News, Views and Updates from the Electrical Safety Authority

PLUGGED IN

FALL 2025

Reducing Arc-Flash Risks:

The OESC's New Requirements

p.6 ▶

Electrical Safety Authority

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Convictions (June 1-September 30, 2025)

The following are convictions under the *Electricity Act, 1998* for violations of the legislation or the Ontario Electrical Safety Code, and have been prosecuted through the *Provincial Offences Act*.

Unlicensed

These convictions, which consist of those who have engaged in unauthorized (i.e., unlicensed) electrical work in Ontario.

Robert Erik Hubie

Location: Thunder Bay

Robert Hubie was a partner in Delta Contracting, a general partnership.

Delta was subcontracted to complete electrical work at various residential properties in and around Thunder Bay. Hubie personally performed the electrical work at these locations, including a community living facility.

Notifications (i.e., permits) were not obtained from the Electrical Safety Authority (ESA) for this electrical work. During a subsequent inspection at one of the properties, Hubie obstructed the process by concealing the electrical work before the inspection could take place.

Defects were identified at each of the properties where Hubie had completed electrical work, some of which posed risks to life and/or property. Hubie was fined $22,000 and placed on probation.

Mannia Electric Corp.
(o/a Mannia Electrical)

Location: Windsor

Mannia Electric Corp., operating as Mannia Electrical, advertised electrical services on its website, through social media and on physical signage placed on the front lawn of the residence of the company's sole Officer and Director, Satnam Singh. These advertisements targeted customers in the Windsor area and promoted various types of electrical work, including the installation of electrical panels, pot lights and other fixtures and wiring. Some of the advertisements included the terms "certified" or "licensed," and the signage displayed on Singh's front lawn also featured the ESA logo.

Mannia Electric Corp. was fined $9,000. In addition, as the company's sole Officer and Director, Singh was fined $4,000 and placed on probation.

Triple Offender Sentenced to Jail for Unlicensed Electrical Work

ESA takes action against a repeat offender with a history of unsafe, unlicensed electrical work.

Julian Solarte-Arango, the sole proprietor of a company called Mr. Fix Enterprise, was sentenced to 15 days in jail after racking up his third conviction under Ontario's *Electricity Act, 1998.*

Despite two previous convictions — in 2019 and again in 2022 — Solarte-Arango continued to perform electrical work without a licence across multiple cities in the province, including Niagara Falls and Thorold. Posing as a licensed contractor, Solarte-Arango completed electrical installations at both commercial and residential properties, left behind unsafe wiring and even used a valid ESA licence number without the contractor's knowledge or permission.

In one particularly egregious case, Solarte-Arango installed wiring, lighting and smoke alarms in a local restaurant, obtaining a Notification of Work by falsely claiming to be the property manager on site. The lighting installed by Solarte-Arango at the restaurant was energized without being properly mounted to the ceiling — posing serious safety risks. At a separate home, switches were wired incorrectly, creating further hazards for unsuspecting residents.

And in 2023 — despite his previous convictions — Solarte-Arango, still operating as Mr. Fix Enterprise, continued to post online advertisements for electrical work, even though he did not hold a valid electrical contracting licence.

In May 2025, the court sentenced Solarte-Arango to 15 days in jail for each of the four separate offences he was charged with, with all sentences running concurrently:

- **Two counts of operating an electrical contracting business without a licence**
- **Advertising electrical services without an electrical contracting licence**
- **Falsely presenting an ESA-issued document as genuine**

Unlicensed Contractor in Thunder Bay Fined $22,000

Robert Erik Hubie, a partner at Delta Contracting, has been convicted for performing unsafe and unlicensed electrical work in Thunder Bay. Neither Hubie nor Delta Contracting were licensed with ESA to conduct electrical work, yet Hubie accepted residential jobs across the community.

ESA's investigation revealed that Hubie, operating under Delta Contracting, installed wiring, switches, receptacles, lights and relocated electrical circuits at several properties. Hubie even completed electrical installations at a community living facility where especially vulnerable people resided. Hubie did not file permits with ESA for any of this work, bypassing the inspection process that ensures compliance with the Ontario Electrical Safety Code.

When ESA's inspectors later inspected the properties, they uncovered defects and hazards at every single site where Hubie had worked. In some cases, the electrical work had been concealed before inspections could occur, compounding the risks. Three of the inspected properties contained electrical hazards so severe that it impacted the safety of the property and its occupants.

In June 2025, Hubie plead guilty to nine charges and was fined a total of $22,000. He also received two years of probation on three of the counts. When rendering its decision, the court cited a number of aggravating factors, including the length of time the offences continued and the fact that defects were identified at every location.

THE HUBIE CASE IS A REMINDER:

Ontario's licensing and inspection requirements are more than administrative steps; they are foundational elements of electrical safety and consumer protection in Ontario.

When unlicensed actors cut corners, it undermines consumer protection and puts lives at risk. LECs, by contrast, reinforce the integrity of the system every time they file a permit and stand behind code-compliant installations.

Reducing Arc-Flash Risks: The OESC's New Requirements

The 29th edition of the Ontario Electrical Safety Code (OESC) introduced a new requirement involving shock and arc flash protection. The impact of exposure to arc flash can be mitigated through design, installation and safe work practices. For workers, the potential severity of an incident determines the protective measures required, including the use of personal protective equipment (PPE). During the design and installation stage, available incident energy can be reduced not only by lowering the available short circuit current, but also by minimizing the time an arcing fault is sustained before it is fully cleared and extinguished.

New Rule 2-306 3) a) aims to reduce the arcing fault clearing time when an overcurrent protection device (OCPD) is rated 1200 A or higher. In principle, a reduction of arcing fault duration means a safer installation for workers, with lower potential incident energy levels. However, the interpretation and application of the new requirement can vary based on the implementation of products on the market and the evolving technologies in arc flash mitigation.

Bulletin 2-32-0 was introduced to explain the nuances of compliance with the Rule. When energized work is performed under Rule 2-304 and an arcing fault occurs, the protection system is required to interrupt the fault as fast as the OCPD is capable. For adjustable circuit breakers, this will be initiated instantaneously rather than waiting

on coordinated time-delay protection elements. The reason for this is that equipment might be designed to survive a short circuit condition for a coordinated duration, but overall produced arcing energy builds the longer it takes to clear the fault.

