

# ELECTRICAL CURRENTS

A Newsletter from the Office of L&I Chief Electrical Inspector Wayne Molesworth

May 2025

## Question of the Month

What amount of electrical current flowing through a person's body will cause loss of muscle control? – See correct answer on page 2.

## Rulemaking Updates

### Electrical Fee Increase

The department adopted a 6.41% fee increase to support operating expenses for electrical inspections and other electrical public safety activities. Learn more on our [Rule Development](#) page. Here is what happens next:

- May 6, 2025: CR-103 was signed by director and new fee rules are adopted.
- July 1, 2025: New fees become effective and fees increase.

Sections affected by this rule making are [296-46B-906](#), [296-46B-909](#), and [296-46B-911](#).

### New Rule Making Proposal

The electrical section is considering changes to the electrical rules.

The 2026 edition of the NEC will publish Fall 2025. We are initiating the rulemaking process now to set the adopt date of the 2026 NEC. This is to give stakeholders more time for review the 2026 NEC prior to L&I's formal rulemaking process in the summer of 2026. During that future rulemaking, stakeholders will have the opportunity to submit proposals for amendments to Washington state electrical rules. The rulemaking will effect [WAC 296-46B-010, General](#).

Besides setting the adoption date of the 2026 NEC, there are other rule amendments that could take effect this year:

- Amending [WAC 296-46B-334, Nonmetallic-sheathed cable](#). This change would allow calculating minimum conductor sizes at a higher temperature rating allowing more options for installations.
- Amending [WAC 296-46B-942, Training certificate required](#). Clarifying the existing requirements for trainee hours of experience submittal.

Here's the proposed schedule:

- May 6: L&I filed a Preproposal Statement of Inquiry (CR-101)
- Sept 2: The proposed rules (CR-102) are expected to be filed with the state Office of the Code Reviser.
- Oct. 7: A public hearing on the proposed rules is tentatively scheduled.
- Nov. 18: The final rules (CR-103), if adopted, is expected to be filed with the state Office of the Code Reviser.
- Dec. 19: The rule changes would take effect.

All are welcome to participate in this process. You can find more information about this rulemaking at L&I's [Rulemaking Activity page](#) or on the [Electrical Program's rulemaking page](#).

## Safety Tip of the Month

Do not allow yourself or others to swim near a dock or marina where electrical power is present. Stray leakage current in the water can paralyze or kill. If you must enter the water to work on a boat or dock, turn off and lock out all sources of electricity first.

NFPA.org has a useful website with pod casts, videos and other resources for installers, inspectors and the public. Check it out:

<https://www.nfpa.org/Education-and-Research/Electrical/Electric-Shock-Drowning>

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## RECAP – Apprenticeship Requirements for Trainees Aspiring to be (01) Journey Level Electricians and Their Employers

On July 1, 2023, changes were made for how electrical trainees qualify for the (01) journey level certification exam. Here's a recap of what everyone needs to know:

### Trainees

- Trainees with fewer than 3,000 hours of electrical experience worked before July 1, 2023 had to become registered apprentices to perform work limited to (01) journey level electricians.
- Trainees with 3,000 or more hours of electrical experience worked as of July 1, 2023 or completers of approved two-year electrical construction and training programs may continue gaining (01) experience until July 1, 2026, without becoming registered apprentices.
- If you've been approved to take the certification exam before July 1, 2026, you are not required to complete the education and work experience requirements of an approved apprenticeship program, even when reapplying after that date.

### Contractors

Electrical contractors wanting to hire someone that is training to become an (01) electrician have a few choices:

- Become a registered training agent for an apprenticeship program. This allows you to hire registered apprentices.
- Establish your own apprenticeship program approved through the Washington State Apprenticeship and Training Council.
- Hire trainees with specific experience. See the second bullet point under "Trainees" in this article.

Learn more: [www.Lni.wa.gov/ElectricalApprenticeship](http://www.Lni.wa.gov/ElectricalApprenticeship)

### Trainee or Apprentice—What is the Difference?

There are two types of trainees. Only one is an apprentice.

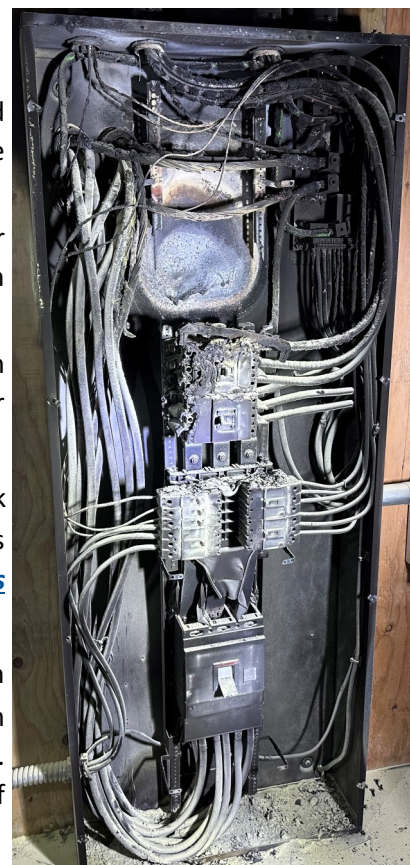
An apprentice is a trainee who is registered in a Washington State approved apprenticeship program. Apprenticeship programs provide formal training and are regulated by the [Washington State Apprenticeship and Training Council](http://www.Lni.wa.gov/ElectricalApprenticeship).

Typically, employers, employer associations, and labor unions sponsor apprenticeship programs. If you are a trainee who is not registered with an apprenticeship program, you are not an apprentice.

All trainees must [renew](#) their training certificate every 2 years until they pass an exam to become an electrician. Trainees and registered apprentices can view their hours of experience and renewal lapses by using our [Verify](#) tool.

**Answer to Question of the Month:** Depending on the person, painful shock and loss of muscular control can happen at current levels of between 6 milliamperes and 30 milliamperes. For more information, see the [Controlling Electrical Hazards](#) page of OSHA's website.

**Picture of the Month:** This 480 volt, 800 amp service panel had a high resistance fault happen above to top breaker. Molten metal from the arc event fell in the service entrance conductors and blew out the fuses on the utilities' transformer. It is amazing the amount of energy these systems are able to deliver. The cause of the fault is unknown.



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