

## The Question of the Month

In the 2014 NEC, what table is used to size sizing grounded conductors, main bonding jumpers, system-bonding jumpers, and supply-side bonding jumpers?

## Note from the Chief – Photovoltaic Rules Delayed

During the past few weeks, several Washington State manufacturers involved in the photovoltaic (PV) industry have contacted the electrical program. All expressed concerns that the industry is not ready for new PV requirements in the 2014 National Electrical Code (NEC) specifically, sections 690.11, Arc-Fault Circuit Protection (Direct Current), 690.12 Rapid Shutdown of PV Systems on Buildings and NEC 705.12(6), Wire Harness and Exposed Cable Arc-Fault Protection. Each manufacturer has technical obstacles in complying with the new NEC requirements by the July 1, 2014 effective date.

The electrical program conducted independent research and came to similar conclusions. We discussed the issues with all four in-state PV manufacturers, other PV industry experts, and the State of Oregon, which has already delayed implementation of NEC 690.11 until April 1, 2016 and NEC 690.12 until October 1, 2017. We conducted extensive online research and reviewed the Reports on Comments and Reports on Proposals for the 2011 and 2014 NEC revision cycles. All three requirements are meant to increase electrical safety for PV systems and in the future, no doubt will. However, by policy, I am granting a one-year delay, until July 1, 2015, in implementation of all three requirements, allowing the Washington State PV manufacturers time to address each of these issues. Enforcement will begin July 1, 2015. This reasonable approach will ensure an acceptable level of safety while not hampering Washington State's PV industry.

## WAC Rule Revision Update – Proposed Effective Date July 1, 2014

In August 2013, the electrical program began publishing monthly articles to update our stakeholders on the process of making changes to WAC 296-46B. With the conclusion of the public comment period, the revised WAC 296-46B is scheduled to be adopted on May 20, 2014, with a proposed effective date of July 1, 2014. The 2014 edition of the National Electrical Code (NFPA 70-2014) will become effective July 1, 2014. If you have not attended a 2014 NEC code update course, you should consider doing so before it becomes effective. For current information on Washington State approved code update courses, please visit our [Continuing Education](#) webpage.

The 2014 rule making process would not be possible without the time and expertise of the many stakeholders who participated. Thank you to everyone that submitted rule proposals, the members of the technical advisory committee that reviewed all of the proposals and made recommendations, the Electrical Board, everyone who attended one of the 17 stakeholder meetings where proposed changes were discussed and those who submitted comments on the proposed rules.

## Electrical Board Opportunities

There are currently four available positions on the [Electrical Board](#): a telecommunication contractor seat, an electrical utility representative seat, an electrical contractor seat, and a general public seat. I would like to thank out-going board members Brad King, Richard Damiano, Louis LaMarche, and Cathleen Bright for their service to the Electrical Program. For information on the qualifications of each seat, please visit:

<http://www.governor.wa.gov/boards/profiles/1000199.aspx>. Anyone interested in applying for a seat must submit the

### Safety Tip of the Month!

Providing an accurate panel directory or circuit identification is not just a good safety practice, it is a National Electrical Code requirement.

Section 408.4 requires every circuit and circuit modification be legibly identified as to its clear, evident, and specific purpose or use. Spare breakers are to be marked as such.

application found at <https://fortress.wa.gov/es/governor/boardsapplication> as soon as possible. Send your resume and any additional information you would like considered in a separate email to the Boards and Commissions mailbox at: [GovernorBoardsandCommissions@gov.wa.gov](mailto:GovernorBoardsandCommissions@gov.wa.gov). Recommendation letters should be sent to the Governor's office. If you have questions about the positions or the Electrical Board, contact Elissa Zyski with the Electrical Program at 360-902- 5259.

### Eligible Telecommunications Workers Can Receive Credit for Past Work Experience

During the recent session, the legislature passed [House Bill 2253](#), creating an open window of opportunity for eligible individuals who have unsupervised telecommunications experience to apply work experience towards eligibility for examination for an (06) limited energy systems certification. The opportunity begins June 12, 2014 and ends July 1, 2015. Those eligible will be able to document their past work experience on a special affidavit form that will soon be available on our [Electrical Licensing Forms and Publications](#) webpage. [WAC 296-46B-942](#) (8)(d) requires employers to provide the necessary documentation and the signed affidavit of experience to a worker within twenty days upon request.

Complete this checklist to determine your eligibility to take advantage of the HB 2253 Open Window	
I will be submitting a special open window affidavit form when it becomes available (June 12, 2014) with proof of experience, the WAC 296-46B-909 affidavit processing fee of \$51.20 prior to July 1, 2015.	Yes No
I possess an electrical trainee certificate (required to apply, but previous experience obtained without a trainee certificate is eligible).	Yes No
The unsupervised hours of telecommunication work experience I will be submitting for credit toward the 06 limited energy exam were gained while employed by a 01 General or 06 Specialty Electrical Contractor.	Yes No
All hours I will be submitting were worked within Washington State.	Yes No
I have not previously received credit toward examination for the hours claimed.	Yes No
For experience worked within the previous 6 years, I will have my employer/previous employer document my experience on the special open window affidavit form <b>OR</b> I will use the form found at <a href="http://www.esd.wa.gov/newsandinformation/formsandpubs/own-record-request.docx">http://www.esd.wa.gov/newsandinformation/formsandpubs/own-record-request.docx</a> to obtain records of my hours of experience and earnings gained while performing unsupervised telecommunications installations. For each 01 General or 06 Specialty Electrical Contractor where I claim to have gained experience , I will submit a separate special open window affidavit form.	Yes No
<b>If you answered NO to any of the statements above, you are not eligible. Contact us at 360-902-5269 if you have questions.</b>	

**Ugly Installation:** Pictured is a serious condition that an L&I inspector found during a cover inspection. Notice the nail shot through the NM-B cable, potentially causing an arcing condition, which could result in a fire if the circumstances are right. To help avoid this, WAC 296-46B-010(6) requires the exterior sheathing nail inspection to be completed by the building code inspector prior to the electrical cover inspection. If not, the wiring and device boxes must be installed a minimum of 2 ¼" from exterior edge of the framing, or wiring and devices must be protected by nail plates. Should the rule be changed to require completion of the siding before cover inspection?



**Answer to Question of the Month:** 2014 NEC new table 250.102(C) - Rather than Table 250.66, table 250.102(C) is used for sizing grounded conductors, main bonding jumpers, system-bonding jumpers, and supply-side bonding jumpers.

This document may contain hyperlinks to internet web pages. To access this PDF document online, go to:

<http://www.ElectricalCurrents.lni.wa.gov>

Electrical Section Internet Address: <http://www.ElectricalProgram.Lni.wa.gov/>

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