

Electrical Safety Authority

Experts in Electrical Safety

Superior Services and Solutions

A Recognized Leader



Electrical Safety Authority

Who is ESA?



- Established as a separate Corporation in April 99
 - Formerly Ontario Hydro's Electrical Inspection Department
 - Long heritage - Inspection was founded in 1915
- ESA is one of Ontario's "Delegated Administrative Authorities"
- One of the largest "Authorities Having Jurisdiction" (AHJ) in North America
- Active supporter of the International Association of Electrical Inspectors (IAEI)
- Private, not for profit, public safety focused organization



Our Purpose

- Ontario-wide mandate for electrical safety and service delivery
 - Bill 35, the *Electricity Act*, 1998
- We establish and enforce Ontario's electrical safety regulations
 - Electrical wiring installations
 - Electrical equipment and products
- Provide electrical safety services to consumers, businesses and industry



Core Issues

- Skill set gaps in “Qualified” staff & Contractors
- Engineers not designing systems to Code
- Inspection permits not being filed for all electrical installations
- Existing installations deteriorating due to lack of maintenance and inspection

Responsibilities of Facility Owner/Operators

2-004 Inspection

- (1) A contractor shall file with the inspection department a completed application for inspection of any work on an electrical installation:
- (a) Before or within 48 hours after commencement of the work whether or not electrical power or energy has been previously supplied to the land, building, or premises on which the work was performed; and
 - (b) Shall pay the fees prescribed by the inspection department.

- Includes maintenance work on existing electrical systems

Report



Responsibilities of Facility Owner/Operators

Maintenance and Operation

2-300 General Requirements for Maintenance and Operation

- (1) All operating electrical equipment shall be kept in safe and proper working condition.
- (2) Electrical equipment maintained for emergency service shall be periodically inspected and tested as may be necessary to ensure its fitness for service.
- (3) Infrequently used electrical equipment maintained for future service shall be thoroughly inspected before use in order to determine its fitness for service.
- (4) Defective equipment shall either be put in good order or permanently disconnected.



Responsibilities of Facility Owner/Operators

2-003 Record of Electrical Installation Work

The owner, owner's agent, or operator shall maintain a record of all electrical installation acceptable to the inspection department in any public building, commercial or industrial establishment, apartment house, or other building in which the public safety may be involved, and shall produce this record to any inspector at any time and from time to time upon request, as specified by the Inspection Department.

- Inspection certificates
- Periodic Inspection Log Book



Responsibilities of Facility Owner/Operators

2-022 Sale or Other Disposal and Use

- (1) No person shall advertise, display or offer for sale or other disposal, or sell or otherwise dispose of any electrical equipment unless it has been approved in accordance with Rule 2-024.*
- (2) No person shall connect any electrical equipment to a source of electrical power until such electrical equipment has been approved in accordance with Rule 2-024.*
- (3) No person shall use any electrical equipment unless it has been approved in accordance with Rule 2-024.*

- Must bear marks of an organization accredited by the Standards Council of Canada



New ESA Fines

A failure to comply with this requirement constitutes provincial offence under the Provincial Offences Act, which upon conviction may result in the following:

- **liable for a fine up to \$50,000; (pending \$1 million for Corporations)**
- **liable for a fine up to \$5,000 for each day an offence is committed; and**
- **imprisonment for a term up to one year**



Continuous Safety Services



Composite Features:

- Inspection of Routine Electrical Maintenance
- Facility Review
- Code Consultation & Advice
- Field Evaluations
- Safety Training/Technical Workshops



Documentation

Advantage:

- Identify areas of deviation from the Code
- Identify repetitive installed defects
- Modulate inspection/audit level based on performance

Benefit:

- Manage risk of electrical system
- Plan skill set improvements for qualified staff
- Wisely apportion dollars to inspection/audit where needed



The Web based Advantage

- View which stations are complying with recording requirements in real time
- File for New Work online
- Eliminate lost or incomplete hard copy books
- Secure Usernames and Passwords provided for designates

[CSSL Logbook](#)



Summary

- Benefits are:
 - improved safety for public and employees
 - improved system reliability
 - reduction in electrical system risk
 - peace of mind relating to compliance with OESC
 - documentation for liability management