

# Editorial | Continuing Professional Competency

By Brad Moyes, P.E., S.E., NCSEA Board Member



In last month's Editorial, John Mercer touched on the importance of continuing education and the chance to fulfill some of those requirements by attending the CASE Winter Meeting and the NCSEA Winter Institute in Jacksonville, Florida in late February. CASE and NCSEA have joined together this year to have their winter meetings in the same location and during the same week, which allows attendees the opportunity to attend both events.

NCSEA's Winter Institute is purposely held in a location to allow those in colder climes to escape winter for a few days. This year it will be held on February 25 and 26 and is entitled *Deferred Submittals: What the EOR Needs to Know and Why, From Design to Construction*. In addition to presentations and discussions on a broad range of topics regarding deferred submittals, tours of a steel joist facility and precast concrete plant are included. The topic of deferred submittals is one that affects practicing structural engineers on a regular basis and has important implications for acceptable performance of projects. If a serious problem occurs as a result of the performance of a deferred submittal item, the EOR will surely be involved in the resolution.

Delegating design responsibility for certain project elements is a necessity. Many elements of structures are proprietary in nature and can vary substantially depending on the supplier. The EOR cannot be caught up with the minutia of specialty cladding elements or pieces of equipment that may be used. Some elements, such as steel stairs, can offer substantial savings to projects if design is left to suppliers who can utilize their standard components. While at times delegating design to others may seem to be an expedient way to shift the work to others, it includes an obligation for the EOR to follow through with review of the subsequent submittal with regard to its completeness and its impact on the remaining structure. There is also an obligation by the engineer designing the deferred submittal to keep in mind the parameters of the supporting structure. The interface between the supporting structure and the deferred submittal item is a particularly troublesome area.

Our firm recently received a deferred submittal for an exhaust stack of a large piece of mechanical equipment. The engineering firm designing the stack utilized a very conservative design, which included much higher wind loads than required by code and wind load on the portion of the stack interior to the building. While a conservative design of the stack components made sense, the resultant forces on the existing structure were much higher than we originally assumed and could not be resisted without substantial building modification. After a number of conference calls and resubmissions of the calculations, as well as our own analysis, we were able to arrive at a reasonable result; however, it was a very time consuming and frustrating process.

Attending the Winter Institute will help you understand the many pitfalls associated with deferred submittals and how to avoid them. Attendance

will also help you to fulfill continuing education requirements. Mr. Mercer's comments about continuing education requirements piqued my interest in their status nationwide. Although continuing education has been required in my home state since 1997, requirements vary in many of the other states I'm registered in. Having been chosen several times for random audits, I appreciate the importance of maintaining accurate records of those activities and making sure one complies with the requirements of each jurisdiction.

The NCEES (National Council of Examiners for Engineering and Surveying) is a non-profit organization that represents the licensing boards from all 50 states, the District of Columbia, Guam, Puerto Rico and the Virgin Islands. NCEES has advocated for uniform licensing requirements for many years, as well as continuing education requirements. According to Wikipedia, the first state to require continuing education was Iowa in 1979. As of this date, not all states require continuing education; but according to the NCEES website, 36 states plus Puerto Rico now require "continuing professional competency" (CPC), as they term it.

The NCEES website includes a manual entitled *Continuing Professional Competency Guidelines*, dated October 2010. This manual provides guidelines for jurisdictions that have, or are planning to have, CPC requirements for licensure renewal. The official position of NCEES with regard to CPC is summarized in the manual as follows:

*NCEES endorses the establishment of uniform continuing professional competency (CPC) requirements for licensed professional engineers and surveyors to promote the health, safety, and welfare of the public by requiring licensees to remain competent within their profession and to facilitate renewal.*

The manual includes a model law and model rules for jurisdictions to follow. The manual also includes a recommended form to use for record keeping that can be useful if your state doesn't provide one. The model rules require 15 PDHs per year. Most of the states with continuing education requirements follow the recommended number of hours, with the remaining states and Puerto Rico requiring somewhat fewer hours. NCEES should be commended for their work, as it seems that substantial progress has been made in achieving uniformity as a result of their efforts.

We hope to see you in Jacksonville later this month to attend the NCSEA Winter Institute. The potential benefits of attending will go far beyond satisfying continuing education requirements. The information presented will broaden your understanding of the vital issues regarding deferred submittals. A side benefit of attending will be the contacts you will develop with your structural engineering colleagues and suppliers of structural elements. ■

*Brad Moyes, P.E., S.E. joined KPFF in 1974 and was named a Principal of the firm in 1991. He is a registered professional engineer in twenty-three states and a LEED Accredited Professional. Brad is past president of the Structural Engineers Association of Oregon and the American Concrete Institute Oregon Chapter.*

