



Oregon

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***Oregon Commercial Energy Conservation Advisory Committee>
Thursday, June 11, 2009
Meeting Summary***

****NOTE:** *The following minutes are 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/10cec.html>*

- Members Present:** Martin Brown, City of Wilsonville, Building Official
Mark Firestone, PAE Consulting Engineers - for Skai Dancy, Oregon Health and Sciences University (OHSU)
Andy Dykeman, Lease Crutcher Lewis
Jim Edelson, Governor's Energy Efficiency Working Group (EEWG)
Jim Klopfenstein, Mechanical Board Member
Larry Taylor, International Brotherhood of Electrical Workers (IBEW) -
for Tim Nicol, International Brotherhood of Electrical Workers (IBEW)
Ron Lowen, Best Heating
Nathan Philips, National Electrical Contractors Association (NECA)
John Kimberling, United Association of Plumbers and Steamfitters (UA290) -
for Marci Wichman, United Association of Plumbers and Steamfitters (UA290)
- Members Absent:** Jeff Harris, NW Energy Efficiency Alliance (NWEA)
Samir Mokashi, American Institute of Architects (AIA)
Bruce Soih, Building Owners and Managers Association (BOMA)
- Guests Present:** Reid Hart, Portland Energy Conservation, Inc (PECI)
David Cohan, Northwest Energy Efficiency Alliance (NEEA)
Michael Rosenberg, Pacific Northwest National Laboratory (PNNL)
- Staff Present:** Gabrielle Schiffer, sustainability coordinator
Shane Sumption, code specialist
Richard Rogers, structural program chief
Brady Peeks, department of energy
Alan Seymour, department of energy
Shauna Parker, rules coordinator
Dana Fischer, building code para-technical

Wendy Beard welcomed the committee and guests. Shane Sumption asked that the committee members introduce themselves because two committee members sent substitutes to participate on their behalf for the meeting today. Committee members introduced themselves.

Mr. Sumption recapped the committee process for the substitute committee members. He explained the first topics of discussion will be the proposals submitted by Reid Hart of Portland Energy Conservation, Inc. (PECI). He also explained the [2007 OSSC Chapter 13 Mechanical](#) document that will be reviewed.

Reid Hart a proponent representing PECI introduced him self and explained the proposals his company submitted and the handouts he provided to the committee today ([document #1](#), [document #2](#) and [document #3](#)) He continued his explanation by reviewing the code proposals with the committee.

Section 1315 Service Water Heating Equipment– Other Buildings Code Change Proposal [OSSC 10-01](#)

Mr. Hart explained the proposal to the committee and the handouts he provided to help explain and support the proposal. The committee discussed the proposal, asking questions on the pros and cons of the proposals language.

1315.4.1 Pump Operation Code Change Proposal [OSSC 10-01](#)

Mr. Hart explained the proposal to the committee. The committee discussed the proposal, asking questions on the pros and cons of the proposals language.

1315.5.3 Heat recovery Code Change Proposal [OSSC 10-02](#)

Mr. Hart explained that this proposal clarifies consistency and enforcement issues. The committee discussed the proposal and asked several questions. Jim Edleson asked how the language would be enforced. Mr. Hart replied that an engineer should be on staff. Mr. Philips asked if this achieves the same effect as the current code requirement of 7%. Mr. Hart replied yes, the intent is to match what is currently in code.

1315.5.4 Required heat recovery for service water heating

Mr. Hart explained the handout he gave the committee today, which provides language to support his code change proposal. He explained there is a size limit and provided an example where the proposal could be used in a grocery store where a large chiller is needed or other facility where large heat recovery is needed. Mr. Brown asked if this is being used today. Mr. Hart replied yes, it might require some remodel but most major chains install these systems. Mr. Lowen commented that he has installed these and that his first installation was in 1980 and the unit is still working today. He stated that smaller facilities will need to do a wash down of the unit. Committee members discussed at length the code proposal and construction aspects that would be directly affected if the proposal is accepted.

Committee discussion continued and included suggestions for code language. Mr. Sumption stated that the intent of the committee is not to write code, but to provide incite and knowledge. He further stated that the proposals have been modified also, which adds some confusion to today's discussion.

Section 1317 Heating, Ventilating and Air Conditioning

1317.2.1 Design ventilation and exhaust rates

Code Change Proposal [OSSC 10-03](#)

Mr. Hart explained the proposal to the committee. The committee discussed the proposal, asking questions on the pros and cons of the proposals language.

Break

The committee reconvened at 2:55 p.m.

1317.2.3 Ventilation controls for high occupancy zones

Mr. Hart explained that this section is based on people not air flow. He also stated the zone will need to be handled independently.

