



Oregon

Kate Brown, Governor

Department of Consumer and Business Services

Building Codes Division

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Construction Industry Energy Board

Meeting agenda

Thursday, April 23, 2015, 9:30 a.m.

Conference Room A

Board meetings are broadcast live via the Internet at

<http://bcd.oregon.gov/>

Click on "View live meetings"

I. Board business

- A. Call to order
- B. Roll call
- C. Approval of agenda and order of business
- D. Approval of the October 30, 2014, board meeting minutes
- E. Date of the next regularly scheduled meeting: October 28, 2015

II. Public comment

*This time is available for individuals wanting to address the board on **non-agenda items only**. The board will not take action on non-agenda items raised under public comment at this meeting. Testimony on agenda items will be heard when the item is called. (See "Issues to remember when addressing board" at the end of this agenda).*

III. Reports

- A. Building Codes Division report
- B. Program update

IV. Communications - None

V. Appeals - None

VI. Unfinished business - None

VII. New business

Board consider proposal to create an EV ready (pre-install conduit, etc.) pilot project for parking facilities

VIII. Announcements - None

IX. Adjournment

Issues to remember when addressing the board:

- All public participation is subject to the discretion of the board Chair for order of testimony, length and relevance.
- Speakers are generally limited to five minutes.
- Please register on the attendance registration form and on the public testimony registration form, listing the appropriate agenda item.
- The board Chair will call you to the front testimony table.
- Please state your name and the organization you represent (if any).
- Always address your comments through the Chair.
- If written material is included, please provide 20 three-hole-punched copies of all information to the boards coordinator prior to the start of the meeting and, when possible, staff respectfully requests an electronic copy of materials 24 hours prior to the meeting.

Interpreter services or auxiliary aids for persons with disabilities are available upon advance request. Persons making presentations including the use of video, DVD, PowerPoint, or overhead projection equipment are asked to contact boards coordinator 24 hours prior to the meeting. For assistance, please contact Debi Barnes-Woods at (503) 378-6787.

Please do not park vehicles with "E" plates in "customer only" spaces.

Note: For information regarding re-appointments or board vacancies, please visit the Governor's website.

Mechanical Board-Construction Industry Energy Board
Combined meeting minutes
October 30, 2014

- Mechanical members present:** Jay Winchester, Chair, building official
Linda Kennedy, Vice-chair, natural gas company, or other utility
Eric Fanning, HVAC installer
Chris Miller, sheet metal contractor
Derek Frazier, sheet metal installer
Gerald Scheuermann, plumbing industry
Darrell Skondin, municipal mechanical inspector
- Members absent:** Jay Hansen, HVAC contractor
Vacancy, Public member
Vacancy, Heat and frost insulation craftsperson
- CIEB members present:** Steven Trapp, Chair, representing EE Board
Bruce Dobbs, Vice-chair, representing RMSB
Timothy Frew, representing EE Board
Rene Gonzalez, representing BCSB
Gregory Nelson, representing BCSB
Darrell Skondin, representing Mechanical Board
Travis Argue, representing State Plumbing Board
Martin Stipe, representing State Department of Energy
- Members absent:** John Chmelir, representing RMSB
Jay Hansen, representing Mechanical Board
Matthew Rozzell, representing State Plumbing Board
- Staff present:** Brett Salmon, manager, Policy and Technical Services
Mark Heizer, technical policy analyst, Policy and Technical Services
Debi Barnes-Woods, boards administrator/coordinator, Policy and Technical Services
- Guests Present:** Stan Danielson, Local No. 36
Kate Newhall, FocusPoint Communications

I. Board business

A. Call to order

Brett Salmon, manager, Policy and Technical Services, called the combined Mechanical and Construction Industry Energy Board meeting to order at 9:34 a.m. The meeting was held at Building Codes Division, Conference Room "A," 1535 Edgewater Street NW, Salem, Oregon.

B. Roll call:

- Mechanical Board - Quorum present. Requires six members. Linda Kennedy, Vice-chair, was connected by teleconference. Jay Hansen and Dereck Frazier were absent excused.
- Construction Industry Energy Board - Quorum present. Voting for this board requires super majority vote. 11 member board. Rene Gonzalez, Building Codes Structures Boards connected by teleconference following the approval of the amended agenda. John Chmelir, RMSB; Jay Hansen, Mechanical Board; and Matthew Rozzell, State Plumbing Board were all absent excused.

