



May 18, 2010

**Clarifying licensing requirements for
photovoltaic system installations**

Opportunity for public input:

Those who would like to provide public testimony may attend a public hearing on May 18, 2010 at 9:30 a.m. The hearing will be located at the Building Codes Division, Conference Room A. Written comments may also be submitted to the contact below. The last day to submit written comments is 5:00 p.m. May 21, 2010.

Live broadcast via the internet:

To view the public hearing live, click on "[View live meetings](#)"

Purpose of the rule:

This proposed rule clarifies licensing requirements for the installation of solar photovoltaic (PV) systems. Specifically, this proposed rule clarifies that an electrical license is not required for the installation of certain structural components of a PV system.

This proposed rule would become effective July 1, 2010.

Citation:

Adopt: OAR 918-282-0400

History:

Because solar photovoltaic (PV) systems are a rapidly evolving technology, there have been questions about the type of license required to perform various aspects of PV installations. Industry representatives, including the Columbia and Pacific-Cascade Chapters of the National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers (IBEW) Local 280 and Local 48 approached the division with a proposal to clarify the licensing requirements for solar photovoltaic installations.

After appropriately vetting the proposal and reviewing it for legal sufficiency, the division responded by drafting this proposed rule. This proposed rule will ensure that requirements can be uniformly enforced across the state. This proposed rule stems from a consensus reached between NECA and IBEW, and was also vetted with the independent electrical workers and segments of the solar installer community.

To a large extent, the proposed rule represents the license requirements captured in ORS 479.630. For example, most of the licensing provisions for systems under 25KW are included in the limited renewable energy technician licensing statute (LRT).

Contact:

If you have questions or need further information, please contact Hearing Officer Aeron Teverbaugh at 503-373-2160, or aeron.teverbaugh@state.or.us.



Secretary of State
NOTICE OF PROPOSED RULEMAKING HEARING*
A Statement of Need and Fiscal Impact accompanies this form.

Department of Consumer and Business Services, Building Codes Division		918
Agency and Division		Administrative Rules Chapter Number
Dolores Wagner	PO Box 14470, Salem, OR 97309	(503) 373-1258
Rules Coordinator	Address	Telephone

RULE CAPTION

Clarifies licensing requirements for solar photovoltaic installations.

Not more than 15 words that reasonably identifies the subject matter of the agency's intended action.

May 18, 2010	9:30 a.m.	1535 Edgewater Street NW, Salem, OR 97304	Aeron Teverbaugh
Hearing Date	Time	Location	Hearings Officer

Auxiliary aids for persons with disabilities are available upon advance request.

RULEMAKING ACTION

Secure approval of new rule numbers (Adopted or Renumbered rules) with the Administrative Rules Unit prior to filing.

ADOPT: 918-282-0400

AMEND:

REPEAL:

RENUMBER:

AMEND & RENUMBER:

Stat. Auth.: 455.117 & 479.730

Other Auth.:

Stats. Implemented: 479.630 & 479.730

RULE SUMMARY

The proposed rule clarifies the licensing requirements for installing photovoltaic (PV) systems. In general, the proposed rule restates the scope of work allowed under ORS 479.630 with regard to the limited renewable energy technician's license. The proposed rule also clarifies that an electrical license is not required for installation of purely structural components of a PV system.

The Agency requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing the negative economic impact of the rule on business.

Friday, May 21, 2010 by 5:00 p.m.

Last Day for Public Comment (Last day to submit written comments to the Rules Coordinator)

Patrick Allen

Signature

Printed name

Date

*Hearing Notices published in the Oregon Bulletin must be submitted by 5:00 pm on the 15th day of the preceding month unless this deadline falls on a weekend or legal holiday, upon which the deadline is 5:00 pm the preceding workday. ARC 920-2005

STATEMENT OF NEED AND FISCAL IMPACT

A Notice of Proposed Rulemaking Hearing or a Notice of Proposed Rulemaking accompanies this form.

Department of Consumer and Business Services, Building Codes Division

918

Agency and Division

Administrative Rules Chapter Number

Clarifies licensing requirements for solar photovoltaic installations.

Rule Caption (Not more than 15 words that reasonably identifies the subject matter of the agency's intended action.)

In the Matter of: Adopting 918-282-0400

Statutory Authority: ORS 455.117 & 479.730

Other Authority:

Stats. Implemented: ORS 479.630 & 479.730

Need for the Rule(s): There is currently an inconsistent understanding of what licenses are required for installing photovoltaic (PV) systems. The division is in the process of adopting a statewide Solar Installation Code to streamline installation and permitting of PV systems. Clarifying the licensing requirements for PV system installations is one component of achieving statewide consistency in the permitting and installation of these systems. This proposed rule is necessary to address questions that have arisen with regard to who may install purely structural components and to address issues that may arise as PV technology advances.

