SEI Structural Engineering Institute

Case History:

State of Oregon

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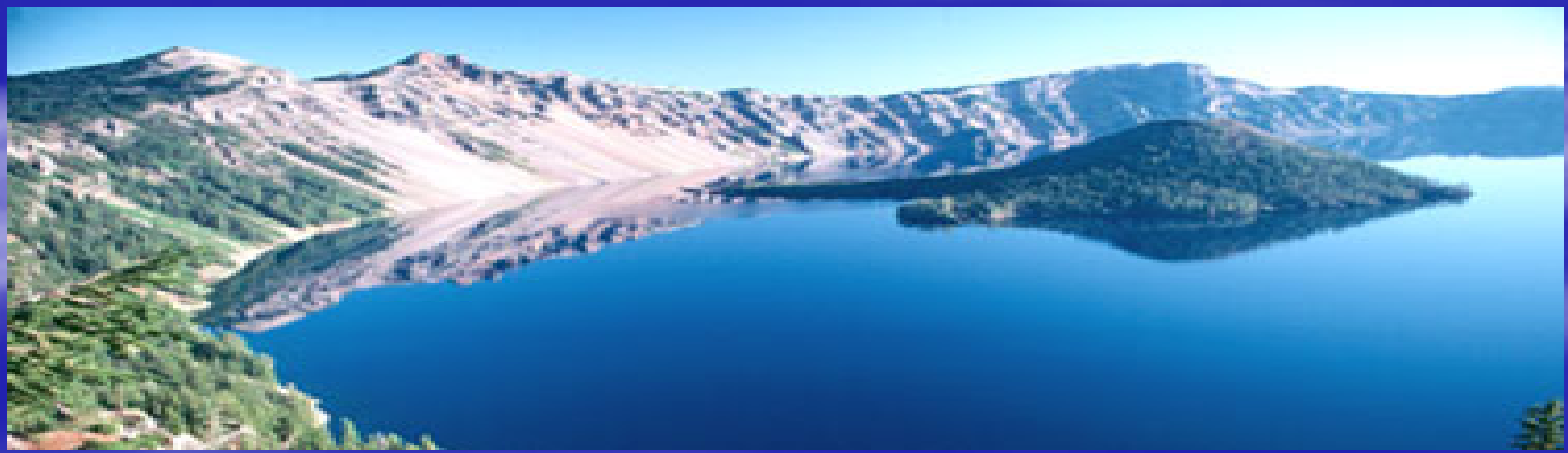
Separate S.E. Licensing Summit

Reston, Virginia

July 18, 2008

Oregon History

- Previously only recognized licensed professional engineer
- Oregon passed a Structural Engineering Practice Act in 1999
- This was the third attempt by SEA Oregon after initial attempts began in late 1960's
- Impetus from two moderate earthquakes in 1993 and recognition of potential subduction zone off Oregon Coast.



The Oregon Story

Campaign

- Initiated by SEA Oregon in conjunction with PEO and NSPE
- Drafted with assistance with SEA member familiar with legislative process and terminology
- Approved language by legal counsel
- Sponsored by “friendly” committee chair
  - House Committee on Commerce
    - Subcommittee on Regulations
    - HB 3144
  - Testimony by SEA members
  - Submit Bill in early for review
- Contact Representatives on committee
- Lobbyist recommended (not used)

The Uphill Battle

Positive Emphasis

- Differentiate scope of practice for engineers
- Restrict those who may perform essential design
- Protect life and property
- Save owner's money, not increase cost of construction
- Exempt residences, small commercial and agricultural structures
- Assurance that grandfathering will not be a burden to OSBEELS
- Improved expertise addressing earthquake safety

Opposition

- Current Professional Engineers opposed to restrictions
- Architects had mixed responses but current Oregon law does not restrict architectural practice
- ODOT engineers opposed to limitations

Compromise

- Had to appease existing licensed PE's who opposed restricting their practice – Grandfather Clause
- Avoid conflict with Architects
- Limited to "significant" habitable buildings, did not apply to bridges or highways
- Be flexible and open to change

820-020-0020

Registrants Shall Perform Services Only in the Areas of Their Competence

- (1) Registrants shall undertake assignments only when qualified by education or experience in the specific technical fields of engineering or land surveying involved.
- (2) Registrants shall not affix their signatures or seals to any plans or documents dealing with subject matter in which they lack competence, nor to any such plan or document not prepared under their direction and control.