Selective coordination of OCPDs is inherent for normal operation and the highest reliability of a power system. Each device located closer to the point of connection of a supply has a greater time-delay. Instead of opening immediately during a fault, it holds to allow downstream protection to operate, which results in a slower overall fault-clearing time. The provision of the new requirement is targeted at faults in specific work locations at the equipment or for periods of time when work is performed per Rule 2-304. It is not anticipated to undermine selective coordination for the rest of the system's operation.

CSA Z462, the standard for workplace electrical safety, is referenced in the Appendix B note to Rule 2-306.

Reducing Arc-Flash Risks: The OESC's New Requirements (Continued)

For arc flash hazards, this standard provides assistance in determining the severity of potential exposure, planning safe work practices and selecting appropriate PPE. Within CSA Z462, there are example methods provided to reduce incident energy. The common functionality of these includes decreasing the fault interruption time as much as possible, bypassing the typical time-delay of an OCPD.

There are practical ways to achieve this objective. The best choice will depend on project constraints, coordination requirements and equipment features. It is expected that the chosen method will function as intended by the new subrule to instantaneously initiate a fault clearing operation or provide an equivalent level of performance. Several examples are listed in the bulletin:

- **Current-limiting fuses**
- **Zone-selective interlocking**
- **Differential protection**
- **Energy-reducing maintenance switching**
- **Arc-flash detection relays**
- **Energy-reducing active arc fault mitigation systems**

If you are submitting a project to ESA's Plan Review team that includes an OCPD rated at or above 1200 A, be sure to submit the applicable supporting information about the chosen method of reducing the arcing fault duration, along with demonstrating how it works. Feedback can then be provided on the design and supporting documents, such as a letter of attestation, manufacturer documentation or a protection study prepared by a professional engineer or other responsible qualified person.

Existing equipment considerations: Simply having a spare OCPD present, or situations involving existing equipment, does not automatically bring the installation under this Rule.

When the threshold applies: The rule is triggered if an OCPD is rated at 1200 A or more. If a device's amperage is larger but the protection rating is set below 1200 A (e.g., a 1600 A frame breaker set to 1100 A or a 1200 A switch with fuses under 1200 A), Rule 2-306 3) does not apply.

Meeting compliance with Rule 2-306 should not be confused with the necessity to perform a detailed arc-flash study, which is useful but beyond the OESC's requirements. The incident energy level will be reduced as an outcome of meeting the new Rule, however, finding these results is not part of the plan review or inspection process.

Director's Corner
Message from the Director of Licensing

SARAH KEMPEL
Director of Licensing

As we reflect on the past few months, there is much to celebrate! From recognizing the outstanding recipients of ESA's 16th Annual Ontario Electrical Safety Awards to the successful launch of our new self-serve online licensing platform, it has been a season of progress and innovation.

A special congratulations to Phase Electric Ltd., this year's recipient of the Licensed Electrical Contractor Recognition Award. Their commitment to safety, compliance and putting people first exemplifies what it means to hold an ESA licence. On behalf of the entire ESA Licensing team, well done, Phase Electric Ltd.!

Director's Corner: Message from the Director of Licensing (Continued)

Licensing's New Self-Serve Online Platform is Live!

I am thrilled to announce the launch of ESA Licensing's new online self-serve platform, designed to make the licensing process more accessible, efficient and user-friendly for all licence holders and Master Electrician (ME) Exam applicants. This milestone reflects ESA's ongoing commitment to modernizing service delivery and enhancing the tools available to our stakeholders.

In addition to streamlining licensing processes, the platform introduces key enhancements:

- An upgraded Contractor Locator Tool to help the public confidently identify and hire Licensed Electrical Contractors.
- A simplified Online Complaints Submission Tool, making it easier to report non-compliance and support enforcement efforts.

Discover the platform and explore available resources here.

LOOKING AHEAD

Don't miss ESA's Virtual 2025 Annual Licence Holder Meeting. This year's theme, *Wired for Change: Connecting Through Digital Innovation*, promises valuable insights and practical takeaways.

Learn more

IMPORTANT LICENSING REMINDERS YOU DON'T WANT TO MISS

Display Your Licence

Your licence number isn't just a requirement, it's a trust signal. Make sure it's visible on vehicles, advertisements and business materials. It sets you apart and helps customers choose licensed professionals.

Learn more

Professionalism in Practice

Clear quotes, accurate invoices and organized records aren't just good business, they're essential for compliance and customer trust.

Explore Best Practices

ESA's New Self-Serve Licensing Platform is Here!

Log in today and experience a smarter, simpler way to manage your licence.

Welcome to a New Era for ESA Licensing

ESA's new self-serve Licensing Platform is officially live. Whether you're a Licensed Electrical Contractor (LEC), Master Electrician (ME) or applying to write the ME Exam, everything you need is now in one secure, modern system. **It's web-based, mobile-friendly and built to make licence applications, renewals, payments and updates faster and easier.**

Key Benefits at a Glance

- User-friendly and intuitive
  - Built with feedback from licence holders
  - No training required — just log in and get started
- Web-based access
- Online ME Exam registration
- Apply for and renew ME and LEC licences
- Self-serve payments
- Manage your licence documents
- Updated Contractor Locator Tool
- Improved complaint tracking and compliance monitoring

HAVE BOTH AN LEC AND ME LICENCE?

The new Licensing Platform will allow you to manage both licences in one place without multiple logins!

ESA's New Self-Serve Licensing Platform is Here! (Continued)

HOW TO GET STARTED

If you haven't already, setting up your new account takes just a few steps:

1. Go to Licensing.ESAsafe.com and click **Sign in.**
2. Select **Sign up now** under the login box.
3. **Enter your email address** and **complete the verification step.**
4. **Copy the verification code** sent to your email address.
5. Paste the code, create a password and click **Create.**
6. **Agree to Terms and Conditions** and fill in your Profile information.