Documents Relied Upon, and where they are available: March 25, 2010 Electrical and Elevator Board meeting minutes and draft rules are available from the division's rules coordinator, located at 1535 Edgewater St NW, Salem, OR 97304 and are available on the division's Web site at www.bcd.oregon.gov/rules.html.

Fiscal and Economic Impact:

While the rule essentially clarifies what is already law, it may change the understanding of some solar installers and jurisdictions as to the licensing requirements. The division is without sufficient information to determine how this may alter the current practice of solar installers. There are approximately 85 companies in Oregon doing solar installations, however not all of those businesses do PV installations.

Statement of Cost of Compliance:

1. Impact on state agencies, units of local government and the public (ORS 183.335(2)(b)(E)):

The division does not anticipate any economic impact on state agencies other than the division which administers the program. There should be no impact on units of local government or the public. The proposed clarification may reduce the expense of installing PV systems since a journeyman electrician will not be required for all aspects of installing a PV system.

2. Cost of compliance effect on small business (ORS 183.336):

a. Estimate the number of small businesses and types of business and industries with small businesses subject to the rule: There are approximately 85 companies doing solar installations. Not all of those businesses do PV installations, so it is unknown at this time how many PV installers there are in the state. It is unknown how many are considered small businesses with less than 100 employees. All businesses and individuals doing PV installations are subject to the proposed rule.

b. Projected reporting, recordkeeping and other administrative activities required for compliance, including costs of professional services: The proposed rule only clarifies the licensing requirements for PV installations. The scope of licenses is set out in ORS 479.630, clarification in the rule does not add any new requirements, so there should be no additional reporting, recordkeeping or other administrative activities required for compliance.

c. Equipment, supplies, labor and increased administration required for compliance: There are no additional equipment, supplies, labor, or other increased administration required of small businesses in order to comply with this rule.

How were small businesses involved in the development of this rule? Small businesses are represented on the Electrical and Elevator Board that approved the rules for hearing.

Administrative Rule Advisory Committee consulted?: No

If not, why?: Small businesses and local jurisdictions are represented on the Electrical and Elevator Board that approved the rule for hearing.

	Patrick Allen	
Signature	Printed name	Date

Administrative Rules Unit, Archives Division, Secretary of State, 800 Summer Street NE, Salem, Oregon 97310. ARC 925-2007

918-282-0400

Solar Licensing

1. For the purposes of this rule the following definitions apply:

a. “Building Integrated” means photovoltaic cells, devices, modules, or modular materials that are integrated into the outer surface or structure of a building and serve as the outer protective surface of that building or structure, such as the roof, skylights, windows, or facades.

b. “Module” means a complete, environmentally protected unit consisting of solar cells, optics, and other components, exclusive of tracker, designed to generate DC power when exposed to sunlight.

c. “Racking” means the material, supports, attachment, frame, skeleton used to attach a solar system or module to a building, structure, or ground mounting.

d. “Rack mounted photovoltaic module” means a photovoltaic module that is attached to racking.

2. Persons placing or installing structural elements, including footings, roofs, carports, racking, and building integrated photovoltaic modules are not required to possess an electrical license.

3. The following licensing requirements apply to photovoltaic system installations:

a. For photovoltaic systems not exceeding 25KW a Limited Renewable Energy Technician, General Journeyman Electrician, General Supervising Electrician or Limited Residential Electrician license is required to perform the following:

A. Installation or attachment of photovoltaic modules to racking.

B. Making electrical connections between modules, including installation of all conductors that connect to or interconnect all photovoltaic modules regardless of the type of electrical connection, including plug-type interconnections.

C. Making electrical connections to combiner boxes and inverter(s), including installation of all conductors between arrays and combiner boxes, up to the load side of the inverter.

D. All elements of system grounding utilizing wire-type conductors on the DC side of the inverter.

b. For photovoltaic systems exceeding 25KW a General Journeyman Electrician, General Supervising Electrician or Limited Residential Electrician license is required to perform the following:

A. Installation or attachment of photovoltaic modules to racking.

B. Making electrical connections between modules, including installation of all conductors that connect to or interconnect all photovoltaic modules regardless of the type of electrical connection, including plug-type interconnections.

C. Making electrical connections to combiner boxes and inverter(s), including installation of all conductors between arrays and combiner boxes, up to the load side of the inverter.

D. All elements of system grounding utilizing wire-type conductors.

E. Electrical connections to building electrical system including all AC connections on the line side of the inverter(s).

Stat. Auth.: 455.117 & 479.730

Stats.: Implemented: 479.630 & 479.730

Hist.: NEW