C. Approval of agenda and order of business

The agenda was amended to add Agenda Item I.G. Welcome State Plumbing Board members and to move New Business Item VII before Public Comment.

The agenda was **RULED** approved as amended.

D. Approval of the board meeting minutes

- Mechanical Board – Meeting minutes of June 4, 2014, approved.

E. Date of the next regularly scheduled meetings:

- Mechanical Board – December 3, 2014
- Construction Industry Energy Board – April 23, 2015

F. 2015 board meeting dates

The agenda was amended to add this item

G. Welcome State Plumbing Board members:

- Travis Argue, journeyman plumbing
- Matthew Rozzell, building official

(Rene Gonzalez, representing the Building Codes Structures Board, was connected to the meeting by teleconference. Because the new business item on the agenda needed a vote by the CIEB, the item was moved to be heard before public comment while Rene was still connected)

VII. New business

Board approval of the technical and scientific facts of Statewide Alternate Method No. 14-01 Installation of Vestibules

There was no board discussion.

Motion by Bruce Dobbs, Vice-chair, to approve the technical and scientific facts of Statewide Alternate Method No. 14-01 Installation of Vestibules

Motion carried unanimously

(Agenda back in order)

II. Public comment – None

III. Reports

A. Building Codes Division report

Code adoption: Structural, mechanical and energy codes anticipated effective date is July 1, 2014. Residential, plumbing and electrical codes anticipated effective date is October 1, 2014. Manager Simmons added that a new process has begun with the residential code moving to a six-year adoption with a three-year interim. The three-year interim review is what the board is reviewing today.

Update on code training: The division has developed a new curriculum and is offering 2014 code-change classes for the upcoming codes. The training combines code changes for the Oregon Structural Specialty Code (OSSC), Oregon Mechanical Specialty Code (OMSC), and Oregon Energy Efficiency Specialty Code (OEESC).

The division is implementing changes to rules that impact certified building officials and building inspectors. These rules add specific training requirements for new building officials, modify continuing education requirements for building officials and inspectors, develop an application process for inspector certifications with non-traditional scope, and expand the scope of certain inspector certifications.

In the past, building officials and inspectors have received training and continuing education from a variety sources. As of April 1, 2014, the division will provide all state required training directly with a goal to improve code consistency.

B. Program update

Mark Heizer, technical policy analyst, said the progress of the 2014 Oregon Mechanical Specialty Code and the 2014 Oregon Energy Efficiency Specialty Code are proceeding with an anticipated effective date for both codes July 1, 2014. On-line training was also discussed.

IV. Communications - None

V. Appeals – None

VI. Unfinished business

Board review of the mechanical checklist created by the Mechanical Specialty Code Inspection Committee for ensuring that mechanical systems operate as efficiently as possible

Mr. Heizer explained that at the last combined meeting of the Mechanical Board and the Construction Industry Energy Board, both boards discussed methods for increasing energy efficiency in buildings to meet the requirements of [ORS 455.530\(2\)](#). He said two suggestions came out of that meeting:

- Methods to address existing buildings with emphasis on incentives for retrofits; and
- Improving new installations with the use of an inspection checklist

Martin Stipe, Oregon Department of Energy; Darrell Skondin, municipal mechanical inspector; and Stan Danielson, International Association of Heat & Frost Insulators & Allied Workers volunteered to participate on the advisory group.

VIII. Announcements - None

IX. Adjournment

Manager Salmon adjourned the meeting at 11:05 a.m.

Respectfully submitted by Debi Barnes-Woods, boards administrator/coordinator

State of Oregon

Board memo

Building Codes Division

April 23, 2015

To: The Construction Industry Energy Board

From: Brett Salmon, manager, Policy and Technical Services

Subject: Development of electric vehicle-ready parking facility construction pilot

Action requested:

The division requests that the board develop and review concepts proposed in House Bill 2577 (2015) to require installation of conduit for electric vehicle (EV) charging system at time of parking lot construction.

Background:

House Bill 2577, introduced in the 2015 legislative session, requires parking facilities of a certain minimum size to have conduit and electrical service in place to support electric vehicle chargers for a minimum percentage of spaces.

After discussion at the Legislature, it was suggested that a pilot program should be considered to determine how local government, the state and industry can establish construction standards that support EV-ready parking facilities.

Discussion:

The Construction Industry Energy Board or a committee of the board is uniquely suited to review HB 2577 and develop recommendations for a pilot program to evaluate how construction standards can support EV-ready parking facilities.

Options:

Provide feedback to the division on how to move forward with a pilot and identify interested persons to assist in this effort.

