ELECTRICAL CURRENTS

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

August 2022

Question of the Month

Surge Protection Devices (SPD). have code requirements when installing. The conductors used to connect the SPD to the line or bus and to ground shall not be longer than ______ and shall avoid any unnecessary bends. Is the answer:

A) 12 inches B) 18 inches C) 24 inches D) necessary

See the correct answer on Page 2.

Proposed Rules for WAC 296-46B-945

The <u>Washington State Department of Labor & Industries</u> (L&I) is considering changes to the state's electrical rules. The result would provide more opportunities to qualify for journey level electrician (EL01) examination.

L&I filed a Preproposal Statement of Inquiry (CR-101) on Aug. 2.

"Good cause" exception

The changes would affect <u>Washington Administrative Code 296-46B-945</u>.

The rule changes under consideration would allow journey level candidates to take the exam through a "good cause" exemption.

This would be done through an exception for "good cause" (allowed under RCW 19.28.195) available from July 1, 2023 (when the 2018 law takes effect) to July 1, 2025.

Safety Tip of the Month DO NOT WORK ON ENERGIZED CIRCUITS!!!

Sorry for shouting, but as highly skilled electricians who know how to mitigate the hazards of working around dangerous electricity, we sometimes make foolish decisions.

The <u>National Census of Fatal Occupational</u> <u>Injuries in 2020</u> by the Bureau of Labor Statics reports 126 workers died nationwide from exposure to electricity.

Even seemingly minor work such as replacing light switches or changing luminaire ballasts, if done while the circuit is energized, could result in an accident and cause serious injury or even death! Take the time to deenergize every circuit you are working on.

Do not ruin your life and the lives of your loved ones by taking shortcuts and risks with electricity.

Why this is happening now

In 2018, <u>Substitute Senate Bill 6126 (Chapter 249, Laws of 2018)</u> implemented registered apprenticeship requirements only for journey level electrician (EL01) examination candidates. The requirements take effect July 1, 2023.

A trainee must be registered in an apprenticeship program when performing EL01 journey level electrical work. The trainee must complete the program to qualify for the exam. Employers need to become apprenticeship "training agents" to employ apprentices. The legislation also limited the ways to qualify for the EL01 exam.

This rulemaking also considers other changes to the rule for updates and housekeeping.

L&I anticipates filing the proposed rules in late 2022.

Rulemaking documents

CR-101 Preproposal

<u>Trades & Licensing Rules Under Development</u> (listed alphabetically) to find electrical safety standards, administration, and installation.

Current electrical rulemaking.

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Year in Review

In the year ending on June 30, 2022, the electrical program accomplished: 261,919 inspections 77% of inspections completed within 24 hours of request 89% of inspections completed within 48 hours of request 1.8 million miles driven

27,342 virtual inspections

63,373 corrections written - 58% are serious corrections
81% of inspection requests made online
187,838 permits sold - 90% are contractor permits
99% of permits purchased online
8,428 total citations and warnings written
5,194 of the citations written targeted the underground economy.
2,310 hours of training and outreach done by ECORE
4,391 pages reviewed by plans examiners - 100% submitted online
20,138 licensees and certificates processed - 95% on line
6,793 new trainee certificates issued - 97% on line
278 reciprocal certificates issued to Oregon journeyman (J) license holders who completed Oregon apprenticeships
4.4 million hours of experience reviewed by the technical review team - 2.9 million hours approved, remaining hours were denied for cause or not considered because the applicant had all hours needed to qualify for exam.

720 hours of training delivered to new inspectors

This is just a snap shot of all the hard work that the Electrical program staff did last year.

Top Eight Corrections Written Last Year

- 3,598 No access for inspection (RCW 19.28.101)
- 2,631 GFCI protection in dwellings (NEC 210.8(A))
- 2,313 Notifying the department work was ready for inspection when it was not ready (WAC 296-46B-906(7)(B))
- 1,272 Not following the manufacture's instructions (NEC 110.3(B))
- 1,225 Failing to install surge-protective devices when required (NEC 230.67)
- 1,041 Covering an electrical installation before it was inspected (RCW 19.28.101)
- 1,030 Corrections not completed at the next inspection ((WAC 296-46B-906(7))
 - 968 Electrical wiring and equipment not accessible at time of inspection ((WAC 296-46B-010(4))

Answer to Question of the Month:

The correct answer is D). See 2020 NEC 242.24 for the full text.

Article 242 covers the requirements for all over voltage installations and is a new section for the 2020 NEC. Article 242 is a combination of the previous articles 280 and 285.

Picture of the Month: *If viewing this document online, click on the picture to open a larger image.* The electrical contractor was just going to "temp some things in" while working on a remodel. There was a family living in the home during the remodel project that took several months. Share this with a coworker and see if you can find any concerns.



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