

Facility owners and operators are required to regularly maintain and repair electrical systems to ensure they are in safe working order.

The following is a general guideline of electrical work covered under the Continuous Safety Services (CSS) Program.

CSS Inspection

1 Review Maintenance Records

a. Ensure electrical maintenance records are up-to-date

2 Electrical Maintenance Work (excluding local distribution company [LDC] connection authorizations)

- a. Panels and distribution systems
- b. Service and electrical equipment
- c. Building and general wiring

3 Routine Electrical Work

a. All electrical installation work of a routine nature in connection with the maintenance or operation of the building or plant therein performed at frequent intervals

4 Repair, Replace, Relocate

- a. Like-for-Like replacement of electrical devices
- b. Repair existing equipment
- c. Relocations of existing equipment from one area of the building to another using the original electrical devices, i.e. moving an assembly area or machine tool.

5 Categories of Maintenance Work (with examples)

- a. Wiring devices light switches, receptacles, relays, etc.
- b. Branch circuits raceways, cables, etc.
- c. Lighting 120V and greater, i.e. 208V, 240V, 347V, 600V
- d. Electrical equipment replacement of capacitors, contactors, equipment panels, uninterrupted power supply systems (UPSS), etc.
- e. Building management systems energy management systems, fire alarms, emergency lighting, ventilation systems, etc.
- f. Motors/motor controls 120V single phase, i.e. circulation pumps, exhaust fans (small motors)
- g. Motors/motor controls 3-phase (greater than 120V, less than 750V), i.e. variable frequency drives (VFDs), large supply pumps, assembly conveyors, motor control centers (MCCs), etc.
- h. Motors/motor controls high voltage (greater than 750V), i.e. large industrial pumps, MCCs, etc.
- i. Electrical distribution switch gear, panels, transformers, enclosed switches, etc.





6 Approved Equipment

a. All electrical equipment and wiring is suitable for use, and is approved for use in Ontario

Note: ESA inspections are limited to the electrical installation, product or device described in the notification. Depending on the nature of the installation, an Inspector may look at all or only some of the above elements. An Inspection does not in any way relieve the applicant from their responsibility to comply with the Ontario Electrical Safety Code in all aspects of their work and the installation.

Note: Under the Ontario Electrical Safety Code, the Electrical Safety Authority determines which installations to inspect. ESA may accept installations and issue connection authorizations without conducting inspection.