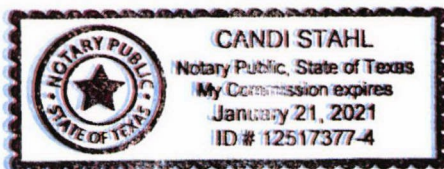
Dennis M. Elmore  
Signature

Dennis M. Elmore  
Printed Name

Director of Engineering and Operations  
Job Title

Central Texas Electric Cooperative  
Name of Affected Entity

Sworn and subscribed before me this 28th day of April, 2020.  
Month Year



Candi Stahl  
Notary Public in and For the State of Texas  
My commission expires on January 21, 2021