

## 2022 Journeyman Event

## Transformer and Streetlight Change

Mean Time: 13 MIN Drop Dead Time: 18 MIN

This event consists of changing out a transformer and a streetlight on adjacent poles. On the transformer pole, the team will be required to open a fused cut-out, remove hot line clamp, install cover-up and transformer gin, remove wire connections and lower the transformer to the ground. On the streetlight pole, the team will be required to remove wire connections, streetlight and lower it to the ground. After the transformer and/or streetlight reach the ground, they shall be raised back into place and re-installed to original configuration.

This event will be simulated as a single phase 4 kV line with #4 triplex between the transformer and streetlight pole, which also acts as the system neutral. The pole with the transformer may not be climbed until the fuse has been opened, while the pole with the streetlight may be climbed at any time after the event has started.

Once the fused cut-out is open, the climber may ascend the transformer pole. The hot line clamp shall be removed with a shotgun stick while positioned below the neutral. Once the hot line clamp is removed, the climber shall install a transformer gin and use a set of rope blocks to remove and lower the transformer to the ground. Once the transformer has made contact with the ground, it shall be raised back up and re-installed. After removing rigging equipment, the hot line clamp shall be re-installed with a shotgun stick while positioned below the neutral. Once re-installed, the climber shall descend to the ground.

Once the event has started, a climber may ascend the streetlight pole at any time but may not disconnect any wires until the transformer fuse has been opened. Once the fuse is open, the climber shall remove the streetlight from the pole and lower it to the ground. Once the streetlight has made contact with the ground, it shall be raised back up and reinstalled. Wire connections shall not be made unless the transformer cut-out is open. After removing any rigging, the climber shall descend to the ground.

After the climber on the transformer pole has reached the ground and final connections have been made on the streetlight, the transformer fused cut-out shall be closed. Time stops when the cut-out is closed and both climbers have reached the ground.

- All special tools will be provided (transformer gin, rope blocks, hot sticks and cover-up).
- Rubber gloves shall be worn for the entire event.

- Cover-up shall be installed on the triplex and primary on the transformer pole.
- Team will have five minutes to set-up and ask questions. The team will signal when they are ready.
- Climbing poles shall be sounded with a hammer and can be completed during the set-up time.
- Time starts when the judge signals "GO".
- Climbers can have gear on but not be strapped to the pole until the event starts.
- The transformer pole climber may not ascend until the fused cut-out is open.
- The neutral will be treated as energized. Incidental contact with a gloved hand will be allowed, but **not** allowed for making wired connections.
- Time stops when the solid blade is closed and both climbers are on the ground.
- All tools and material not in use must remain on the tarp.