ELECTRICAL CURRENTS

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

September 2024

Safety Tip of the Month

As an electrical professional, be alert for

electrical hazards on the jobsite that may

injure or kill unsuspecting coworkers. Never leave an energized electrical panel without a cover. Make sure receptacles used for

temporary power are GFCI protected, and

be on the lookout for improper temporary wiring splices and damaged cords or tools.

We have the skills and knowledge to help keep people safe from electrical hazards on

our job sites.

Question of the Month - Electrical trainees are required to work under the direct supervision of a properly certified electrician working on the same jobsite. What is a jobsite and what is supervision? *See the correct answer on Page 2.*

Who can Repair and Replace Electric Vehicle Supply Equipment?

Electric Vehicle Supply Equipment (EVSE) is all equipment for plug-in charging between the premise wiring system and electric vehicle. In this article, we will focus on who can repair and replace it and when inspections are required.

Laws only allow licensed electrical contractors that employ certified

electricians to repair and replace EVSE when it is located on property owned by others. (RCW <u>19.28.041</u>, RCW <u>19.28.271</u>). Property owners that own EVSE located on their property may repair and replace it under allowances in RCW <u>19.28.261</u>.

Manufacturers and their factory authorized service technicians may support their EVSE products as outlined in WAC <u>296-46B-925(22)</u>. Warranties are something that automatically come with a product. They not something that costs extra and are sold separately from a product. Service contracts and extended warranties are not warranties for the purposes of WAC <u>296-46B-925(22)</u>.

Permits and inspections are required to repair and replace EVSE, except for Class A basic electrical work described in WAC <u>296-46B-901(7)(b)</u>.

Take a look at the damaged EVSE in the picture of the month in this edition. Using a Class B permit, someone allowed to do the work could replace the damaged output cable and electric vehicle connector. Class B permits are easy to use, they cost less than regular permits, and are inspected on a random basis. Learn more: www.lni.wa.gov/licensing-permits/electrical-permits-fees-and-inspections/purchase-permits-request-inspections#class-b-electrical-permits

This regulatory system helps assure that installations of EVSE remain in strict conformity with safety standards pursuant to RCW 19.28.010(1). Find out more: www.lni.wa.gov/Electrical.

New Service Approval Comments on Inspection Results

The electrical program has standardized our comments for service approvals. Service approvals have the following comment "SERVICE APPROVED. CONTACT SERVING UTILITY TO ARRANGE FOR CONNECTION."

This change is to clearly communicate approved services to utilities and help permit holders with the next step to have their power connected.

This document may contain hyperlinks to internet web pages. Access this PDF document online at:

https://lni.wa.gov/licensing-permits/electrical/electrical-currents-newsletter/

Electrical Section Internet Address: https://www.lni.wa.gov/ -

Select Licensing & Permits, then Electrical



Expanded Surge Protection Requirements in the 2023 NEC

In 2002 the NEC introduced surge protection to address proper installation of hardwired Transient Voltage Surge Suppressors (TVSS) or Surge Protective Devices (SPDs). In the 2020 NEC, surge protection became a mandatory requirement.

Due to the need to protect electronics in systems that protect us, the 2023 NEC expanded these requirements to some common sections. Here are some sections where surge protection requirements were added:

- 409.70 for industrial control panels
- 620.51(E) emergency conveyance disconnect
- 645.18 critical operation data systems
- 670.6 Industrial machinery with safety interlock
- 694.7(D) between wind electric systems and premises
- 695.15 fire pump controller
- 700.8 emergency systems switchboards and panel boards
- 708.20 distribution for critical operations power systems (COPS)

It seems likely that surge protection requirements will continue to evolve in the future editions of the NEC.

Reminder - Journey Level Exam Approval Deadline Coming

<u>Until July 1, 2026</u>: Washington trainees who have 3,000 hours in the electrical construction trade before July 1, 2023 and acquired 8,000 total hours of experience (4,000 of which must be new commercial or industrial installations) and 96 hours of basic classroom instruction.

To qualify for an (01) journey level examination under this allowance, the department must receive candidate examination applications and supporting documentation before July 1, 2026.

L&I Inspector positions opening soon!

The first step to becoming an inspector is a technical knowledge assessment. The assessment will evaluate the applicant's knowledge of the electrical industry and application of National Electrical Code (NEC), WAC and RCW. The assessment is open book and you can bring any copyrighted reference materials. You will need passing score of 70%. Passing scores are good for 1 year. For more information, testing locations and times please contact us at electricalassessment@LNI.WA.GOV.

Picture of the Month: Electric Vehicle Supply Equipment (EVSE) is prone to damage and often needs repair or replacement. Find the article in this edition to learn more about it and who can repair and replace it

Answer to Question of the Month:

"Job site" means a specific worksite having a single address or specific physical location (e.g., a single family residence, a building, a structure, a marina, and individual apartment building with a specific address, etc.). "Supervision" for the purpose of supervising electrical trainees, means that the appropriately certified supervising electrician is on the same job site as the trainee being supervised. For complete definitions of these terms, see WAC 296-46B-100. Lack of proper supervision not only creates potentially hazardous conditions, it is illegal and could result in civil penalties being assessed to the contractor, administrator, and trainee.

