



ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

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● Upcoming Electrical Stakeholders Meetings

Stakeholder meetings will run through June 2008 at the locations listed below. It is important for you to stay up to date with changes that might affect you. You have an opportunity to get your questions answered and give the Electrical Program your valued input when you attend a stakeholder meeting. Please join us at 6:00 p.m., at one of the remaining stakeholder meetings near you.

Safety Tip of the Month!

Look for telltale signs of electrical problems such as dimming of lights, frequent circuit breaker trips or blown fuses.

2008 Remaining Stakeholder Meetings

February 20	100 Oyster Bay Ave., Public Works Conference Rm., Bremerton	February 21	City Council Chambers, 321 E 5 th St., Port Angeles
April 9	Clark County PUD, 1200 Fort Vancouver Way, Vancouver	May 20	3001 W. Broadway, Moses Lake
May 21	Cowlitz County PUD, 961 12 th St., Longview	May 21	Walla Walla University, CTC Room 105, Walla Walla
May 22	Pacific Power Auditorium, 500 North Keys Rd, Yakima	June 11	Hampton Inn, 3985 Bennett Dr, Bellingham

● 2008 WAC Rule Process

We are in the second month of accepting WAC revision proposals. March 31st is the last day for you to submit a proposal. See the November 2007 Special Edition Electrical Currents for submission details.

In March, we will be taking applications for the 49 member Technical Advisory Committee (TAC). The TAC process has proven to be very valuable in past years. The department will again appoint an advisory General TAC made up of experts and interest group representatives to review and make recommendations on proposals from the electrical industry.

Persons interested in becoming TAC members must submit a letter of interest for specific positions to the Chief Electrical Inspector, P.O. Box 44460, Olympia, WA, 98504-4460 to be received from March 1, 2008, to March 31, 2008. The letter should show constituency support for the prospective member. All applications will be evaluated to determine that the applicant meets the requirements for the position. The General TAC makeup will be based on an equitable distribution relative to proportion of involvement within the electrical industry in Washington. TAC membership provides an opportunity for everyone interested in the Electrical Program's WAC development to participate in the process.

If necessary, each successful candidate may have an alternate attend the General TAC meeting. There will be no formal alternate assigned by the department. Any TAC member that is absent must notify the Chief Electrical Inspector of the alternate's name one day prior to the General TAC meeting. Failure to make the required notification will result in the position being vacant during the meeting.

● Borrowing Electricians

If you are an electrical contractor and decide to loan/supply your electricians to another contractor, the simplest arrangement is to release them to the other contractor and transfer them to that contractor's payroll for the entire project time period. This way there is no question of responsibilities or control.

If you retain employees on your payroll and loan/supply labor to another electrical contractor you must meet the same requirements as any construction employment agency. The department must make sure the intent of chapter 19.28 RCW is met. When you share labor there must be a **written contract** between the two parties **prior** to loaning the workers. The contract must state the duration of the loan period and the individual(s) involved. The contractor loaning the labor must give up the ability to recall the workers until they are released by the borrower, even though they remain on the payroll of the loaning contractor. Since the loaning contractor gives up "control" of the employees, the contract is limited to one continuous time period.

The electrical contractor borrowing the electrician has complete control and responsibility for the individual through the duration of the employment contract. This means that the borrower must have the

ability to dispatch, retain, and terminate the individual involved in the contract. The individual electrician (or trainee) must be properly certified for the work they are performing. The borrower must be a licensed electrical contractor. The contractor borrowing the labor will be held responsible for the performance and proper supervision (including affidavits of experience for trainees) of the borrowed individual.

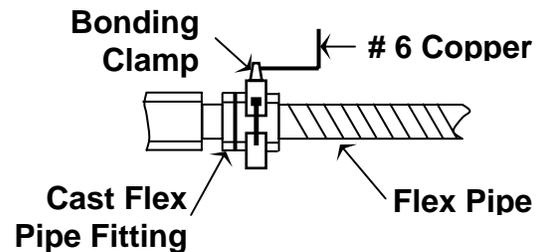
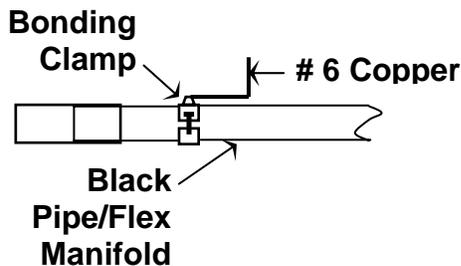
● Bonding Flexible Gas Piping

Flexible metal gas piping systems manufacturers generally require bonding methods that are somewhat different from the NEC 250.104(B) requirements. Effective March 1, 2008, for flexible gas piping bonding, L&I will accept the bonding methods shown in the diagrams below. These diagrams are typical of most manufacturers' bonding instructions. The bonding at the flex gas pipe must be accessible and occur as close as possible to either the electrical service location or the gas meter. The bonding must terminate on either the:

- Service equipment enclosure;
- A service grounding electrode conductor or electrode; or
- Neutral conductor bus in the service enclosure.

Any other bonding method must be substantiated by providing the inspector with the specific manufacturer's instructions for bonding the piping system before the inspection is made.

If any other bonding method is used and the manufacturer's instructions are not available at the time of inspection, the inspector will consider the installation not ready for inspection and a trip fee will be necessary for the required re-inspection.



● Pool/Spa/Hot Tub – Testing Lab Listing & Disconnecting Requirements

RCW 19.28.010(3) requires all pool, spa, and hot tub equipment to be listed by an approved electrical testing laboratory before being offered for sale or exchange. This includes internet or other wholesale/retail sales. Field evaluation is not an option. The equipment must be listed.

Except for pool lighting, NEC 680.12 requires a maintenance disconnecting means for pool, spa, hot tub, and similar utilization equipment. The maintenance disconnecting means must:

- Disconnect all ungrounded conductors supplying the equipment.
- Be within sight and within 50' of the equipment.
- Be "Readily accessible" means being capable of being reached quickly for operation, renewal, or inspection without climbing over or removing any obstacles or using a portable ladder. This includes having to use tools to gain access.
- Be at least 5' from the inside wall of the pool, spa, or hot tub (WAC 296-46B-680).

NEC 680.41 requires an emergency shutoff for all non residential spas and hot tubs. NEC 680.41 requires the emergency shutoff to be:

- Clearly labeled.
- At least 5' from the spa or hot tub.
- Within sight and within 50' of the equipment.

● Question of the Month

GFCI protection is required for all 125V, single-phase receptacles not exceeding 30 amperes located within 5 ft, measured _____ from the inside walls of a hydro massage bathtub.

Answers: A) vertically, B) horizontally, C) across, D) none of these.

January's Question was: A series circuit contains 1 path for current flow.