



Proposed NCSEA Policy on Separate Structural Engineering Licensure

To be proposed at the NCSEA Annual Conference: October 20-22, 2011

Policy

The National Council of Structural Engineers Associations (NCSEA) supports separate licensure for structural engineers to protect the safety, health, and welfare of the public due to the potential loss of life and property in improperly designed and constructed structures such as buildings and bridges.

NCSEA encourages all jurisdictions to adopt a Structural Engineering Practice Act that defines the practice of structural engineering and restricts it to those who have demonstrated competence by means of education, experience, and examination. In particular, NCSEA endorses the 16-hour Structural examination developed by the National Council of Examiners for Engineering and Surveying (NCEES) and administered for the first time in April 2011, as well as the NCEES Model Law Structural Engineer qualifications as the standard for licensure of structural engineers.

NCSEA also encourages jurisdictions to include in their new legislation an equitable transitioning clause for engineers currently practicing structural engineering.

Issues

Some of the issues that need to be addressed in the adoption of structural engineering licensure and practice restrictions include:

- The qualifications for licensure should include education, experience and examination standards.
- The requirements for licensure should be as consistent as possible across jurisdictions to allow appropriately qualified structural engineers to practice nationwide.
- The provisions for licensure should permit currently licensed professional engineers (PE) with appropriate education and experience to continue designing structures for which they have adequate expertise without requiring additional examination.
- Some jurisdictions will choose to adopt threshold criteria for structure size and/or type for which design by a licensed structural engineer is required.
- Each jurisdiction must decide whether licensure of structural engineers should be separate from other professional engineering licensure or set up as a post-PE credential.

Rationale

Every engineer holds paramount the safety, health and welfare of the public.

The field of civil engineering encompasses a broad spectrum of concepts from traffic and surveying, water and wastewater treatment, and municipal and utility engineering to building and bridge design. The specialty of structural engineering within

this spectrum is unique in its impact on the safety, health and welfare of the general public. A structural system failure almost always has serious consequences; even in the best cases, there are often substantial costs associated with correcting what is or could become a life-threatening situation.

The field of structural engineering has become increasingly complex, requiring the engineers who practice it to be diligent in keeping up with the latest codes and specifications. The complexity of the structural engineering field has been recognized by NCEES in the development of the “Model Law Structural Engineer” designation that requires 16 hours of examination instead of the 8 hours of testing required for other fields of engineering. The implementation of the new 16-hour structural engineering examination further attests to the higher standard to which structural engineers are being held.

The need for advanced credentials has been acknowledged sporadically across the country, resulting in a lack of uniformity among jurisdictions that makes licensure by comity or reciprocity difficult.

- The structural engineering specialty within civil engineering has been recognized by a number of jurisdictions, starting with Illinois in 1915, with the implementation of separate licensure laws.
- California requires a specialized licensing exam that incorporates seismic design principles in order to obtain a professional civil engineering license. Following sufficient experience, a separate specialized examination, in addition to the 16-hour NCEES exam, is currently required to obtain structural engineering title authority which allows the design of schools and hospitals.
- Several other western states require additional examination before an engineer can practice structural engineering or use the title “structural engineer”. These states have differing education, experience, and examination requirements and differing criteria that govern which structures must be designed by a licensed structural engineer.

The Council of American Structural Engineers (CASE) and the American Society of Civil Engineers (ASCE), as well as its Structural Engineering Institute (SEI), also support separate licensure for structural engineers.

NCSEA believes the effort to implement separate structural engineering licensure in all jurisdictions is a worthy commitment and encourages their Member Organizations and the structural engineering community to take the lead in making these changes in each jurisdiction.

Obtain the full document at www.ncsea.com.

19th Annual Conference



Oklahoma City, Oklahoma
October 20 – October 22, 2011



Renaissance Oklahoma City Convention Center Hotel

Leadership in
Structural Engineering

NCSEA

Register and obtain more information at www.ncsea.com.

Structural Licensing Workshop

Saturday afternoon, October 22, 2011

Agenda

- 1:15-1:30 Presentation of proposed NCSEA Policy and status of Licensure
- 1:30-1:45 Presentation of SEI Policy on SE Licensing by Sam Rihani
- 1:45-2:15 Discussion of proposed NCSEA Policy and Vote by Delegates
- 2:15-2:30 Review goals and plans for Breakout Strategy Sessions
- 2:30-2:55 Breakout Strategy–Session One
- 2:55-3:20 Breakout Strategy–Session Two
- 3:20-3:35 Break
- 3:35-4:00 Breakout Strategy–Session Three
- 4:00-4:30 Summarize results and discuss after-conference follow up

Reception and Awards Banquet

Saturday night, October 22, 2011
Formal attire requested



October 6 Webinar by Philip Brandt

Modern Concrete Repair Technology – From Failure to Completed Repair

This seminar will guide the participant through the ABCs of concrete repair, including the causes of concrete deterioration, owner requirements, repair material requirements and selection, bonding agents and proper repair techniques. Current ICRI standards are referenced and many case studies are discussed, including parking decks, bridges, highways and slabs on ground. Cathodic protection will also be addressed.

Philip Brandt is Vice President of the National Business Development Group for The Euclid Chemical Company, Cleveland, Ohio. A thirty year veteran of the construction industry, Mr. Brandt's experience includes quality control of ready mix concrete, commercial construction, material

sales, technical services and concrete repair. Originally from Tennessee, Mr. Brandt holds a Degree in Construction Engineering and is a national member of The American Concrete Institute, including Secretary of ACI 360, "Design of Slabs on Ground," Past Chairman of ACI 305, "Hot Weather Concrete" and a member of ACI 546, "Repair of Concrete." Mr. Brandt is also a member of the International Concrete Repair Institute and has spoken at many NCSEA events.



The cost is \$250 per internet connection. Several people may attend for one connection fee. This course will award 1.5 hours of continuing education.

The times will be 10:00 am Pacific, 11:00 am Mountain, 12:00 pm Central, and 1:00 pm Eastern

Approved in All 50 States

