



Oregon

Theodore R. Kulongoski, Governor

Department of Consumer and Business Services

Building Codes Division

1535 Edgewater Street NW

PO Box 14470

Salem, OR 97309-0404

(503) 378-4133

FAX (503) 378-2322

bcd.oregon.gov

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Oregon Solar Energy Code Committee
February 25, 2010
Meeting Summary

****NOTE:** *The following is a summary of the committee's discussion.*

To review the meeting in its entirety, the archived video of the meeting is available on the committee's Web site at the following link: <http://www.bcd.oregon.gov/committees/10sec.html>

Members Present: Doug Aljets, Electrical and Elevator Board and Solar Installer for NW Current Energy, LLC
Brian Crise, International Brotherhood of Electrical Workers (IBEW), Local 48
Robin Rabirot, Oregon Solar Energy Industries Association (OSEIA) **and** EC Company
Len Ralston, Solar Installer for Dynalectric
Robert Rice, Oregon Building Officials Association (OBOA) **and** Josephine County Building, Official
Jaimes Valdez, City of Portland – BPS/BDS
Nathan Philips, National Electrical Contractors Association (NECA)

Members Absent: Jerry Henderson, Independent Contractor for Department Of Energy (DOE) **and** Energy Trust of Oregon (ETO)
Robert Lane, Three Phase Electric
Marcus Reed, State Fire Marshal
Dave Mumford, Lear Electric

Guests Present: Johnathan Balkema, Oregon Home Builders Association
Greg Creal, Central Electrical Training Center
Kim Berhorst, National Solar
Rob Delmar, Oregon Department of Energy
Dan Saddler, Earth Advantage

Staff Present: Chris Huntington, Policy and Technical Services Manager
Dennis Clements, Electrical Program Chief
Aeron Teverbaugh, Policy Analyst
Richard Rogers, Structural Chief
John Powell, Facilitator
Debi Woods, Boards Coordinator
Dana Fischer, Building Code Para-Technical

Introductions

John Powell, facilitator called the meeting to order at 1:40 p.m.

Aeron Teverbaugh, policy analyst explained to the committee and guests, that the division had a request to table “firefighter” discussions until the next meeting so further research could be completed.

Mr. Powell asked that Robert Rice discuss [Chapter 3 Installation Requirements](#).

Chapter 3 Installation Requirements

Section 302 Definitions

Accessible Roof

The “subcommittee” changed the definition from “A roof plane that has an eave not more than 25 feet (7620 mm) above grade with adequate space on the ground for staging firefighters” to “A roof plane that has an eave not more than 20 feet (7620 mm) above grade with an adjacent Firefighters Staging Area”. *The committee agreed to the language modification.*

Cutout

This is a new definition drafted by the subcommittee. The committee voiced no objection to the definition’s language.

Firefighter Staging Area

Mr. Philips proposed to table discussion on this definition until the committee discusses “firefighter access language”.

Tabled: The committee agreed to table this section, until the next meeting.

Non-Occupied Accessory Structure

This is a new definition drafted by the “subcommittee” which states “A structure normally not occupied such as a garage, shed, or agricultural building”. The committee discussed revising the language by deleting the word “parking” and adding the word “carport”. *The committee agreed to the language modification.*

Self Ballasted System

This is a new definition drafted by the subcommittee.

Tabled: The committee agreed to table the discussion on this definition.

Vent Cutouts

It was suggested by the “subcommittee” that this definition be deleted. *The committee agreed to language modification by deleting the definition.*

Section 303 Minimum Standards and Quality

303.1 Scope

The committee had no comment on this section.

303.2 Type of Construction

The committee discussed listing requirements of products and how sometimes the code addresses the enforcement of listing requirements and sometimes it does not. Also discussed; current standards versus who is conducting inspections. A motion was made to add listing requirements in the code language.

Motion to approve as modified the code language to include “listing requirements”. The vote was 1-yes, 5-no.

Motion failed. Language approved as originally modified.

303.3 Material Standards

To maintain consistency throughout the draft code, the word “photovoltaic” was abbreviated to “PV”. The subcommittee deleted the words “listed and labeled” replacing them with “certified”. *The committee agreed to the language modification.*

Motion to approve as modified section 303.3 by deleting the words “listed and labeled” and replacing with the word “certified”.

Motion carried unanimously.

303.4 Fire Classification

Mr. Powell proposed a modification to the language from “...shall have the same fire classification as the roof...”, to “...shall have a fire classification that is equal to or greater than the roof...”. The section was also renumbered to 303.5. *The committee agreed to the language modification.*

303.4.2 Wind resistance

Committee members discussed and approved the section to be renumbered to 305.5.2. After further discussion, it was proposed that the section and its table should be deleted. *The committee agreed to the language modification by deleting the complete section, including its tables.*

303.5 Weather protection

The language “frames, braces and attaching devices” was deleted and the language “all components of the PV system” was added. The section was also renumbered to 303.6. *The committee agreed with the language modification.*

303.5.1 Roof Decks

Since section 303.5 was renumbered to 303.6, it was suggested that this section be renumbered to 303.6.1. The “subcommittee” originally suggested deleting the language in this section. *The committee agreed to the language modification by deleting the section.*

303.5.2 Weather protection

Committee members discussed and approved the section to be renumbered to 303.6.2. After further discussion it was suggested the section be deleted. *The committee agreed to the language modification by deleting the section.*

303.6 Certification Requirements

This is a new section drafted by the “subcommittee”. The committee discussed the language and Mr. Crise raised a concern that if “PV Systems” is left in the language, it can be perceived as “electrical provisions”, when in fact it is only for “structural provisions”. Several language changes were suggested and discussed. It was decided that PV “racking, support structures and attachments” would be added and “Systems” would be deleted. The section was also renumbered to 303.4. *The committee agreed to the language modifications.*

Motion to approve as modified the language to “PV racking, support structures and attachments shall comply...”. The modification includes renumbering the section from “303.6” to “303.4”.