You should now be registered and able to view your online Licensing Platform Profile!

Log in today at Licensing.ESAsafe.com.

What Licence Holders Are Saying

"The new ME Exam application process is a game-changer. Applicants can now submit their applications online and make payments through a convenient self-serve system, which significantly speeds up and simplifies the process. Once they pass the Exam, they can use the same platform and login to apply for their ME licence — keeping everything streamlined and in one place for a smooth, efficient experience."

Glen Hicks, Chair of ESA's Master Examining Committee

"As Acting Chair of ESA's ECRA Advisory Council, I've seen the new online Licensing Platform firsthand and it's intuitive, efficient and easy to navigate. LECs can quickly check their licence status, renew and update account information, saving valuable time that would otherwise be spent on paperwork. That means more time to focus on what really matters — safety and customer service."

Larry Shaver, Acting Chair, ESA Electrical Contractor Registration Agency Advisory Council

ESA's New Self-Serve Licensing Platform is Here! (Continued)

What's Different from Before

With the launch of the new Licensing Platform, here's how things now work:

- **New Licensing Platform (LIVE):** This is now the single place for all licensing activities. Use it for LEC and ME licence renewals, ME Exam applications, payments, account updates and access to licence documents.
- **LEC Portal, SAFE (LIVE):** The LEC Portal remains in place to submit all wiring notifications to ESA. Continue to use your current login credentials as the permitting process remains separate from the new Licensing Platform.
- **ME Portal (RETIRED):** The ME Portal has been decommissioned, and your credentials will no longer be valid. All functionalities of the ME Portal have been transitioned over to the new Licensing Platform.

Make the Most of ESA's New Licensing Platform

Visit ESAsafe.com/LicensingPlatform — your go-to source for updates and resources on ESA's new licensing system.

On the online hub, you'll find:

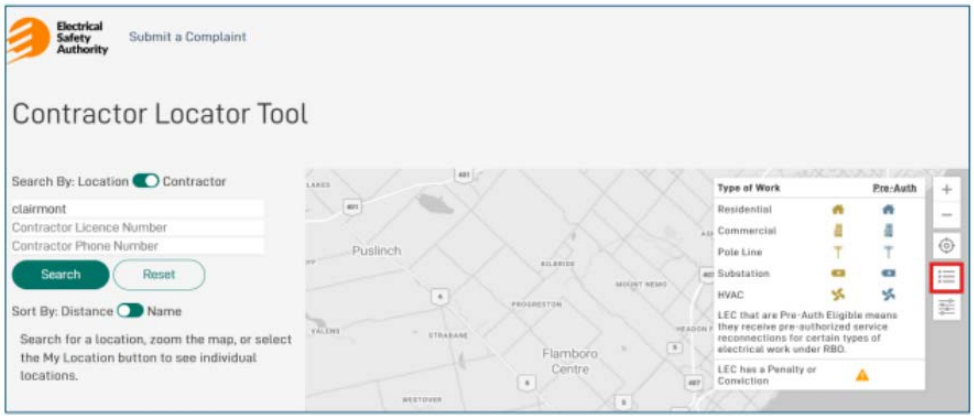
- **FAQs** on topics like logging in, how to change contact information and how to add or change administrators for your account
- **Step-by-step guides** to walk you through features of the new platform
- **Key announcements** around the use of the platform
- **Support contacts** if you need extra help

ESA's New Self-Serve Licensing Platform is Here! (Continued)

KEY FEATURE: UPDATED CONTRACTOR LOCATOR TOOL

The enhanced **Contractor Locator Tool** now goes beyond simply listing LECs in Ontario.

- If an **unlicensed contractor** is caught performing electrical work and receives an **Administrative Penalty Order (APO)** or a **conviction**, the tool will flag them as unlicensed.
- For **LECs**, the tool will **display their licence status** and recent **compliance history**, including any active conditions, APOs and convictions.
- **Consumers** can see these **compliance actions** directly, giving them clear warning signs before hiring.
- This update **strengthens public protection** and reinforces the **value of hiring LECs**.



Zoom in to find a contractor. Select a business then click on the legend to view the types of work a licence holder can conduct.

Try the Contractor Locator Tool: FindAContractor.ESAsafe.com

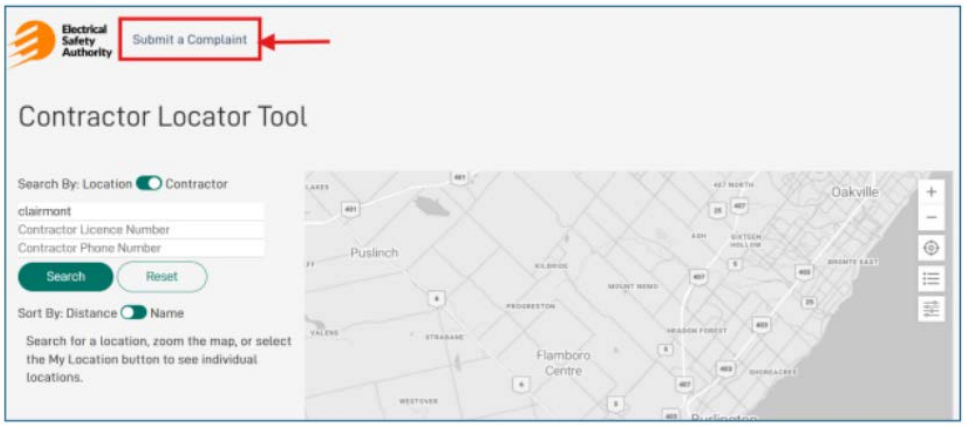
ESA's New Self-Serve Licensing Platform is Here! (Continued)

KEY FEATURE: EASY ACCESS TO THE COMPLAINT SUBMISSION TOOL

The new **Complaint Submission Tool** improves how ESA tracks and responds to concerns about licensing complaints.

- Complaints can be **submitted directly online** from the Contractor Locator Tool or at Licensing.ESAsafe.com.
- **ESA reviews every complaint** and may contact the complainant, ESA inspectors or contractors to gather information.
- Only **escalated compliance actions** — such as APOs, convictions and conditions applied to a licence after repeated or serious non-compliance — are made **publicly visible** in the Contractor Locator Tool.

