



# ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

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Vol. 12 No. 6

June 2009

## ● New Law Requires Electricians And Trainees To Carry Photo Identification

Governor Gregoire signed HB 1055 into law in April, 2009. This new law will be effective July 26<sup>th</sup> and amends the existing language in RCW 19.28.271. After July 26<sup>th</sup>, all electricians and trainees must be in possession of their electrical certificate and government-issued photo identification at all times when working as an electrician or trainee. Anyone found to be in violation of this law is subject to civil penalties.

## ● Only An Apprenticeship Training Director Can Submit Electrical Apprentice Hours

In the past, electrical contractors who are employers of apprentices registered in an apprenticeship program (training agents) were allowed to report electrical training hours for an apprentice directly to the department using an Affidavit of Experience signed by the contractor. This practice is in conflict with WAC 296-46B-965(11)(c). The only way a contractor can submit an affidavit of experience for a trainee is if that trainee is not enrolled in an electrical apprenticeship.

The path to exam eligibility for registered apprentices is through the completion and graduation from an approved apprenticeship program. A Washington State Apprenticeship Council completion certificate is the only acceptable documentation for graduation. The only way to get credit for training hours while enrolled in an apprenticeship program is through the Apprenticeship Training Director (or Apprenticeship Chairman, Secretary, etc., if there is no formal Training Director). The Training Director has the ability to report electrical training hours to the department on an Affidavit of Experience during the apprenticeship. Some Training Directors do not submit training hours for apprentices because apprenticeship programs often require more on-the-job experience than the minimum on-the-job experience required for non-apprentice trainees.

## ● Supervision Requirements For Trainees

Trainees working for an electrical contractor must be appropriately supervised by a properly certified electrician not less than 75% of the total time on each jobsite or 100% of the time for certain specialty contractors (e.g. 03A, 06B, 07A, 07B, 07C, 07D, 07E, and 10). If an L&I inspector finds a trainee working without supervision on a jobsite, the inspector will give the trainee an opportunity to provide evidence to document the proper supervision is being provided. This will come in the form of a document called Electrical Trainee Supervision Statement.

This legal document must be filled out and signed by both the trainee and the supervising electrician and returned to the inspector. If the Electrical Trainee Supervision Statement is not returned within 24 hours, the trainee, electrical contractor, and assigned administrator/master electrician may receive a civil penalty for the trainee working without proper supervision per RCW 19.28.161(3). Both the trainee and supervising electrician must attest to the proper supervision. If the document is fraudulent, additional civil penalties may be assessed.

## ● WAC Revision Proposals

WAC 296-46B is being revised. Since all the proposed changes are administrative rather than technical, the Technical Advisory Committee will not be convened. Stakeholders may comment on proposed changes during the public comment period and the public hearing tentatively scheduled for July 29th in Tumwater. The rule's targeted effective date is in late September.

### Personal Protection Equipment and Knowledge Saves Lives

Whenever you enter a jobsite you should always ask yourself:

- Am I wearing my hardhat, safety glasses, hearing protection, appropriate clothing, and safety shoes or boots?
- Do I know what the potential hazards are and how to recognize them?
- Should I re-assess the potential hazards as I enter different areas or situations on this jobsite?
- Where is the nearest first aid kit, fire extinguisher, and telephone?

### ● WAC Proposal – Distance Learning Continuing Education Classes

A WAC proposal will require distance learning class applications (i.e. Internet and correspondence) to demonstrate that the course includes the same or reasonably similar information content as a classroom course with similar clock hours. The application must also demonstrate how the number of requested clock hours was determined and monitored by the sponsor. Basing distance learning courses on the actual clock hours necessary to complete the course will ensure that students are actually engaged in their course material for the number of hours being credited. For Internet courses, sponsors must use software that tracks time based on when a student is actively engaged in the course material.

This proposal will align the requirements for distance learning courses with those used by other state agencies. All currently approved distance learning courses will be allowed to remain in use until they expire. All new distance learning classes will be required to demonstrate that they meet the requirements of clock-hour based distance learning.

### ● First Aid And Safety Classes

The WAC proposal includes a clarification that all classes must be approved by the L&I Electrical Program before continuing education credit is granted. In the past, the Electrical Board has allowed First Aid classes to be allowed without review. Upon the effective date of the WAC revisions, all classes, including First Aid must have L&I approval and the course sponsor must use the on-line roster reporting system. In addition, the board has asked that First Aid classes be limited to a maximum of 4 hours of credit towards the individual's total continuing education requirement.

Workplace safety classes such as NFPA 70E – Standard for Electrical Safety in the Workplace are limited to a maximum of 12 hours of credit towards the individual's total continuing education requirement. These classes are not considered to be First Aid.

### ● Current Policy Change And WAC Proposal – One-Line Diagram And Calculations For Alternate Energy Installations

There is common language in WAC 296-46B-445 (Wind Driven Generators) and WAC 296-46B-690 (Solar Photovoltaic Systems) which require the installer to submit installation design documents to the inspector at the time of the inspection request. We have found that submittal before the inspection is inefficient and difficult for both the department and the installer.

We now allow those documents to be provided on the jobsite at the time of inspection. This policy change will be formalized in coming WAC revisions.

The installer must leave the required documents at the jobsite in a weather resistant plastic bag or equivalent protective container for the electrical inspector to review upon arrival at the jobsite. When the electrical inspector leaves, the documents will be left in the container available for the next person (i.e. building official, owner, etc.) that needs the documentation.

### ● New/Replaced Receptacles On An Existing Residential Branch Circuit Must Be Tamper-Resistant

NEC 406.11 requires all dwelling unit 125 volt 15 and 20 ampere receptacles to be tamper-resistant. If an existing branch circuit is extended to allow for the addition of a new receptacle(s), the newly installed receptacle(s) must be tamper-resistant. Except when using a non-grounding type receptacle, receptacles that are replaced in an existing circuit must also be tamper-resistant.

### ● Electrical Question of the Month

**This Month's Question:** For a 240V, 3-wire circuit, what is the minimum branch-circuit load allowed for a 13.25 KW household electric range installed in a dwelling unit? **A)** 9275 watts, **B)** 8800 watts, **C)** 8000 watts, **D)** 6160 Watts

**Last Month's Question:** Which of the following types of electrical installations are covered by the NEC? **A)** ships, **B)** above-ground mining machinery, **C)** railway rolling stock, **D)** none of the answers. The answer is: **D)** [NEC 90.2(B)(1), (3) and Federal Mine Safety & Health Act of 1977, Public Law 91-173, as amended by Public Law 95-164].