Additional information:

The division developed administrative rules to establish standards for communities expressing an interest in experimentation or innovation of matters not required in the State Building Code.

These rules (attached) could provide a framework for the board to recommend standards for an EV-ready pilot program in specific communities. Issues to address include, but are not limited to:

- 1) Type and size of building construction that would trigger an EV-ready installation;
- 2) Number of parking spaces or percentage of parking spaces to include;
- 3) Sizing, type and other technical requirements for installation of conduit;
- 4) Distribution panel capacity;
- 5) Permit/inspection protocols;
- 6) Regulatory incentives;
- 7) Cost benefit analysis;
- 8) Direction of pilot;
- 9) Other

Several years ago, the division proposed a pilot program for EV ready residential installations. Although there was insufficient interest to establish a program, the board might find interest in the approach and information generated. (See attached residential EV pilot program – For informational purposes only)

House Bill 2577

Sponsored by Representative BARNHART; Representatives LIVELY, REARDON (Presession filed.)

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure **as introduced**.

Makes legislative finding regarding benefit of state building code requiring that new construction of certain parking facilities include electrical supply capacity and conduit system capable of supporting electric vehicle charging.

Requires that new construction of parking facilities of specified size and type include electrical supply capacity and conduit system capable of supporting electric vehicle charging stations.

A BILL FOR AN ACT

1
2 Relating to electric vehicle charging infrastructure at parking facilities.

3 **Be It Enacted by the People of the State of Oregon:**

4 **SECTION 1. Sections 2 and 3 of this 2015 Act are added to and made a part of ORS**
5 **chapter 455.**

6 **SECTION 2. The Legislative Assembly finds and declares that property owners will incur**
7 **lower long-term costs if the state building code requires that new construction of parking**
8 **facilities having a large number of parking spaces open for general use include an electrical**
9 **supply capacity and conduit system capable of supporting electric vehicle charging stations.**

10 **SECTION 3. (1) As used in this section:**

11 (a) **"Motor vehicle" has the meaning given that term in ORS 801.360.**

12 (b) **"New construction" means:**

13 (A) **That the property did not, within one year prior to the commencement of con-**
14 **struction, alteration, repair or an addition, have at any time a valid approval for use or oc-**
15 **cupancy as a parking facility in effect;**

16 (B) **That a construction, alteration, repair or addition will result in newly created parking**
17 **spaces being at least 20 percent of the open parking spaces at a parking facility; or**

18 (C) **That the number of open parking spaces at a parking facility is increased, if the in-**
19 **crease occurs within one year after substantial completion of construction, alteration or**
20 **repair of, or an addition to, the parking facility.**

21 (c) **"Open parking space" means a parking space that is not:**

22 (A) **Leased for the use of a specific party;**

23 (B) **Assigned or reserved for employee or company-owned vehicle parking;**

24 (C) **Reserved for motor vehicles that are inventory;**

25 (D) **Reserved for motor vehicles awaiting transport at a port or other transit facility;**

26 (E) **Reserved for use by commercial motor vehicles, emergency vehicles or commercial**
27 **or farm motorized equipment;**

28 (F) **Reserved for use by motorcycles, mopeds or all-terrain vehicles; or**

29 (G) **Of a type identified in Department of Consumer and Business Services rules as ex-**
30 **cluded from being an open parking space.**

NOTE: Matter in **boldfaced** type in an amended section is new; matter [*italic and bracketed*] is existing law to be omitted. New sections are in **boldfaced** type.

1 (d) "Parking facility" means a property or part of a property for which the major occu-
2 pancy or use is providing parking spaces for motor vehicles.

3 (e) "Parking space" means a defined area that has two or more indicated fixed edges and
4 is designed for the parking of a single motor vehicle.

5 (2) The Director of the Department of Consumer and Business Services shall include in
6 the state building code a requirement that new construction of parking facilities described
7 in subsection (3) of this section include an electrical supply capacity and conduit system ca-
8 pable of supporting the installation of electric vehicle charging stations at 20 percent or more
9 of the open parking spaces. The electrical supply capacity and conduit system must be ade-
10 quate to support simultaneous electric vehicle charging by three percent or more of the open
11 parking spaces.

12 (3) Except as provided in subsections (4) and (5) of this section, the director shall make
13 the state building code provision required under subsection (2) of this section applicable to
14 new construction of parking facilities that are in whole or in part:

15 (a) Buildings or structures that are regulated as parking garages or carports under the
16 structural code and have 50 or more open parking spaces;

17 (b) Parking lots that serve one or more commercial businesses and have 50 or more open
18 parking spaces; or

19 (c) Parking lots for multifamily housing that have 50 or more open parking spaces.