This process strengthens accountability, gives Ontarians greater transparency and ensures licence holders meet their safety obligations.



To file a complaint against a licence holder who has failed to meet their licence requirements or an unlicensed contractor, consumers can now click "Submit a Complaint" via the Contractor Locator Tool.

Check Out the Complaint Submission Tool: Compliance.ESAsafe.com

Whare Are You Waiting For? Login in Now at Licensing.ESAsafe.com.
Get ready to manage your licensing needs anytime, from anywhere.

Licensed Electrical Contractors and Designated Master Electricians: Trusted Professionals Advancing Electrical Safety in Ontario

Licenced Electrical Contractors (LECs) and Designated Master Electricians (DMEs) play an essential role in safeguarding the electrical safety of Ontarians. As an LEC or DME, you are responsible for ensuring that all electrical work is carried out in compliance with the Ontario Electrical Safety Code and relevant laws relating to health and safety, employment standards, consumer protection, business tax and business practices.

For LECs, having a licence means operating a professional, compliant and customer-focused business — one that is committed to the highest standards of safety, ethics and integrity.

To demonstrate leadership in electrical safety and build trust with your customers and the broader public, you are expected to:

- **Clearly display your LEC licence number** on all business materials, including advertisements, contracts, quotes, invoices, receipts and your website. This allows customers to identify you as a licensed professional who meets Ontario's safety, insurance and licensing requirements.
- **Provide clear and accurate written quotes and invoices** when offering and completing electrical work. Transparency builds trust and protects both your business and your customers.
- **Maintain organized and complete business records.** Good recordkeeping, including copies of contracts, invoices and payment receipts, is essential for demonstrating compliance and supporting smooth business operations.

Being a licence holder is both a professional responsibility and a privilege. By meeting your licensing and business requirements, you help protect your customers, support the safety of Ontario's homes and businesses and strengthen the reputation of the licensed electrical contracting industry.

Want to learn more?
Resources for MEs and LECs that support your business and promote excellence in safety, ethics and proficiency can be found on ESA's website.

Register Now for ESA's 20th Annual Licence Holder Meeting

WIRED FOR CHANGE
Connecting Through Digital Innovation

This year marks ESA's 20th Annual Licence Holder Meeting — a milestone celebrating two decades of collaboration, innovation and safety leadership made possible by Ontario's licence holder community.

This year's theme, ***Wired for Change: Connecting Through Digital Innovation***, will explore how technology is transforming the way we work.

DATE & TIME: NOVEMBER 26, 2025 | 2:30 – 4:00 P.M.

Our invited speaker, **Candice White, CEO & Registrar at Skilled Trades Ontario (STO)**, will share STO's commitment to elevating the skilled trades and inspiring young people to pursue a rewarding career in the trades.

By popular demand, the **Technical Q&A session** will be back — along with opportunities to ask questions directly to ESA's Licensing and Operations teams.

AGENDA HIGHLIGHTS

COMMUNICATIONS CAMPAIGNS:
Discover the creative, data-informed ways we are educating and empowering consumers on the value of hiring licensed professionals.

DIRECTOR OF LICENSING UPDATE:
A snapshot of the past fiscal year and a look ahead at our strategic direction, grounded in evolving service delivery and fostering compliance.

UNDERGROUND ECONOMY UPDATE:
Learn how we are using data-driven approaches to identify and disrupt unlicensed activity.

LICENSING PLATFORM UPDATE:
Get to know more about our digital transformation and the new licensing self-serve platform, designed to make managing your licence easier and more transparent.

QUESTION & ANSWER SESSION WITH A TECHNICAL ADVISOR:
Submit your questions for review and get a response from our technical experts.

KEYNOTE SPEAKER:
Insights from Candice White, CEO & Registrar at STO, on the future of skilled trades.

Register Now to secure your spot and receive your Zoom link.
After registering, you'll get a confirmation email with details on how to join.

We Want to Hear From You!
Have questions for Licensing or about the Code? Submit them with your registration email by **November 7, 2025**.

Displaying Your Licence Number: What Licensed Electrical Contractors Need to Know

If you're a Licensed Electrical Contractor (LEC), displaying your licence number to the public isn't just a regulatory requirement, it's a smart business move.

Your licence number must be clearly visible on all business vehicles, company materials (like contracts, invoices, receipts, business cards) and anywhere you advertise, including online platforms like Kijiji and Facebook Marketplace.

Why does it matter? Because customers are actively looking for it. At ESA, we encourage homeowners and businesses to look for a licence number to tell the difference between hiring licensed professionals and unlicensed contractors. By proudly displaying yours, you're not just complying with the rules, you're building trust, credibility and confidence in your services.

Your licence tells the public that you have the training, expertise and equipment to get the job done safely and professionally. It's a powerful signal that sets you apart in the competitive market.

You worked hard for your LEC licence, let it work for you.

Want to find out more?
You'll find the requirements, including the guidelines for vehicles, on ESAsafe.com/DisplayYourLicence.

Is Your Email Address Current?

ENSURE SEAMLESS COMMUNICATION WITH ESA: CHOOSE EMAIL

To stay informed and maintain compliance with your licensing obligations — regardless of postal service interruptions — make sure your Master Electrician (ME) and Electrical Contactor (EC) licences have email as their preferred method of communication.

DO YOU HOLD BOTH A ME AND EC LICENCE?

If so, you may have registered each with different contact details. Please check both records and ensure ESA has the correct email on file for both licences.

To update your communication preferences, simply email ESA.licensing@electricalsafety.on.ca with your licence number(s) and request to have email as your preferred method of communication.

The ‘Hire an LEC’ Campaign is Back — And This Time, It’s Coming to Life

The award-winning ‘Hire an LEC’ campaign is officially back in market! Now in its third year, the campaign is once again taking on the underground economy — reminding Ontarians about the risks of hiring unlicensed contractors and the importance of filing a permit for all electrical work.

This year, we added a new, attention-grabbing element to the campaign — a live activation designed to stop people in their tracks and spark real conversations about electrical safety.