820-040-0020
Structural Engineering

"Structural Engineering" means that branch of professional engineering that provides analysis, design, evaluation or review of structures or their elements, parts or systems for support of external forces such as gravity, lateral loading, temperature, seismic influence, etc.

- (1) Structural engineering services for significant structures, as referred to in ORS 672.002 to 672.325, shall mean structural engineering for the primary structural frame or load resisting system and its elements or parts. The primary frame shall be that portion of the structure, which provides the overall stability of the structure. Elements, components, or parts of the structure, which are not part of the primary frame do not require the services of a professional structural engineer.

- (2) A "Structural Engineer" is a registered professional engineer who passes a structural engineering examination recognized by the Board and meets the other necessary qualifications for registration under ORS 672.002 to 672.325.

672.107 Structural engineer registration for performing engineering services on significant structures; rules.

- (1) For purposes of this section:
  - (a) "Significant structure" means:
    - (A) Hazardous facilities and special occupancy structures, as defined in ORS 455.447;
    - (B) Essential facilities, as defined in ORS 455.447, that have a ground area of more than 4,000 square feet or are more than 20 feet in height;
    - (C) Structures that the Director of the Department of Consumer and Business Services determines to have irregular features; and
    - (D) Buildings that are customarily occupied by human beings and are more than four stories or 45 feet above average ground level.
  - **(b) "Significant structure" does not mean:**
    - (A) One-family and two-family dwellings and accompanying accessory structures;
    - (B) Agricultural buildings or equine facilities, both as defined in ORS 455.315; or
    - (C) Buildings located on lands exempt from Department of Consumer and Business Services enforcement of building code regulations.

- (2) Consistent with ORS 672.255, the State Board of Examiners for Engineering and Land Surveying shall adopt rules establishing standards of competence in structural engineering analysis and design relating to seismic influence.

- (3) An engineer may not provide engineering services for significant structures unless the engineer possesses a valid professional structural engineer certificate of registration issued by the board. [Formerly 672.129]

Licensure for PE

- Graduation from an ABET accredited engineering program
- Fundamentals of Engineering Examination
- Demonstrate 4 years of qualifying experience
- NCEES Professional Engineering Examination
- Continuing Education (15 PDH required per year, with a maximum of 30 PDH per year)

Grandfather Clause

- Allowed for transition
- Avoided vocal opposition from practicing PE's
- Oregon already recognized SE's as those who had passed examinations but did not restrict practice – good first step
- Convened a committee of (8) existing SE's to review applications

Implementation

- Received 70 applications
- Approved 25 applicants for SE
- 3 applicants appealed, all of whom were ODOT engineers denied by the committee on the basis of lack of experience and knowledge with building codes
- One appeal was overturned by OSBEELS and awarded the SE license

Committee Process

- OSBEELS staff addressed the following questions:
  - ➢Was application postmarked by October 23, 2000?
  - ➢Was applicant registered with OSBEELS prior to October 23, 2000?

Committee Process Continued

- Asked Committee to review following questions:
  - Did applicant submit summary of at least 4 years of experience in structural engineering as defined in OAR 820-010-0010(e)?
  - Does summary of experience describe structural system used for each project referenced?
  - Did experience cover seismic design requirements similar to those in Oregon?
  - Does application contain at least 3 acceptable references that specifically attest to 4 years of relevant experience?
  - Is at least 1 reference from outside applicant's current firm?

Committee Evaluation

- Committee members could not have a conflict of interest regarding an applicant
- Committee reviewed applications in pairs, if either one rejected application, it was reviewed by a third committee member
- If rejected by third member, it was issued as a recommendation to OSBEELS Board
- Only 8 applications were reviewed by a third committee member
- If both committee members affirmed application, it was approved
- If both committee members rejected application, it was denied
- Final decision rested with OSBEELS Board

It’s smooth sailing from here…