

Example Code of Practice for Energized Electrical Work Requiring Troubleshooting on Live Electrical Equipment

Date: _____ Time: _____

Persons present	Qualified	Non-qualified
Name: _____ Signature: _____	<input type="checkbox"/>	<input type="checkbox"/>
Name: _____ Signature: _____	<input type="checkbox"/>	<input type="checkbox"/>
Name: _____ Signature: _____	<input type="checkbox"/>	<input type="checkbox"/>

Meeting conducted by: _____

The employer representative, _____, must ensure the COP is followed.

Section A - Clearly established responsibilities and accountabilities for each person who may be exposed to electrical hazards by inadvertently touching the electrical equipment or approaching it closer than a safe distance.

Example

Qualified workers:

- Conduct shock and arc flash risks assessments
- Follow the established written lockout procedure for the electrical equipment to be worked on
- Select and use properly rated test equipment
- Establishing and ensuring approach and arc flash boundaries are not crossed by unqualified workers and unprotected qualified persons

Non-qualified workers:

- Non-qualified workers will remain outside of approach and arc flash boundaries delimited by non-conductive barricades and safety signs.

Section B - Description of the work to be performed, the circuit and electrical equipment to be worked on, their location and the electrical hazards and other associated risks.

Example

Electrical room B, MCC bucket 104-B 600V. Testing for missing voltage on motor control contactor feeding 3 phases motor 104-B within the restricted approached boundary. Electrical hazards: shock and arc flash.

Section C - A justification for why the work needs to be performed in an energized condition.

Example

Removing electrical power will not permit to do proper troubleshooting.

Section D - The safe work procedures to be followed.

Example

Follow electrical procedure E-100 that provides guidance to the following:

- Diagrams and drawings verification
- Assessment of work environment hazards (wet conditions, traffic, fall, etc.)
- Testing equipment (Voltage meter, multimeter, etc.) verification
- Notifying personnel who may be impacted by the work
- Shock and arc flash risk assessments
- Selection of PPE and other protective equipment using CSA Z462-15 or newer version
- Installation of barriers

Section E - The voltage to which employees will be exposed.

Example

600 volts AC 3 phases, 65 kA short current available, 0.03 second clearing time

Section F - Description of the personal protective equipment and other protective equipment to be used.

Example

Arc-flash (CSA Z462-15 table 5) Category 2 (8 calories/cm²)

Arc-rated long-sleeve shirt and pants

Arc-rated arc flash suit hood

Protective equipment:

- Safety glasses or select proper safety goggles
- Hearing protection (ear canal inserts)
- Heavy duty leather gloves to protect the insulating rubber used for shock protection (Class 0 protects workers up to 1,000V AC) for working within one foot.
- Leather footwear (CSA Z462-15 section 4.3.4 Approach boundaries to energized electrical conductors and circuit parts for shock protection)

For this example, using Table 1A:

- Restricted approach boundary: 0.3 m (1 ft 0 in)
- Limited approach boundary: 1 m (3 ft 6 in)

Section G - Description of the means employed to restrict the access of unqualified persons to the work area

Example

Installing non-conductive barriers for arc flash boundary with safety signs in front of MCC at 5 ft (using Table 4B).

Authorizing Individual	Signatures	Date
Requester (Client, Operations, etc.)		
Qualified person(s)		
Supervisor or designate		
Manager or designate		