Oklahoma Association of Electric Cooperatives
Hot Line School
September 10—12, 2018

Workstations – Equipment – Material List

General Session
Registration, Orientation, Cover-up, and group assignments

Workstation #1
Change out fused combination disconnects on under-ground riser pole, C7-1.

Scenario: Change out all three combinations fused disconnects. The service feeds a hospital that must be left on.

Material:
- 3 ---15kv combination fused disconnects
- #6 solid copper wire
- wire connectors

Workstation #2
Change out x-arm and all three insulators.

Scenario: X-arm bad, R/P, and re-insulate for 14.4/24.9kv. Do a complete cover up, may need to lower neutral temporarily for clearance. Start with the far phase and work toward the basket.

Equipment:
- 1 ---double basket truck
- 1 ---3 phase lifting tree
- 8 ---line hoses
- 3 ---split blankets or 2 x-arm covers and 1 pole cover
- 8 ---blanket pens or keepers
- 2 ---insulator hoods
- 1 ---hand line
- 1 ---8 foot hot stick to latch and release holders.

Material:
- 1 ---8 foot x-arm
- 2 ---x-arm pins
- 3 ---pin insulators
- 2 ---28 inch x-arm braces
- 2 ---carriage bolts
- 1 ---lag screw
- 1 ---extra 14 inch through bolt
- 3 ---preformed primary ties or soft drawn aluminum tie wire if applicable.

Workstation #3
Change out Damaged Bells on C7-C71

Scenario: Damaged Epoxy Bells on Three Phase Junction Pole replacement needed

Equipment:
1 --- basket truck, single or double  
2 --- blankets  
9 --- blanket pens or keepers  
3 --- split blankets or 2 x-arm covers and 1 pole cover  
2 --- Web Hoists  
7 --- line hoses  
1 --- hand line  

Material:  
3 --- Epoxy Bells  

Workstation #4  
Change out bells on C-3  

Scenario: Change out all three suspension insulators or rezlines that are getting bad.  

Equipment:  
1 --- basket truck, double or single  
2 --- strap hoist  
2 --- link stick  
2 --- nylon sling  
2 --- bell or dead-end covers (blankets & pens)  
3 --- line hoses  
1 --- hand line  

Material:  
3 --- dead-end assemblies or rezlines  

Workstation #5  
Change out pole on C4-1. (Transfer conductors)  

Scenario: Replace bad pole. There are several ways to accomplish this task this is only one. Cover up and bypass all jumpers. Set a temporary pole behind the old pole, transfer to the temp. pole, change out the bad pole and transfer to the new pole, make up and connect new jumpers.  

Due to the time element of each station, after the initial temporary pole is set, leave it in place and simulate the complete change out of the pole.  

Equipment:  
2 --- double baskets  
1 --- digger truck, preferably a boom truck  
6 --- bell, dead-end covers  
12 --- line hoses  
3 --- pole covers  
3 --- blankets  
9 --- blanket pens or keepers  
2 --- strap hoists  
4 --- mechanical jumpers  
2 --- link sticks  
2 --- nylon slings for link sticks  
4 --- chain hoist
4 ---line grips
2 ---guy grips
1 ---hand line

Material:
1--- 45’ pole
8 ---14 inch eye bolts
8 ---extension links 10-inch eye bolts with eye nuts and shackles

Note:  The extensions and extra eye bolts could be omitted if enough strap hoists, link sticks and nylon slings were available to catch off, on the temp. pole.

Note:  Usually it will work to set the new pole either in front, preferably, or behind the existing pole and make the transfer permanent.  This usually won’t move the pole out of line enough to put any significant strain on the poles down line.

Note:  The procedure of setting a temp pole or setting a new pole close to the existing pole would not work very well where the existing pole was set in rock.

**Workstation #6**

Change out Damaged Insulators on VA-2

Scenario:  Damaged Big Skirted Insulators on Single Phase 14.4 Pole

Insulators will be Changed out Hot while keeping of Energized Phase.

Material Needed:
1. Two Big Skirted Insulators
2. Preform Ties for Wire

Equipment:
1 ---basket truck, single or double with jib
1 ---hand-line
4 ---line hose
1 ---split blanket

**Workstation #7**

Basket Escape

Scenario:  Basket is stuck in the air need to escape to the ground.
1---Basket Truck
1---Hand Line

**Students need to bring Hard Hat, Safety Glasses, Rubber Gloves, Rubber Sleeves**
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Agenda

September 10

12:30pm—1:15pm __________________________ Registration

1:15pm—4:00pm __________________________ Work Stations

September 11

8:00am—9:40am __________________________ Work Stations

9:40am—10:00am __________________________ Break

10:00am—11:45am __________________________ Work Stations

11:45am—1:00pm __________________________ Lunch (On Own)

1:00pm—2:40pm __________________________ Work Stations

2:40pm—3:00pm __________________________ Break

3:00pm—4:30pm __________________________ Work Stations

September 12

8:30am—10:30am __________________________ Group Session & Demo

10:30am—11:15am __________________________ Break

11:15am—12:00pm __________________________ Clean Work Area, Evaluation, Dismiss