Motion carried unanimously.

Section 304 Location

The committee discussed the language in subsections at length.

Motion to approve as modified Sections 304.1 – 304.6.

Motion carried unanimously.

Section 304.7 Mechanical Equipment Clearances

Tabled: The committee agreed to table discussion on the section.

Section 304.8 Roof Drainage

Tabled: The committee agreed to table discussion on the section.

Section 304.9.1

Tabled: The committee agreed to table discussion on the section.

Section 304.9.2

Tabled: The committee agreed to table discussion on the section.

Section 304.9.3

Tabled: The committee agreed to table discussion on the section.

Section 304.9.4

Tabled: The committee agreed to table discussion on the section.

Section 304.9.5

Tabled: The committee agreed to table discussion on the section.

Section 304.9.6

Tabled: The committee agreed to table discussion on the section.

Section 304.9.7 Alternate Installations

The committee discussed the proposed language and agreed to modify the language from "...material, design, or method of construction shall be approved where the building official..." to "...material, design, location or method of construction may be approved by the building official...", and agreed to delete the rest of the language. The committee also agreed to renumber the section from "304.9.7" to "304.10".

Motion to approve as modified the language in section 304.9.7, including renumbering to 304.10.

Motion carried unanimously.

Section 305 Structural

305.1 General

The committee had no comment on this section.

305.2 Module Attachment

To maintain consistency throughout the draft code, the word "photovoltaic" was abbreviated to "PV". The committee discussed the language, suggesting it be modified from "...manufacturer's installation instructions and the OSSC" to "...manufacturer's installation instructions and to account for all loads, including dead loads, snow loads, wind loads and seismic loads, as prescribed by the OSSC".

Motion to approve as modified the language in section 305.2.
Motion carried unanimously.

Section 305.3 Racking

No changes were made to the language in this section.

Section 305.3.1 Weather Exposure

The committee agreed to change the title from “Weather Exposure” to “Building Penetrations”, and added the word “from” after the word “moisture”.

Motion to approve as modified the language in section 305.3.1, including the title change from “Weather Exposure” to “Building Penetrations”.
Motion carried unanimously.

Section 305.3.2 Structural Support

The “subcommittee” suggested modifying the title to “Structural Support and Connection”. Doug Aljets suggested modifying the title to “Structural Support and Attachment”. *The committee agreed to Mr. Aljets suggestion, by modifying the title to “Structural Support and Attachment”.*

Tabled: The committee tabled further discussion on the section, until Jerry Henderson can provided proposed language. He is absent from today’s meeting.

Section 305.3.3

The “subcommittee” suggested deleting the section. *The committee agreed to the language modification by deleting the section.*

Motion to approve as modified section 305.3.3 by deleting the whole section.
Motion carried unanimously.

Section 305.3.3.1 Roof mounted racking

The section was renumbered to 305.3.3 since the original section 305.3.3 was approved to be deleted. It was also suggested that the reference to section 303.6.14 be renumbered to 303.4.

Motion to approve as modified section 305.3.3.1 by renumbering to the section “305.3.3 and reference to section “303.6.14” to “303.4”.
Motion carried unanimously.

Section 305.3.4 Ground mounted racking

The committee discussed modifying the language in the second sentence from “The bottom of panels shall be...” to “The bottom of modules shall be...”. *The committee agreed to the language modification.*

Section 305.4 Prescriptive Installations

The committee discussed and approved renumbering the section to 305.5. Also discussed was the modification of the language “...light-frame construction that comply with...” to “...light-frame construction which comply with...” and “...require design...” to “require an engineered design...”. *The committee agreed to the language modification.*

The committee continued to discuss the “subsections” of this section.

Subsection 1 Roof structure

The committee discussed modifying the language “...members at 24 (610 mm) inch spacing...” to “...members at a spacing of 24 (610 mm) inch on center...”. The committee discussed modifying the “exception” in this section by changing “A, B and C” to “A, B or C”. *The committee agreed to the language modification.*

Subsection 2 Roof materials

The committee discussed different types of roof materials used in construction and discussed modifying the language from “...shall be standing seam metal...” to “...shall be metal...”. *The committee agreed to the language modification.*

Subsection 3 Loading

The committee discussed deleting the language “see Figure 305(1)”. *The committee agreed to the language modification.*

Exceptions

Mr. Rice stated that he is modifying figures “305.3.3.1.1(1)” and “305.3.3.1.1(2)” and that they will be available for review at a later date.

Tabled: the committee agreed to table for further discussion the section until Jerry Henderson can provide proposed language. He is absent from today’s meeting.

Section 305.3.3.2 Ground mounted racking

The “subcommittee” suggested deleting the section. *The committee agreed the language modification by deleting the section.*

Motion to approve as modified by deleting section 305.3.3.2.

Motion carried unanimously.

The committee discussed deleting the paragraph labeled “Protection” located at the end of Chapter 3 since it does not have a specific section assigned to it yet. *The committee agreed to delete the paragraph labeled “Protection”.*

Section 305.4 Prescriptive Installations

Subsection 3

Mr. Rogers asked to revisit subsection 3, suggesting to delete the word “are” and replacing it with “shall”. *The committee agreed to the language modification.*

Subsection 1

Mr. Valdez asked to revisit subsection 1, suggesting to add the words “on center” to the first sentence. *The committee agreed to the language modification.*

Adjourn

Meeting adjourned at 4:18 p.m.