We took our messages to the streets of Acton with a “Super Sketchy Electrical” van — complete with a crew that didn’t quite pass the sniff test. Stationed outside of a local home improvement store, the van was operated by seasoned improv actors posing as unlicensed electricians.

Through humorous, street-theatre-style skits, they demonstrated just how easy it can be to get duped by someone pretending to be licensed — and how risky that choice can be.

Passersby were handed a crumpled napkin featuring a phone number and QR code. A quick call or scan revealed the truth: “Super Sketchy Electrical” wasn’t real — but the dangers of hiring unlicensed electrical contractors are. It was a memorable and effective way to bring the campaign to life, while reinforcing the importance of doing your due diligence when hiring for electrical work.

Footage from the live activation was also packaged up as part of a viral video campaign to reinforce key messages on popular social media channels such as YouTube, Facebook and Instagram.

WATCH VIDEO

In Real Life, Unlicensed Electricians Won’t Be So Obvious.

WATCH VIDEO

Don’t Risk It. Hire Licensed.

Essential Bulletin Updates Went into Effect on October 1st, 2025

There's always something new buzzing around ESA, and we don't want you to miss out! Below, you'll find bite-sized insights on three important upcoming bulletins with updates to be enforced for any Notification of Work filed from October 1st, 2025, onwards.

- **Meter base grounding — Bulletin 10-15-9**
  The installation or alteration of a meter base must meet the criteria set out in Bulletin 10-15-9. The bulletin has been revised to remove the permission of utilizing the neutral conductor as a bonding means from the meter base to the service panel. Refer to the bulletin for exceptions.
- **Whole house transfer switch bonding — Bulletin 10-24-4**
  The installation of whole home backup generators has resulted in many transfer switches which are service entrance rated to be installed on the load side of existing meter bases for residential services. Since the whole home transfer switch now becomes the new main service box for the house, it was permitted to utilize the neutral conductor as a bonding means from the meter base to the transfer panel. The bulletin has been revised to clarify grounding requirements for whole home transfer switches and to remove the previous permissions similar to those in Bulletin 10-15-*.
- **Bonding of swimming pool, hot tub, and spa — Bulletin 68-8-2**
  The goal of the OESC around pools is to ensure all metal and conductive parts (including surfaces) in and around the pool are at the same electrical potential; this reduces the risk of electric shock when people enter, exit or interact with the pool. By establishing an equipotential plane, stray voltages from nearby electrical faults are controlled, lowering the chance of harmful step and touch voltages.

Essential Bulletin Updates Went into Effect on October 1st, 2025 (Continued)

Here is the full list of bulletin updates published in October:

WHAT'S NEW – OCTOBER 2025 BULLETINS

New Bulletin	Replaces Bulletin	Title	Change
2-32-0	N/A	Reduction of arcing fault clearing time	Interpretation and clarifications provided for arcing fault clearing time reduction methods to comply with new Rule 2-306 3)
4-3-12	4-3-11	Sizing of neutral conductors	Added – allowance for permitted neutral size for supply authority metering
6-5-7	6-5-6	Service to public transit shelters, telephone booths, signs, CATV amplifiers, etc.	Revised to clarify that other acceptable methods are permitted, such as ground plates.
10-15-9	10-15-8	Grounding with a meter base on the supply side of service boxes	Removed – Item 4) ESA's direction for single and multi-gang meter base grounding. New – direction to clarify use of previously accepted grounding methods for existing installations.
10-24-4	10-24-3	Whole house transfer switch bonding	Removed – Item 5) ESA's direction for adding a transfer switch to existing installations with grounding at service box
20-4-9	20-4-8	Wiring methods for diesel fuel dispensers located in hazardous areas	Zone 2 in Diagrams B1 and B2 is extended to include the motor/dispenser enclosure, updated legend for the Zones, and added a note to clarify Zone 1 wiring method requirements.
36-12-9	36-12-8	Loop feeder and ring buss	Updated installation of customer owned load break switch for loop and radial feeds; Added connection of switches exception; Updated exceptions for switch blade installation when in open position.
68-8-3	68-8-2	Bonding of swimming pool, hot tub, and spa	Reorganized removed question and answer form to use plain language for direction on all topics, simplified language throughout, included clarification for perimeter decking (patio) bonding requirements, and revised diagrams B1 and B2 to include clarification on various requirements.

Meter Bases — Bonding, Safety and Section 10 Changes

ESA Technical Advisor, Trevor Tremblay, walks through common mistakes, updated code requirements and best practices for bonding and grounding meter bases.

Bonding Confusion at the Base

Improperly bonded meter bases have become a recurring issue in the field. With updated Section 10 code rules introduced in 2018 and a transitional period in place until October 1, 2025, many electrical contractors are still relying on old habits. This is especially true since new meter bases look almost identical to legacy models, making it easy for old habits to persist.

"We are seeing a lot of meter bases being installed without a bond unknowingly," Trevor explains. "It's pretty concerning. There is a chance that in abnormal conditions or when something doesn't work properly it could sit there energized."

That can lead to dangerous results, including shock or fire hazards. Trevor says that while the code changes may be subtle, they'll have a "pretty big impact on installations."

From Habit to Hazard

For decades, contractors bonded meter bases through the neutral. When the rules changed, that practice became non-compliant. Trevor's concern is that many Licensed Electrical Contractors may have missed that update.

"We are creatures of habit," he says. "We've been doing something the same way for 20-30 years and we don't get a defect, so we continue to do it the same way."

LISTEN TO FULL EPISODE

EPISODE 18
Meter Bases - Bonding, Safety, and Section 10 Changes
Click Here to Listen

But in 2018, Section 10 got a "complete rewrite — essentially saying your neutral now could only be grounded in one location, at the consumer service. No longer can you do the meter base at the panel board."

Subtle model differences, like "permanently bonded" vs. "isolated neutral", often appear as small labels or acronyms (e.g., "IN") in hard-to-see places.

Trevor recommends verifying bonding using a multimeter whenever there's doubt and paying close attention to the manufacturer's specifications. Some newer models even have visible bonding conductors to help identify the configuration more easily.

