ELECTRICAL CURRENTS

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

August 2024

Question of the Month - True or False?

The maximum setting for all ground fault protection systems in a marina (NEC 555) is 30 milliamperes.

See the correct answer on Page 2.

2026 National Electrical Code® - The First Draft Report has been posted and is open for Public Comment!

Go to www.nfpa.org/70next to submit a Public Comment using the online submission system. Once on the NEXT EDITION page, select the link "Submit Public Comment" to begin the process. You will be asked to sign-in or create a free online account with NFPA before using their system. If you have any questions during the process NFPA offers a chat feature, or you can contact them via email or phone at 1-800-344-3555. For more information on submitting public inputs visit www.nfpa.org/publiccomment.

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

This is your opportunity to get involved and send in your recommended changes to the National Electrical Code®!

The closing date for Public Comments is August 28, 2024.

Continuing Education Requirements

If you are an electrician, administrator, or master electrician you are required to take twenty-four hours of approved continuing education classes between your renewal dates. Eight hours must be on changes in the currently adopted, or any more recently published National Electrical Code. Four hours must be on the currently adopted RCW 19.28 and/or WAC 296-46B. The remaining twelve hours may be your choice of currently approved classes. Approved first aid classes are limited to four hours of credit toward renewal of your certificate.

Do not wait until the last minute! To stay active you will need to complete the required class work before your certificate expires. If you have not completed your classes, you may renew your certificate into an inactive status by paying the renewal fee. When in inactive status, you may not perform any work requiring a valid certificate. Your certification stays inactive until your continuing education is completed. Renew online at https://lni.wa.gov/licensing-permits/manage-licenses-certifications

Something to "Spark" Your Interest

NEC 2023 added Section 220.57 to aid in load calculations for electric vehicle supply equipment (EVSE). Additionally, Section 625.40 was modified to provide flexibility in the number of EVSE on a branch circuit. Learn more about the changes in the 2023 NEC on the NFPA website.



Year in Review

In the year ending on June 30, 2024, the electrical program delivered:

263,058 total inspections, 47,828 of them done through our Virtual Electrical Inspection program

78% of inspections completed within 24 hours of request

90% of inspections completed within 48 hours of request

66,365 corrections written - 68% for serious safety concerns

1.8 million miles driven

178,317 permits sold - 90% are contractor permits

98.6% of permits purchased online

76% of inspection requests made online

22,865 citations written - about a third are warnings

14,266 of the citations written targeted the underground economy.

2,779 hours of training and outreach done by ECORE

4,678 pages reviewed by plans examiners - 100% submitted online

19,823 licenses and certificates processed - 91% on line

6,862 new trainee certificates issued - 90% on line

4.4 million hours of experience reviewed by the technical review team - 87.5% approved, remaining hours were not approved because the applicant had all hours needed to qualify for exam or were denied for cause.

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

Last Year's Top Eight Corrections

3,346 - GFCI protection in dwellings - NEC 210.8(A)

3,078 - No access for inspection - RCW 19.28.101

2,305 - Notifying the department work was ready for inspection when it was not ready - WAC 296-46B-906(7)(B)

2,195 - Not following the manufacture's instructions - NEC 110.3(B)

1,479 - Requesting an inspection when previous corrections are incomplete - WAC 296-46B-906(7)(D)

1,416 - Failing to install surge-protective devices when required - NEC 230.67

1,296 - Circuit directory or circuit description - NEC 408.4(A)

1,270 - AFCI requirements in dwelling units - NEC 210.12(A)

Picture of the Month: If viewing this document online, click on the picture to open a larger image A contractor was replacing this old electrical equipment and share the "before" picture with a VEI inspector. The pictures illustrate the need for making sure that all openings in electrical equipment greater than 1/4 inch need to be closed. The local insect population have made a nice home of the equipment. Also the lack of a conduit system for the open conductors is concerning.

Answer to Question of the Month: False - 2023 NEC 55.34 (A) and (B) allows for 100 milliamperes on feeders, 30 milliamperes for receptacles for shore power and 5 milliamperes for outlets other than shore power.