20 (4) Subsection (3) of this section does not apply to:

21 (a) A temporary parking facility that is reasonably expected to be in service for three
22 years or less; or

23 (b) Parking lots for multifamily housing in which 50 percent or more of the dwelling units
24 are reserved for tenants whose incomes are no greater than 60 percent of the area median
25 income.

26 (5) This section does not require that the state building code mandate:

27 (a) The installation of an electrical supply capacity or conduit system to serve parking
28 spaces that are not open parking spaces; or

29 (b) The installation of electric vehicle charging stations in a parking facility.

30 (6) The installation of an electrical supply capacity and conduit system as provided in a
31 state building code requirement described in this section is an alternative fuel vehicle project
32 as defined in ORS 469B.320.

33 **SECTION 4.** The Director of the Department of Consumer and Business Services shall
34 make the state building code requirement described in section 3 of this 2015 Act applicable
35 to parking facilities for which the Department of Consumer and Business Services or a
36 municipality acting under ORS 455.148 or 455.150 issues a permit for new construction on or
37 after January 1, 2016.

38

918-020-0370

Local Amendment Requests

(1) A local municipality may request under ORS 455.040 a local amendment relating to matters covered under the building code, by submitting to the division, in writing, a local amendment application. The application must include:

- (a) The reason for the request;
- (b) The name of, and contact information for, the building official responsible for submitting the request and enforcing and interpreting the local amendment if approved;
- (c) A copy of the municipality's proposed local ordinance or administrative rule; and
- (d) A copy of the report required by section (2)(b) of this rule.

(2) Prior to submitting a request for a local amendment under ORS 455.040, a municipality must:

(a) Provide for a public hearing or public meeting in the manner required by applicable municipal or state law; and

(b) Submit a report to the division. The report must:

(A) Summarize comments received;

(B) Outline the impacts of the local amendment;

(C) Explain how the municipality responded to the substantive concerns and issues raised during the public input period;

(D) Identify the financial or regulatory incentives provided by the municipality to businesses or contractors impacted by the local amendment request;

(E) Estimate the fiscal impact of the local amendment.

(i) If the proposed amendment impacts residential construction, identify the additional construction cost per square foot to develop a 6,000 square foot parcel and to construct a 1,200 square foot detached single family dwelling on that parcel; or

(ii) If the proposed amendment impacts commercial construction, identify the additional construction cost per square foot to develop a 20,000 square foot parcel and to construct a 10,000 square foot B or M occupancy type. If the proposed amendment does not impact B or M occupancy structures, then the local jurisdiction shall identify the structure type and provide similar construction cost information for the impacted type of structure to the extent it applies to the above parameters.

(F) Describe the stakeholder outreach, summarize groups communicated with and the result of that communication; and

(G) Identify any other communities the municipality discussed the proposed amendment with and whether a regional solution was considered.

(3) Local amendments shall not contain a severance clause. The content of the local amendment as interpreted and approved by the division represents the terms and conditions of the approval. Where one or more provisions are deemed invalid, the entire local amendment is invalidated.

(4) Once the local amendment request is received, the division will review the request and the municipality's proposed amendment, and either approve the proposed local amendment in whole or in part, or deny the request. The division may approve the local amendment with conditions.

(5) Once the local amendment's provisions are approved by the division they cannot be changed. If a municipality wishes to change the provisions, they must submit a new amendment request for the division's approval.

(6) The building official for the municipality, identified in subsection (1)(b) of this rule, requesting the local amendment will be responsible for enforcing and interpreting the amendment once it is approved.

(7) The division may, upon written request, issue a directive to the building official to ensure that the local amendment is being administered according to the terms and conditions of the approval.

(8) A local amendment may be reviewed occasionally by the division to determine if it continues to be viable.

(9) The division reserves the right to terminate approval of the local amendment based on new information, including but not limited to, changes in technology, conflicts with model codes, changes in accepted practices under the applicable model codes, and failure of the building official to uphold the terms, conditions, or any directives related to the local amendment.

