

Transformer Change Out

Chief Judge: Cody Raveling

(Journeyman Event)

Mean Time: 16 minutes

Drop Dead Time: 18 minutes

Event Summary:

This event is simulated energized at 12/7.2 kV. Teams will replace a 25 KVA transformer weighing approximately 235 lbs. on a single phase straight-line overhead structure with #2 triplex secondary wire. The old transformer will be lowered to the ground and then pulled back up simulating a new transformer.

Event Specifications:

1. Teams will have 5 minutes to set up, and all tools must be laid out on a competitor supplied tarp in the designated work area.
2. Time starts at the judge's signal with the fall arrest system detached from the pole. Time will stop when the work is complete and the last climber has both feet on the ground.
3. Climbers must wear class II minimum rubber gloves ground to ground.
4. The neutral and neutral clevis must be covered with rated cover-up before ascending above. Secondary triplex must also be covered.
5. MAD must be maintained at all times.
6. The primary jumper must be disconnected from the main line during this event.
7. All permanent connections must be brushed.
8. Secondary voltage must be checked with volt meter for bad before de-energizing the existing transformer and also on the new transformer prior to hooking up the hot secondary leads. The transformer must be de-energized when the secondary leads are connected. The neutral must be connected to transformer before checking for voltage.
9. Cutout must be utilized to drop or pick-up load. A rated hot stick must be utilized to open/close cutout, the fuse must be replaced.
10. The transformer must be lowered and raised using blocks (3-2 blocks minimum) and a manufactured rated transformer gin.