1317.2.4 Enclosed parking garage ventilation controls

Mr. Hart explained this is a reduction in the “limit” and what is being done currently in the IECC, and lines up with model code.

1317.2.5 Laboratory exhaust systems

Mr. Hart explained that the language in this section has been taken from the ASHRAE Standard. Mr. Hart also explained that an optional compliance efficiency method was added as an option, if a full heat recovery cannot be reached. The committee discussed the proposed language.

1317.2.6 Exhaust air-heat recovery

Mr. Hart explained the intent of the language to the committee, stating that if there is a significant amount of exhaust, heat recovery is necessary. Committee members briefly discussed the language, asking Mr. Hart to answer a few questions about the proposed “exceptions”.

1317.3 Economizer cooling

Mr. Sumption explained that the proposal changes the “threshold requirements” which then allows the user to qualify to move forward with using “exceptions”. Mr. Hart explained that the proposal can not have a higher efficiency than the Federal Standard, even if it is determined to be more cost effective. Mr. Hart also explained the subsections found in this section, stating that the hi-limit shut off numbers found in the table is what is currently found in the ASHRAE Standard.

1317.4 HVAC Controls

Mr. Sumption asked Mr. Hart to explain the language. Mr. Hart explained that if the heating is controlled separately from the cooling, the language helps ensure those two areas remain interlocked on a zone to zone basis. He also explained there are some extra provisions that help set up zones, so that a building is not completely heated or cooled in pre-determined areas, if those areas do not warrant it. Committee members discussed the section, asking Mr. Hart to answer a few questions.

Mike Rosenberg, who represents Pacific Northwest National Laboratory (PNNL), suggested deleting the last sentence “systems that provide simultaneous heating and cooling to a zone are prohibited”. Mr. Hart agreed that the language could be modified.

1317.4.2 Zone temperature controls

Mr. Hart commented that this section is straight forward in that the “heating water” is just for heating and not for re-heat.

1317.4.3.2 Optimum start controls

Mr. Hart explained that in the past, optimum start control systems were only required for large complex systems. He also stated that an explanation will be added to help clarify the language.

1317.4.3.3 Shutoff dampers

Tabled: Mr. Rosenberg asked that this section be tabled until the next meeting because some information is missing that needs to be included.

1317.4.3.3.1 Shutoff damper controls

Tabled: Mr. Rosenberg asked that this section be tabled until the next meeting because some information is missing that needs to be included.

1317.4.3.3.2 Motorized dampers leakage

Tabled: Mr. Rosenberg asked that this section be tabled until the next meeting because some information is missing that needs to be included.

1313.4.4 Heat pump controls

Mr. Hart explained that a lock-out is being added to “heat controls” which helps with efficiency. Mr. Lowen asked if it is typically an intergraded control. Mr. Hart answered yes. Mr. Lowen expressed concern that it will be hard to enforce because no one will know how it is controlled or installed.

1317.5 Equipment performance

Mr. Hart commented that this section consists of many tables. He commented that the “[table](#)” handout he gave the committee today has been updated with the most current information and that the information has been taken from the ASHRAE 90.1 Standard. Committee members discussed the language provided by Mr. Hart. They shared ideas and voiced several concerns, one being the cost of equipment repairs.

1317.5.1.1 Packaged electric equipment

Mr. Hart explained the proposed requirement would be applied to an engineered building.

1317.5.3 Hot gas bypass limitation

Mr. Hart explained the proposed language has been taken from the ASHRAE 189 Standard. He stated the proposal helps to provide multiple stages of cooling which is more efficient.

1317.5.4 Heat rejection equipment

Mr. Hart explained this section is basically the “tables” and that the “tables” have been cleaned-up.

1317.5.4.1 Variable flow controls

Committee members asked Mr. Hart a few questions about the proposed language in this section and offered a few suggestions which would improve the language. Mr. Hart agreed to research the committee’s suggestions.

1317.8 Duct sealing and testing

Mr. Hart briefly explained the two types of duct work described in the proposed language. Committee members asked questions pertaining to how equipment will be tested and why testing is suggested for only large systems. Mr. Philips asked why the section does not define conditioned space. Mr. Hart explained that the boundary of conditioned space is found at the beginning of the document.

Committee discussion continued and Mr. Dykeman commented that he does not feel ducts will pass inspection if duct lines are visible. Also discussed, was if testing will be done to make sure there is no leakage. Mr. Lowen replied that normally, testing is only done when a high pressure system is involved and when a customer requests a test to be done. Andy Dykeman also stated that as each section of duct is installed, a test is done.

The meeting ended with Mr. Hart agreeing to re-write some of the language for this section.

Adjourn

The meeting adjourned at 4:00 p.m.