Meter Bases — Bonding, Safety and Section 10 Changes (Continued)

Multi-Gang and Armoured Cable Considerations

Contractors also need to pay close attention when working with multi-gang meter bases or armoured cables. As Trevor notes, the new code requirements allow for a single bonding jumper at the meter base and reduce the number of required ground bushings — provided bonding conductors are properly installed.

"In the new code cycle now, if the bond wire is run with the conductors, you only have to put one ground bushing at either end of the teck cable, and if you have a bond wire in there, you connect it at both ends," Trevor notes.

"Essentially, we did end up paralleling the neutral with the armor and hence the ground bushings. They wanted a good connection just in case you lost the neutral."

Trevor also highlights that contractors should take note that, as of October 1st, 2025, when it comes to multi-gang setups, grounding is only permitted at the meter base, and a system bonding jumper must be installed.

"It eliminates the need for multiple ground electrodes and the requirement to interconnect all the ground electrodes when installed at the same building," he says. "These meter bases should have enough termination points for all the bonding and grounding conductors required."

Combination Devices & Replacement Guidance

Combination meter mounting devices — which house the meter and main breaker — require grounding in the breaker compartment, not the meter area. It's another subtle but important distinction.

What about meter base replacements? Trevor explains that if the configuration and ratings don't change (e.g., replacing a 200AMP underground base with the same type), contractors won't be forced to upgrade to meet new grounding rules.

"Aging infrastructure leads to failures, so we would recommend changing it no matter what."

The ESA's bulletin on whole-home transfer switches has already been updated to reflect the upcoming grounding rules. While the code is not retroactive, contractors should still install systems that meet new requirements to avoid rework in the future.

Follow Grounded in Ontario wherever you get your podcasts. Got a technical question or an idea for an upcoming topic on our show, we want to hear from you! Email us at: podcast@esasafe.com.

Managing and Scheduling Notifications: How Staying Organized Promotes Safety & Positively Impacts Your Compliance and Fees

Managing and scheduling notifications in a timely manner helps ensure your installations are compliant with the Ontario Electrical Safety Code (OESC) and allows you to meet your licence holder obligations. Compliant installations mean electrical safety is not compromised. ESA has tools and tips to help you manage your notifications and renewal costs.

Did you know that a notification is valid for 12 months?[1] If a notification is outstanding for 12 months, without a final inspection, it automatically renews, and you are invoiced a renewal fee. You are also deemed to have acknowledged the status of the notification and therefore accept that the work is not yet completed. **Scheduling a final inspection is not only a legal requirement in Ontario, but it also helps ensure a site is safe and compliant, while saving you time and money.**

As a Licensed Electrical Contractor (LEC), you're required to perform electrical work in accordance with the OESC. This entails submitting applications for inspection and ensuring all required inspections are scheduled, including the final inspection upon project completion. Stay compliant with your licence requirements by making sure you notify ESA's Customer Service Centre before starting any electrical work and requesting your inspections, especially final inspections, promptly.

To better understand how being Code compliant relates to your licensing obligations, you can review the Standards of Conduct and Guidelines for Licence Holders on ESAsafe.com.

[1] ***Residential and Apartment:*** *Residential (new and renovation) and Apartment (renovation) notifications are valid for 12 months.*

Industrial/Commercial/Institutional and Agricultural: *ICIA notifications with total inspection fees valued at $1,000 or less are valid for 12 months.*

Managing and Scheduling Notifications: How Staying Organized Promotes Safety & Positively Impacts Your Compliance and Fees

(Continued)

ESA Has Tools and Tips for Managing Your Notifications & Getting Inspections Scheduled

ACCOUNT CORRESPONDENCE

45 Day Expiry Notice

Some jobs simply take longer than others. ESA will send you correspondence, reminding you of the outstanding final inspection, 45 days before your notification is set to expire. If you are ready for inspection, contact our Customer Service Centre or use our online tools to schedule a Final Inspection. Be sure to schedule before the date listed on your notice to avoid renewal fees being applied to your account.

Open Notifications Report

Once a month, ESA issues your business an Open Notifications Report ("Report"). This Report lists all notifications, greater than 90 days old, that are open on your account. **Watch for your Report between the 20th and 22nd of every month.** This is a great tool to help catch those notifications that may have fallen between the cracks.

ONLINE TOOLS

ESA ON Mobile

Since you are on the move, ESA has developed a tool that moves with you. The ESA ON Mobile app allows you to check the status of your notifications and schedule an inspection from the convenience of your phone. There is no need to spend extra time in the office or in front of a computer when you can schedule an inspection anytime, from anywhere.

LEC Portal

The LEC Portal is our online tool that is designed for use when you are in the office or in front of a computer. The portal makes it easy to view a list of your open notifications, review your correspondence, pay your invoices and schedule inspections. Do you have multiple teams or employees in the field? The LEC Portal allows you to provide access to multiple users, so everyone can contribute to staying on top of your notifications and getting those inspections scheduled.

New to ESA Online Services and don't know where to start? Our team of Customer Service Representatives are here to help. Contact the Customer Service Centre at 1-877-372-7233 to get you set up and on your way.

Phase Electric Ltd. Wins 2025 Licensed Electrical Contractor Recognition Award

Phase Electric was celebrated at the Ontario Electrical Safety Awards in September for their technical excellence, dedication and true partnership with ESA inspectors.

At the Ontario Electrical Safety Awards in September, Phase Electric was recognized with the Licensed Electrical Contractor Recognition Award (LECRA) for their work in one of the most challenging environments imaginable — a multi-purpose facility in Thunder Bay that cared for vulnerable residents. Inside, ESA inspectors found exposed conductors, damaged conduit and panels, along with evidence of dangerous arcing events that had already caused power disruptions. The situation demanded urgent expert attention to protect some of the community's most vulnerable residents.

LECRA was first introduced in 2020 to celebrate the strong partnership between ESA and Ontario's Licensed Electrical Contractors. It recognizes LECs who demonstrate exceptional leadership in electrical safety and consistently deliver outstanding service. What makes this award especially meaningful is that nominations come directly from ESA inspectors — professionals who work side-by-side with LECs every day.

