Newsletter from the Office of the Chief Electrical Inspector

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Electrical Curren

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Question of the Month – If originating in service equipment and routed through nonmetallic conduit, how many and what size *aluminum* supply side bonding jumpers are suitable for bonding a metallic CT metering enclosure for a 600 ampere 480-volt service supplied by two parallel runs of 400 kcmil aluminum conductors? *See correct answer on Page 2*

Safety Tip of the Month

In the coming months, be prepared for deteriorating driving conditions. Rain, fog, ice, and snow are on the way. To help prepare for winter driving, see the <u>Winter Travel</u> page on the Washington Department of Transportation website.

Announcing Additional 2020 National Electrical Code (NEC) Amendments

To give testing laboratories and manufacturers additional time to deal with incompatibility between equipment manufactured in compliance with existing product safety standards and new NEC requirements, L&I is clarifying implementation of several 2020 NEC requirements:

- Until January 1, 2023, we are delaying enforcement of:
 - GFCI requirements for outdoor outlets in 2020 NEC 210.8(F). There are incompatibility issues with GFCI protection and certain outdoor HVAC units causing the need to allow more time for manufacturers and testing laboratories to revise safety standards and equipment.
 - 2020 NEC 210.8(A)(7) GFCI protection requirements for receptacles rated 30 through 50 amperes within six feet of sinks that are supplied by single-phase branch circuits rated 150 volts to ground or less. This exception is also to allow more time for manufacturers and testing laboratories to revise standards and equipment to ensure all affected equipment is compatible with Class A GFCI protection.
- 2020 NEC 230.71 Maximum Number of Disconnects:
 - O Until further notice, requirements in 2020 NEC 230.71 are not applicable to equipment certified according to UL 231 Standard for Power Outlets. Such equipment is commonly used as service equipment for temporary construction power, recreational vehicles, and other applications. If implemented as written in 2020 NEC 230.71, a significant number of temporary services would have to be disposed of due to new requirements.
 - Manufacturers need additional time to produce and distribute metering centers containing two to six service disconnects in the same enclosure in compliance with NEC 230.71. The department will delay the requirements of 2020 NEC 230.71 for metering centers until July 1, 2021.

How Do 2020 NEC 230.85 Emergency Disconnect Requirements Apply to Altered Services?

2020 NEC 230.85 requirements for emergency disconnects for one- and two-family dwellings will apply to all new dwellings having building permits issued on or after October 29, 2020. For service alterations made under electrical permits issued on or after October 29, 2020, a readily accessible outdoor emergency disconnecting means must be installed where services are increased or decreased in size, or where service disconnects, meter bases, overhead service masts, or underground service risers are relocated.

01 General Journey-Level Electricians – Reciprocal Agreement with Oregon

The reciprocal agreement in effect between Oregon and Washington allows eligibility for certification without examination under certain conditions.

Among them, reciprocity applicants must have passed examination in either state after completing formal apprenticeships or hold master or supervising electrician certificates obtained by examination in either state. On-the-job training is not a formal apprenticeship. Before applying, review all conditions to be sure you qualify.

Visit the Journey Level Electrician tab of our Electrical Licensing webpage for more information.

Rule Making Update: WAC 296-46B-940 Reciprocal Agreements

An emergency rule is in place because of a petition to revise rules for reciprocal agreements between Washington and other states. L&I is in the process of adopting these rules through the permanent rule making process. There will be a telephonic public hearing on this issue November 10, 2020 at 9:00 a.m. You can call 1-866-715-6499 to participate. When prompted enter passcode 9862128073# (pound sign required). More information about this and other rule making activity is available on the Rule Development tab of our <u>Electrical Laws, Rules, and Policies</u> web page.

Temporary Allowance Extended for Trainees to Work While Completing Classroom Training

The COVID-19 pandemic has reduced availability of required classroom education for electrical trainees. Temporary measures are in place to increase availability of education during recovery. Trainees having certificates that expired on or after March 13, 2020, who have paid a renewal fee to renew them into inactive ("T") status, may continue working in the trade while completing their classroom education until January 26, 2021.

On October 29, 2020 the new <u>2020 WAC 296-46B</u> takes effect, and with it, trainees cannot renew their certificates if they have not completed their required classroom education. If not renewed by the expiration date, a late renewal fee is required. Trainees expiring on or after October 29, 2020 may continue to work for 90 days after their expiration date while completing their required classroom training. If required training is not completed within the additional time allowed, trainees cannot lawfully work in the electrical trade without a properly renewed (active) training certificate. This policy will remain until a date to be determined after the Governor declares the state is moving into Phase 4 of the recovery.

If you have a training certificate, now is the time to schedule your classroom education. Trainees should not wait until the last minute to complete educational requirements! You can download a list of <u>approved basic trainee classes</u> at the <u>Basic</u> <u>Classroom Instruction & Continuing Education</u> page of our website.

Ugly Picture of the Month: *If viewing this document online, click on the picture to open a larger image.* If the phase tape markings are correct, there is a dead short between phases. The installer can be thankful an electrical inspection called it to their attention. Inspection oversight helps prevent damage to equipment or worse yet, injury to the utility workers energizing it.

Answer to Question of the Month: One 1/0 aluminum bonding jumper in each of the parallel service entrance conduits. See NEC 250.102(C)(2). When bonding CT enclosures, check with the serving utility about their service requirements. Among them, some prohibit bonding connections to grounded conductors landed inside the CT enclosure. In that case, you must install a supply-side bonding jumper(s) from the service equipment to bond the CT enclosure.



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