

# Powerline Workers Apprenticeship Program

## Class 59 – Adel

### YEAR ONE – *February 28, 2020*

#### **Begins 6 months before Rigging & Climbing Class**

Review/Study before Rigging & Climbing Class:

Chapters 1-13 of The Lineman's and Cableman's Handbook 13<sup>th</sup> Edition &

Chapter 46 OSHA 1910.269 (a) (c) (e) *(in the back of the handbook)*

APPA Safety Manual 16<sup>th</sup> Edition Section-507

NESC 2017 Section 41

#### ***Hands-On – August 31 - September 4, 2020***

##### ***Rigging & Climbing Class***

"APPA Pole Climbing Safety and Rescue" video

"APPA Bucket Truck Safe Operation and Rescue" video

Pole-climbing – equipment inspection, gaff sharpening, boxer-stance, rhythm-climbing, circling, positioning, safetying/unsafetying

Rigging – hanging cross-arm, singles & doubles

Knots - proper application & tying test

Wire Ties – perform & tie-wire

Hoist operations – nylon strap & chain

Rescue techniques – Pole-top & Bucket

Introduction to transformers

Review NESC-2017 – Sections 41, 42, 44

Review APPA Safety Manual – Sections 507

**Test on Chapters 1-13 of The Lineman's and Cableman's Handbook &**

**Chapter 46 OSHA 1910.269** (a) (c) (e)

**APPA Safety Manual 16<sup>th</sup> Edition** Section-507

**NESC 2017** Section 41

##### ***At-home***

**Study & Test on Chapters 1-6 of The Guidebook for Linemen and Cablemen**

Tests are due back **February 28, 2021**  
(6 months after the Rigging & Climbing Class).

**\*\*Year One Ends\*\***

## YEAR TWO – March 1, 2021

### **Begins 6 months before Distribution System Construction Class**

Review/Study before *Distribution System Construction Class*:  
**Chapters 14-31** of The Lineman's and Cableman's Handbook &  
**Chapter 46** OSHA 1910.269 (g) (i) (l) (m) (n) (p) (t) (w) *(in the back of the handbook)*  
APPA Safety Manual Section-507  
NESC 2017 Section 41

### ***Hands-On – August 2021***

#### *Distribution System Construction Class*

Review NESC-2017 – Sections 41, 42, 44

Review APPA Safety Manual – Sections 507, 509

Pole-line construction

Powerline rigging

Pulling/Sagging conductor

Transformer installation and change-out

Underground terminations – elbow, splice, terminator

Personal protective grounding – bracket, equal-potential

Pole change-outs – de-energized, energized (simulated)

Trouble-calls – real world situations

**Test on Chapters 14-31** of The Lineman's and Cableman's Handbook &  
**Chapter 46** OSHA 1910.269 (g) (i) (l) (m) (n) (p) (t) (w)  
APPA Safety Manual Section-507  
NESC 2017 Section 41

### ***At-home***

**Study & Test on Chapters 7-13** of The Guidebook for Linemen and Cablemen

Tests are due back **February 2022**  
(6 months after the *Distribution System Construction Class*).

**\*\*Year Two Ends\*\***

## YEAR THREE – March 2022

### **Begins 6 months before Distribution Operations Class**

Review/Study before *Distribution Operations Class*:  
*Chapters 32-49* of The Lineman's and Cableman's Handbook  
Distribution Transformer Handbook 5<sup>th</sup> Edition

### ***Hands-On – August 2022***

#### *Distribution Operations Class*

Hot-Work – pole change-outs, wire transfer, rigging,  
proper cover-up procedures

Underground – system design, operations, troubleshooting,  
power-restoration

Transformers – theory, single-phase, three-phase connections

Distribution Switching – breakers, regulators, tying circuits

Trouble-calls – real world situations

Line-coordination

Sub-station overview

**Test on Chapters 32-49 of The Lineman's and Cableman's Handbook**  
**Distribution Transformer Handbook**

### ***At-home***

**Study & Test on Chapters 14-21 of The Guidebook for Linemen and Cablemen**

Tests are due back **January 2023**  
(5 months after the *Distribution Operations Class* –  
1 month before graduation).

### **Year Three Ends with Graduation**

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# February 2023