

<b>Agenda Item IV.B.</b>
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**State of Oregon**

**Board memo**

**Building Codes Division**

**January 26, 2010**

**To:** Construction Industry Energy Board

**From:** Chris Huntington, Manager, Policy and Technical Services

**Subject:** Oregon Solar Installation Code update

**Background:**

Since early September 2009, the Solar Installation Code Committee has met bi-monthly to draft a first-in-the-nation statewide code for photovoltaic (PV) installations. The code will include provisions applicable to both residential and commercial solar photovoltaic installations. Committee membership includes solar installers, electrical workers and contractors, fire services, a building official, and energy experts. Upon completion of the committee's work, the Construction Industry Energy Board will review the proposed code and vote to approve, disapprove, or modify the committee's recommendations. The board action will be followed by a rulemaking hearing and subsequent adoption of the code.

The goal of the Oregon Solar Installation Code (OSIC) is to create statewide consistency through a clear and concise code for PV installations. The first edition of the code will address approximately 80 percent of the most common types of solar installations. It will not address licensing, solar water heating, solar thermal issues, or cutting edge technology. The Solar Installation Code Committee will not address tax incentives administered by other state agencies, but the division will attempt to align the code to meet tax incentive requirements, where feasible. The division anticipates that the code will be updated and expanded in the future to recognize changes in technology and practice.

The draft code is divided into four chapters:

**Chapter 1: Administration.** The section will provide guidance for local jurisdictions on permitting, plan review requirements, and general items associated with the OSIC as a stand-alone code.

- *Highlight:* The committee is developing a prescriptive path to expedite installation and permitting. The goal is to avoid lengthy reviews of common installation procedures on standardized modules and systems.

**Chapter 2: Definitions.** This section covers terms related to solar products and installation. Code references are defined as well.

**Chapter 3: Structural Requirements.** The structural requirements section is the most innovative portion of the code. This section covers racking, array type and placement, control protections, and fire/hazard safety.

- *Highlight:* Fire fighter access has been a contentious issue as residential solar installers want all available south-facing roof space for energy generation while fire services want adequate access to the roof in the event of a fire emergency. The committee recently approved a fire access pathway standard that balances energy generation with safe access for fire services personnel.

**Chapter 4: Electrical Requirements.** Chapter 690 of the OISC contains the electrical provisions that apply to solar PV electrical energy systems including the array circuits, inverters, and controllers. The provisions in 690 also include accessible means of disconnection.

- *Highlight:* Of note, the (OSIC) is a stand-alone code but electrical sections referenced in the code are amendments to the Oregon Electrical Specialty Code (OISC). The electrical requirements of the solar code (OSIC) will be contained in chapter 690 of the Oregon Electrical Specialty Code. The provisions will also be contained in an appendix to the (OISC) for ease of reference. The committee has already suggested Oregon specific amendments to the electrical requirements.