Although based more than 15 hours away in the GTA, Phase Electric didn't hesitate to respond. Their team made the long journey north, assessed the risks and committed to seeing the job through.

Over nearly a month, they worked alongside ESA inspectors to correct every defect, replacing damaged conduit, bringing panels back into compliance and repairing more than 500 fixtures to restore safe conditions throughout the facility.

> "What stood out most was their dedication," said Serge Laflamme, General Manager, Northern Region at ESA. "Phase Electric didn't just show up to do a job. They understood the seriousness of the situation and vulnerability of the people inside. Their collaboration with our inspectors strengthened the safety outcome for everyone involved."

Congratulations to Phase Electric for this well-deserved recognition. Their work is a powerful example of the skill, professionalism and commitment to safety that Ontario's LECs bring to communities across the province every day.

Want to learn more about this year's Ontario Electrical Safety Award winners? Visit ESAsafe.com/SafetyAwards.

2024 Ontario Electrical Safety Report Now Available

Canada's most comprehensive source of electrical safety data

Since its inception in 2000, the Ontario Electrical Safety Report (OESR) has been the only publication in Canada to consistently track and publish detailed electrical safety data. Now in its **24th edition**, the OESR continues to provide a comprehensive perspective of electrical fatalities, injuries and incidents in Ontario. ESA uses the data from the OESR to identify areas that present the greatest risk to Ontarians, to monitor changes over time and to understand emerging risks and trends.

The OESR is made possible through collaboration with the **Office of the Chief Coroner, the Ministry of Labour, Immigration, Training and Skills Development**, the **Office of the Fire Marshal**, the **Canadian Institute of Health Information** and the **Workplace Safety and Insurance Board of Ontario**.

WHY THE OESR MATTERS FOR LECS

- **Powerline contact continues to be the leading cause of electrical fatalities in Ontario.**
  - Powerline contact while working accounted for 43% of all occupational electrical fatalities between 2015 and 2024.
- **Unsafe work practices are linked to electrical safety incidents.**
  - There was at least one critical injury to an electrical trade worker each year, in the past ten years.

2024 Ontario Electrical Safety Report Now Available (Continued)

- **Non-occupational electrical fatalities are climbing, showing the need for continued public awareness about staying safe around electricity.**
  - Powerline contact while at home or in recreational settings increased between 2015-2019 and 2020-2024. There has been a 29% increase in the rate of non-occupational fatalities due to powerline contact.

A MILESTONE ACHIEVEMENT

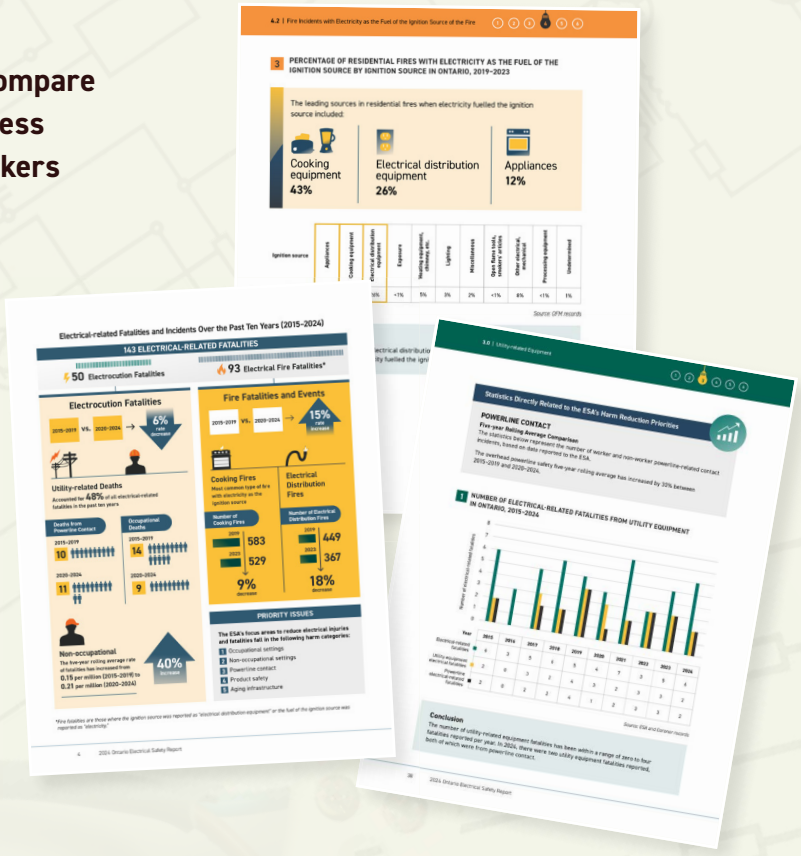
Between 2020-2025, Ontario saw an **8.3% reduction in critical injuries and fatalities.**

The declining rate reflects ESA's strategic focus on electrical safety awareness, targeted education and strengthened compliance efforts. It also reflects the commitment of LECs, utilities and our safety partners working together to reduce the risk of harm in the province.

EXPLORE THE 2024 OESR

The full report is available now at: ESAsafe.com/OESR.

Download the latest statistics, compare year-over-year progress and access insights you can use to keep workers and customers informed.



Lifelong Safety Through Lifelong Learning — Safety and Technical Training is Worth the Investment

Safety and Technical Training delivers value across the entire electrical sector — from electricians and related trades to electrical contracting businesses and consumers.

In a field as technically complex and fast moving as Ontario's electrical industry, staying up to date is critical. New technologies are constantly emerging, and with them come Ontario Electrical Safety Code (OESC) rules and evolving safety practices. Continuing to build your knowledge and skills ensures you stay current and prepared.

ESA's industry-leading experts design courses with the latest insights on electrical safety, industry trends, adult learning principles, the OESC and other relevant standards and codes.

Three Reasons Safety and Technical Training is a Smart Investment

1 BUSINESSES SAVE TIME, MONEY AND IMPROVE SAFETY

Training supports the safety and advancement of the entire electrical sector while strengthening public safety and welfare. By staying ahead of new requirements, businesses can complete OESC-compliant installations more efficiently, reducing defects, saving on labour and materials and maintaining a competitive edge.

