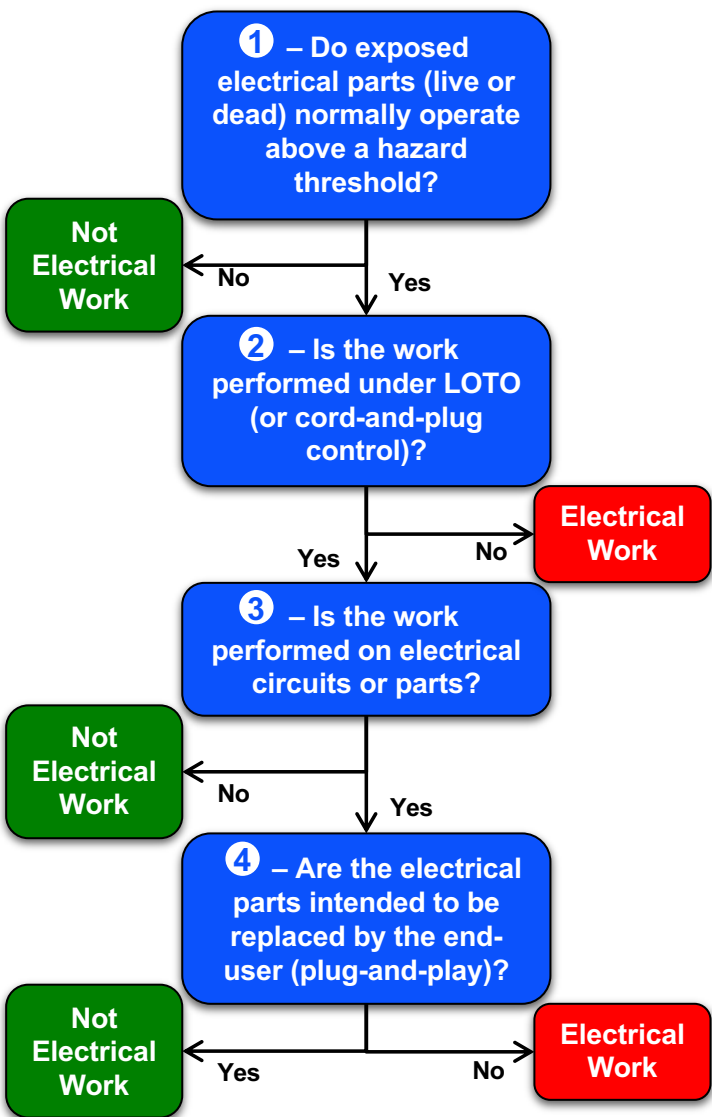




## What is “Electrical Work”?

Electrical work is any task that involves a shock or arc flash hazard or that could create potential shock or arc flash hazards for future users, *and therefore requires a Qualified Electrical Worker (QEW).*

For clarification or special circumstances, always refer to the Electrical Safety Manual and/or speak with an Electrical Safety Officer or Electrical Safety Advocate.



### Electrical Hazard Thresholds

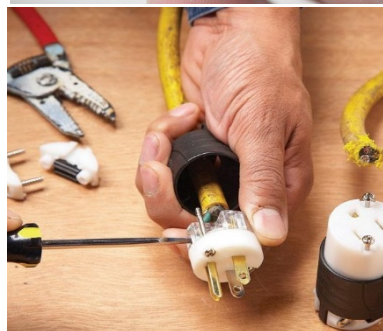
Source	Includes	Thresholds
AC	50-60 Hz nominal	≥ 50 V and ≥ 5 mA
DC	All	≥ 100 V and ≥ 40 mA
Capacitors	All	≥ 100 V and ≥ 10 J
Batteries	All	≥ 100 V
Sub-RF	1 Hz to 3 kHz	≥ 50 V and ≥ 5 mA
RF	3 kHz to 100 MHz	A func of frequency

### Examples



Not Electrical Work

Changing a cartridge fuse (plug-and-play)



Electrical Work

Wiring up a new plug

### Exceptions Under QEW Supervision

Personnel are not required to be QEWs for electrical work if:

- A QEW provides direct field supervision, and
- Personnel are trained and authorized to perform the work on that specific equipment, and
- (A) Cord-and-plug or (B) hard-wired requirements are followed

**(A) Cord-and-plug:**

- The equipment is unplugged and under continuous and exclusive control.
- Equipment meets the cord-and-plug exemption to LOTO (no stored energy).

**(B) Hard-wired:**

- A QEW establishes an Electrically Safe Work Condition.
- All persons join the LOTO.
- QEW performs Test Before Touch every time job continuity is interrupted.