



Control Number: 50595



Item Number: 102

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Public Utility Commission of Texas



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

PROJECT NO. 49827

AFFECTED ENTITY: GEUS

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.

Please, see GEUS' summary description of hazard recognition training documents provided to employees related to overhead transmission and distribution facilities below.

For the purposes of this training, transmission facilities include those electric facilities operating above 60 kV. The goal for this training is to educate employees to observe, recognize and report hazardous situations.

Course Outline:

1. Definition of a Hazard
2. Hazards to Report
 - a. Non-compliance with NESC
 - b. Failed System Components
 - c. Failure of Warning Lights/Marker Balls
3. Summary of Clearances for Transmission Facilities
4. Recognition of Changes in Conductor Sag for Long Spans
5. Activities near the Line
 - a. Grading
 - b. Crane Operation OSHA 1926.1408(a)
 - c. Scaffold Clearances OSHA 1926.451(f)
 - d. Construction of Adjacent Buildings/Signs
6. Right-of-way Issues
 - a. Danger Trees
 - b. Dead Trees
 - c. Erosion of the Right-of-Way
7. Priorities of Reported Issues
8. Record Keeping Requirements

Objectives:

1. Define hazards associated with transmission lines.
2. Identify appropriate distance for cranes from power lines.
3. Identify required clearances for transmission line related to roads and buildings.
4. Define a danger tree.

Summary of Hazard Recognition (four-hour C•O•R•E course)

HB 4150 Section 38.102(a)(1) requires utilities to provide a summary of hazard recognition training documents for overhead transmission and distribution lines. Hazard recognition training focuses on equipping electric utility employees with the knowledge to recognize clearance hazards of overhead power lines.

Course Outline:

1. Importance of Hazard Recognition for Overhead Power Lines
2. Vertical and horizontal clearance requirements
3. Importance of an intact system grounding system
4. Isolation or/and grounding of anchor guys
5. Hazard Assessment Management
6. Defining Criteria for Hazard Assessment and Data Collection
7. Analyzing Data and Determining Appropriate Actions
8. Preparing and Executing an Action Plan
9. Report Documentation and Record Maintenance

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.

Please, see GEUS' summary description of training programs provided to employees related to the NESC for construction of electric transmission and distribution lines below.

Course outline:

1. Defining sag requirements—Rule 230 2
2. Ground clearances—Table 232-1 and 232-2
3. Clearances to building and signs—Table 234-1
4. Clearances to pools and grain bins—Rule 234E and 234F
5. Joint use clearances—Rule 235, 238, and 239

Summary of Designing Transmission and Distribution Lines Crossing Lake (one-day course)

This training reviews clearances as defined by Rule 232 of the NESC and compliance with the U.S. Army Corps of Engineers easement requirements. This training class will review the applicable sections of the NESC as it relates to designing long spans over lakes and the easement terms and specifications commonly found in easements with the Corps of Engineers. The training provides a demonstration of designing a lake crossing using software such as Pole Foreman and Sag 10.

Course Outline:

1. Requirements of the HB 4150
2. Lake Crossing Issues
3. NESC Requirements for Lake Crossings
 - a. Rule 232 Clearances
 - b. Rule 241 Required Grade of Construction of crossing lakes
 - c. Rule 250D Application of Extreme Ice
 - d. Rule 250C Extreme Wind
 - e. Rule 235Cb Design Considerations for Wire Slap and Sag to Lower Conductors
4. Corps of Engineers Easement Requirements
 - a. Vertical Clearance Requirements
 - b. Additional Clearance Requirements for Areas Designated for Rigging or Launching Sail Boats
5. Determining Lake Crossing Clearances
 - a. High Water
 - b. Sag and Tension for Long Crossings
 - c. Worst Case Sag
6. Additional Consideration
 - a. Transmission Adders
 - b. Marker Balls
7. Example problems

NESC Clearance Review of Existing Transmission Lines (one-day course)

This training will concentrate on NESC Section 232-Vertical Clearances. Further, the training will provide the skill sets necessary to inspect transmission lines using LiDAR.

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

Affected Entity: GEUS

PROJECT NO. 49827

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.

Alicia Price

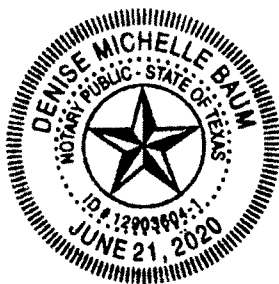
Signature

Alicia Price
Printed Name

General Manager
Job Title

GEUS
Name of Affected Entity

Sworn and subscribed before me this 2nd day of April, 2020
Month Year



Denise Michelle Baum
Notary Public in and For the State of Texas

My commission expires on June 21, 2020