2 INDIVIDUALS CAN UPSKILL AND GROW THEIR CAREERS

ESA training provides practical, job-ready skills that can be applied immediately. Whether you're looking to strengthen your expertise in your current role or work towards becoming a Master Electrician, ESA's award-winning Training Solutions team can help you reach your career and business goals.

3 FLEXIBLE LEARNING OPTIONS WITH ESA

ESA makes training accessible with multiple delivery methods to suit your learning style and schedule:

- **In-person Classroom:** Learn directly from expert trainers with extensive field experience.
- **Virtual Instructor-Led (ViLT):** For those looking for real-time instruction from seasoned trainers with no travel required.
- **Online:** Access course materials anytime and at your own pace, including engaging multimedia, practice exercises and additional resources.

Lifelong Safety Through Lifelong Learning — Safety and Technical Training is Worth the Investment (Continued)

Check out ESA's course offerings here or by using your smartphone or tablet to scan the QR code below.

Group rates are available. E-mail your Client Safety Specialist at CSS.ContactUs@electricalsafety.on.ca for details.

Course Features:

IT'S NOT TOO LATE TO GET TRAINED ON THE 2024 OESC

Stay current on new and amended requirements with ESA's expert-led course. Learn at your own pace with our flexible online option or join an in-person session in your area.

Register In-Person Here

Register Online Here

NEW! ELECTRICAL SAFETY IN THE WORKPLACE – UNDERSTANDING Z462:24

Electrical hazards remain one of the top risks in construction, manufacturing and maintenance settings. ESA's updated one-day, in-person course helps you strengthen safety programs and align with the latest CSA Z462:24 Standard.

Learn how to assess risk, apply safe work practices, establish electrically safe conditions and stay compliant. Ideal for supervisors, OHSA staff, electricians, engineers and anyone working around energized systems.

Register Here

Disclaimer: *Training is a non-regulatory service offered by the Electrical Safety Authority (ESA). Electrical safety and technical courses may be offered by other providers. View more information about ESA's non-regulatory activities here.*

How Well Do You Know the Code?
Take Our Quiz and Test Your Technical Knowledge.

Q1

For the installation of a new panelboard in a single dwelling, how many additional breaker spare spaces are required to be left for future overcurrent devices?

a. 1 additional space for a single-pole breaker

b. 2 additional spaces for provision for a double-pole breaker

c. 3 additional spaces for double-pole breakers

d. 4 additional spaces with provision for a double-pole breaker

Q2

What is the maximum rating permitted for plug fuses?

a. 5 A

b. 10 A

c. 20 A

d. 30 A

Q3

When installing grounding electrodes to mitigate neutral voltages for customer owned power lines, what is the minimum separation between the primary and secondary grounding electrodes?

a. At least 2 m apart

b. At least 3 m apart

c. At least 5 m apart

d. At least 10 m apart

Answers

Question 1:
d. 4 additional spaces with provision for a double-pole breaker
Ref Rule 8-108 1)

Question 2:
d. 30 A
Ref Rule 14-208 1)

Question 3:
c. At least 5 m apart
Ref Rule 75-812 3)

Underground Splices (Rule 12-012 7)

As so often happens in life, unexpected and perhaps unwanted events occur, such as an underground cable or conductor becoming damaged. When the damage is located and confirmed, working to repair it can be challenging to say the least and this is one of those projects that you really want to get right the first time around.

As with all splices in electrical systems, they are required to be accessible (Rule 12-112 4)). Grade level in-ground enclosures are specifically engineered for this purpose and are the preferred method to ensure the longevity of the installation. Rule 12-012 7) also provides a possibility for a deviation to be considered for those places where a grade level in-ground enclosure is not feasible. However, in both scenarios, unfortunately, the method of splicing or the materials used is sometimes not aligned with the requirements of the Ontario Electrical Safety Code.

12-012 Underground installations

7) Where a deviation has been allowed in accordance with Rule 2-030, cables buried directly in earth shall be permitted to be spliced or tapped in trenches without the use of splice boxes.

When engaging in underground splices, some important points to include in the repair are:

1 USE APPROVED PRODUCTS FOR DIRECT BURIAL (DB)

All electrical components are required to be approved (Rule 2-022 1)) and approved for the purpose that they are utilized. Products used for splicing are no exception. Many manufacturers have kits for underground splices, however, for common cables or conductors, individual parts such as crimp barrel splices and approved thickwall heatshrink can fill in when in a jam.

Underground Splices (Rule 12-012 7)

If it is approved, it will be marked with a recognized certification or approval marking. It may be on the package, but it will also have a symbol on the product itself. Also look for DB or "DIRECT BURIAL" markings for the protection of the splice.

2 CONSIDER THE TYPE OF CABLE BEING SPLICED

Some conductors or cables require a more complex splice, such as an armoured cable or a high voltage cable. It is important to ensure that the integrity of all the cable's individual components is maintained through the repair. This is where a manufactured repair kit excels, as they have developed and tested a system to provide a complete and robust method to restore the functionality of the cable, including all the individual components such as the continuity of the armour, the concentric conductors or the tape shield.

3 CONSIDER THE EXISTING CONDITIONS

A familiar question your electrical inspector might ask as they peer down on your repair is: "What does this feed?" Other questions might include: "Are they part of a parallel set? What is the voltage? Are the cable or conductors still at an acceptable depth?" Parallel conductors are required to be free from splice throughout their length (Rule 12-108 1) a)) which would prohibit their repair unless a deviation had been accepted through the formal process on the ESA web site.

4 CALL BEFORE YOU FINISH

Reach out to your area inspector. ESA's Customer Service Representatives will be able to provide you with an inspector's phone number. ESA also has an online tool that can help you find your local inspector, along with their contact details (FindAnInspector.ESAsafe.com). A quick phone call or text can save you and your client lots of frustration. All installations need to be inspected before being concealed, which includes below grade. If a grade level in-ground enclosure is used, its benefits become even more measurable at this point. However, you should also consider the type of splice as the inspector may need to see it before it is finished.