Stat. Auth. ORS 455.030

Stats. Implemented: ORS 455.040

Hist.: BCD 28-2008, f. 12-31-08, cert. ef. 1-1-09; BCD 8-2013(Temp), f. 9-27-13, cert. ef. 10-1-13 thru 3-30-14; BCD 10-2013, f. 12-16-13, cert. ef. 1-1-14



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Insert Date

EV-Ready Residential Pilot Non-Binding Letter of Interest

(City or County) hereby expresses its desire to participate in the EV-Ready Residential Pilot being developed by the Department of Consumer and Business Services, Building Codes Division (BCD).

While this letter of interest is non-binding, (City or County) understands that BCD will use the letter to determine the level of interest among jurisdictions that administer and enforce a local building inspection program in requiring that some, or all, new residential construction and garage remodels within their jurisdiction are EV-ready.

To be considered 'EV-ready ' new garages or carports accessory to a one- or two-family dwelling or townhouse must accommodate an electric vehicle (EV) charging station with minimal preparation. Examples of EV-ready construction include:

- Listed raceway installed to accommodate a dedicated branch circuit for the future installation of Level 2,240 volt, electric vehicle supply equipment (EVSE).
- Raceway securely fastened at the main service or sub panel and terminated in close proximity to the proposed location of a future charging station into a listed cabinet, box or enclosure.
- Label stating 'EV-capable' posted in a conspicuous place next to the raceway termination and at the service panel.

(City or County) further understands that to participate in the EV-ready pilot, (City or County) will need to identify "regulatory incentives" to help off-set the cost of EV-ready construction to the builder and that the EV-ready pilot will be processed as a local amendment (OAR 918-020-0370) to the state building code.

BCD will notify local jurisdictions that have expressed interest in the EV-ready residential pilot when the application process begins. A selection committee will choose an applicant for the EV-ready residential pilot on the strength of the local public process and "regulatory incentives" identified.

The successful applicant will receive specific authority from BCD to exceed the state building code through a local amendment for the duration of the pilot. Until that time, this letter of interest is non-binding and neither party is under any obligation to submit an application to participate in the EV-ready residential pilot.

Date:

Contact Person:

Email:

Phone:



PHIL BARNHART
STATE REPRESENTATIVE
CENTRAL LANE AND LINN COUNTIES

March 25th, 2015

Members of the Construction Industry Energy Board:

I want to express my excitement for the Electric Vehicle (EV) pilot project considered under “New business” at your meeting on Thursday, April 23rd. This project would ensure new buildings and parking lots are EV-ready. I understand that Portland and Eugene have expressed interest in participating in such a pilot project, and I want to encourage the board to start this endeavor as quickly as possible.

Oregon should make it easy for landlords and property developers to accommodate EV charging stations to meet the demand for them increases as lower costs make EVs available to mainstream consumers. The US Department of Energy estimates that we can power 70% of the country’s light-duty vehicle fleet with our current energy infrastructure, which means that we have the opportunity to make a meaningful impact on carbon pollution by making provisions for increased EV use at work and at home.

Work and home are the two locations where a car is parked for many hours. The main requisite for the inexpensive “Level 2” chargers is that cars remain parked for a longer period, because these chargers require longer charging times. When EVs can at home and work, they are vastly more convenient than gas cars, which must be taken to the service station to stop and fill up. These chargers will allow for a seamless transition between work and home, charging like a cell phone that needs only to be unplugged and taken to the next appointment.

The cost of laying conduit (i.e. PVC pipe) in our parking lots prior to pouring concrete is minimal compared to the price of trenching that concrete later—most estimates from local contractors we spoke with ranged from between \$100-\$200 per foot cost for trenching and retrofitting after-the-fact, pennies for installation at time of construction.

Aside from the benefits of reducing carbon impact and avoiding expensive retrofitting costs, promoting EV infrastructure provides a huge economic benefit to Oregon. A study by the California Electric Transportation Coalition found that each dollar saved from gas spending and spent on other household goods and services generates more jobs in the state. And in Portland, Oregon, where residents drive four miles less per day than the national urban average, the aggregate impact of fuel savings from EV use means that \$2.6 billion dollars each year stay circulating here in Oregon that would have otherwise been funneled to out-of-state oil companies.

I cannot emphasize enough the importance of taking this small, practical step toward ensuring we have EV-ready infrastructure in Oregon homes and businesses. We hope that progress can be made as quickly as possible. Building owners will be pleased when they discover this small expense gives them a huge competitive advantage over our older structures.

Thank you for your time, your consideration, and your work.

Respectfully,

Phil Barnhart
State Representative
Central Linn and Lane Counties

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Session Office: State Capitol, Salem, OR 97301, 503-986-1411, rep.philbarnhart@state.or.us

