

**Chief Judge: Rick Cate**

**Email: [rcate@scs.net](mailto:rcate@scs.net)**

# Transformer Tap Change

Senior/Journeyman/Apprentice

**Mean time:** 7 minutes

**Drop dead time:** 10 minutes

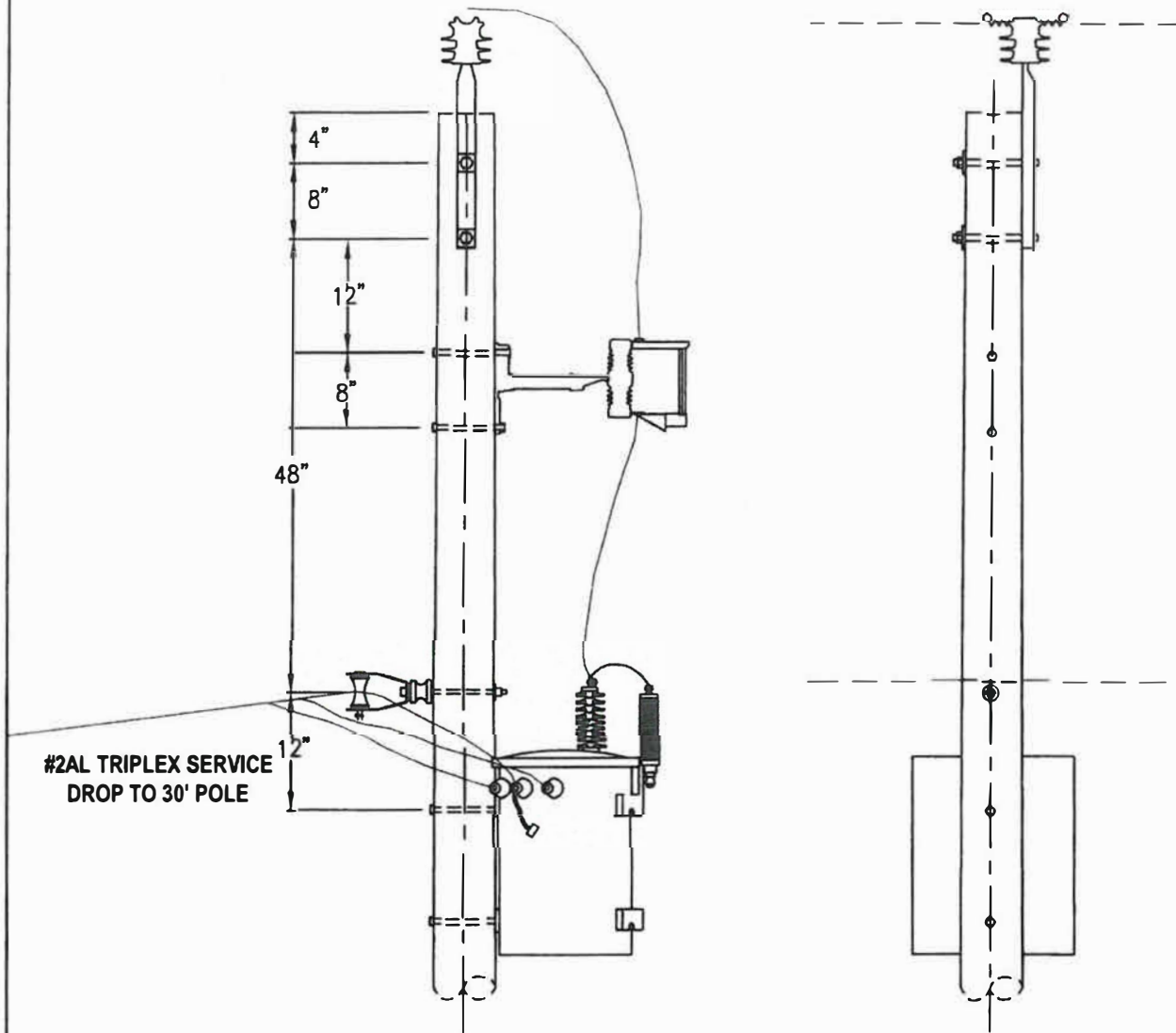
**Event Summary:** Customer contacted utility to complain of voltage surges/high voltage, causing blown bulbs and appliance failures. Troubleman has been dispatched to inspect connections, check voltage and make needed repairs. Upon arrival the meter is pulled to check connections and voltage. Voltage is determined to be abnormally high. Troubleman determines transformer needs to be stepped to reduce voltage. Troubleman climbs pole, de-energizes transformer, inspects connections, and changes tap setting to lower voltage. Transformer is re-energized and voltage is checked at meter base to confirm voltage has been lowered to an acceptable level. Meter is re-installed into meter base and sealed.

## Event Specifications:

1. Competitors shall abide by all Individual Competitor General Rules unless noted otherwise.
2. Each competitor will be issued one meter base seal upon entering event.
3. Competitor will be given 5 minute set up time prior to start of event.
4. Competitor to furnish all needed tools.
5. Mats will be in place at each event pole to place volt meter and hand tools on when not in use.
6. Gloves shall be required for the duration of the event including set up and clean up.
7. Rubber gloves shall be used while climbing, pulling and setting meter, and checking voltage.
8. Competitors shall announce voltage readings to judges.
9. Visual inspection of meter base connections and transformer connections shall be announced to judges.
10. Transformer shall be de-energized prior to changing tap setting. Disconnect is to be opened and jumper to primary lifted.
11. Grip Stick to be placed in bag when not in use.
12. Setting of tap change shall be announced to judges.
13. Competitor shall re- install jumper and close disconnect to energize transformer, check voltage at meter base to confirm lowered voltage, set meter, and seal meter base.
14. Time stops when meter base is sealed.
15. Time starts when volt meter is removed from mat.
16. Climbing tools shall remain off prior to climbing pole but can be worn after descending pole.
17. Competitors shall carry hand line to working position on pole and attach to pole. Hand line block and sling shall be tagged with working load limits. WLL shall not be less than 1000lb.

**Tools Needed:** 8' Grip Stick, Stick Bag, Hand Line, Volt Meter, Hand Tools

# SENIOR TRANSFORMER TAP CHANGE



INSULATOR: HENDRIX HPI-55-4  
 CUTOUT: CHANCE C710112PX  
 POLE: 40' CLASS 4 WOOD

|             |                        |
|-------------|------------------------|
| UNIT:       | TRANSFORMER TAP CHANGE |
| DRAWN BY:   | MCC                    |
| CHECKED BY: | SS/MCC                 |
| DATE:       | 6/29/2021              |



UNIT DESIGNATION

**RODEO**