


TO: NSPE Board of Directors

cc: NSPE House of Delegates
NSPE Committee, Task Force, Council and Interest Group Chairs
State Society Presidents/Presidents-elect
State Society Executives Council
NSPE Past Presidents

FROM: Mark J. Golden, FASAE, CAE 
Executive Director

DATE: September 1, 2016

RE: Board Update: August 15-31, 2016

Championing the PE License

At the 95th Annual NCEES Meeting last week in Indianapolis, the NCEES Council (consisting of the state and territorial licensing boards) defeated a proposed motion to change the *NCEES Model Law* which, NSPE argued, could have encouraged the creation of a separate license for structural engineers in additional states beyond those where such a credential already exists and a requirement that structural engineers be included as members of jurisdictional licensing boards. The vote was 12.5 in favor, 51.5 opposed and 2 absentions.

On July 26th, NSPE President Kodi Jean Verhalen communicated NSPE's concerns with the proposals in a [letter](#). A big thank you is owed to our many state societies, who backed up national with individual, state-level contacts to their licensing boards prior to the NCEES meeting.

In Indianapolis, in private meetings and addressing the NCEES board, President Verhalen acknowledged the strong relationship between NSPE and NCEES and their shared commitment to increasing public awareness of the critical role of the PE in protecting the public health, safety and welfare. She reiterated NSPE's long standing [position](#) opposing discipline-specific licensure, which, in our view, would splinter the profession, confuse the public, and weaken a strong licensure system. She noted that a proposal for a separate structural engineering license had been brought to a vote at last year's NCEES meeting and been defeated.

In conversations before the NCEES Council vote, she acknowledged that the NCEES committee that had proposed the *Model Law* amendments had not intended to endorse or mandate discipline-specific licensure; rather, the committee had intended only to create *Model Law* language to be used by those state boards that already license SEs separately. However, she maintained, if SEs and NCEES wish to provide such model language, it should be done as an addendum with a clear disclaimer to avoid misuse or misrepresentation of the action taken.

NSPE made it clear that it does not object to PEs individually identifying the fact that they practice in a particular field of engineering, like structural engineering, or use specialty designations in combination with the PE designation, so long as such communications are in accordance with local practice regulations.

NSPE is pleased with the decision of the NCEES Council, and that they voted in a manner that preserves the integrity of the professional engineering licensure system.

In response to a request for assistance, earlier this month NSPE Government Relations staff prepared a set of questions for the Nevada Society of Professional Engineers to address at two upcoming networking events with the Nevada State Board of Professional Engineers and Land Surveyors.

Ethical Guide to the Profession

Rapid progress in autonomous vehicle technology development continues, and with it a continuing awareness and appreciation of the public health, safety and welfare implications. Hacking conferences like Defcon and Black Hat are increasingly turning their attention to autonomous vehicle hacking to expose existing flaws so manufacturers can address issues before malicious hackers exploit those flaws in real-world situations.

In a recent Bloomberg News item, Rapid7 (an internet security company) transportation security director Craig Smith asserted that while autonomous vehicles do face some security risks, those risks are no more dangerous than existing risks associated with older vehicles subject to human error. Smith added that the ability to update security flaws over “airwaves” will also prevent the need for “big, costly recalls.” A senior systems engineer from Bugcrowd, a crowd-sourced internet security testing company that pays “bounties” to individuals who discover and alert manufacturers to software vulnerabilities (Fiat Chrysler Automobiles is a client) told The Guardian (UK) that as car manufacturers migrate to the self-driving vehicle market, they “are finally realizing that what they sell is just a big computer you sit in.” Senior systems engineer Kevin Tighe asserted that this realization is reassuring because major automobile manufacturers are understanding their responsibilities to consumers and treating vehicle security seriously.

This is reassuring, but only goes to underline NSPE’s concern that a licensed engineer be in responsible charge of assessing security and safety of these “big computers you sit in” before they are introduced into the physical, transportation system. The need for such a technically competent and ethically accountable individual was underlined by the recent revelations, carried in the *New York Times* (August 26, 2016), documenting that the automotive industry was fully aware of extreme safety flaws in cheaper automobile airbags manufactured by Takata Corporation and went with them anyway, for purely economic reasons. (The airbags at the center of the Takata recalls have killed and injured over 100 people and led to the largest auto safety recall in US history.) The story indicates that “in the late 1990s” GM first asked its then airbag supplier, Autoliv, “to match the cheaper design” of airbags made by Takata “or risk losing the automaker’s business.” Autoliv tests,

however, overwhelmingly concluded that the cheaper devices transformed into shrapnel bombs in certain climate conditions and refused to compromise their product. Moreover, the United States Council on Automotive Research, an industry consortium that sets design and performance specifications, updated its airbag guidance reflecting the accepted dangers of using ammonium nitrate inflators in high-humidity environments. “The problem,” the Times reports, “is that no one enforced the specifications.” The danger of such history repeating itself in the area of autonomous vehicles is obvious.

(Incidentally, each of these stories were caught and carried in NSPE’s *Daily Designs*, a service provided to all of our members.)

Also on the issue of autonomous vehicles, President Kodi Verhalen has been confirmed as a featured speaker at the 4th annual Florida Automated Vehicle Summit in November in Tampa, Florida. The event is hosted by the Florida Institute of Consulting Engineers in cooperation with the Florida Department of Transportation.

On August 16th, NSPE filed [comments](#) with the Securities and Exchange Commission urging it to clarify language in its rulemaking on *Modernization of Property Disclosures for Mining Registrants* to more clearly define a “qualified person” under the rule as a “licensee in good standing with a board authorized by US state statute to regulate professionals.”

Powering Professional Advancement

NSPE’s first live webinar of the season is coming up September 14th at 2:00 PM Eastern Time, and will cover the newly-updated and revised [2016 Design-Build EJCDC contract documents](#).

Additional details on previously announced webinars and new sessions have been confirmed for October and November:

- October 19: Engineering Ethics - Public Health and Safety and Communications Issues - Arthur Schwartz
- October 26: Defining Roles and Risks for Professional Engineers and Construction Managers - Coy Veach
- November 2: Building Your Pipeline of Success - Lauren LeMunyan
- November 9: Engineering Ethics – Licensure and Professional Practice Concerns - Arthur Schwartz
- November 16: Thinking Outside the Wooden Box – Kimberlee McKitish

Read more on the [website](#).

NSPE’s second annual “virtual career fair” will be held October 6th from 12 noon to 3 PM Eastern Time. Registration is now open for employers and job seekers. Job seekers can register for free and login at any time before the event to learn about participating employers. On event day, employers and job seekers can engage with each other in

discussion feeds as well as one-on-one chats. The platform also provides follow-up tools for both job seekers and employers.

The Fall is a busy time for seminar (live and online) activities from many of our state partners. We recently reminded the State Society Executives Council (SSEC) that any partner with a live event coming up can [post](#) it on NSPE's online *PE Institute*. If so, please use this [link](#) to submit your upcoming event. To access this form directly from the NSPE website, it is under the Resources section: click Continuing Education > Live Educational Events > Listing An Educational Event Program. If you have any additional questions feel free to contact NSPE Education Manager [Tanika Coates](#).

We have had many positive reactions and inquiries on the conference app used at the Professional Engineers Conference in Dallas in June. For state societies who might be interested in considering it for their own conferences, the app vendor we used was [Eventpedia](#). We chose them, after viewing multiple potential vendors, because of their proven integration with our netForum (membership) database. In addition, PDH Claimer was an add-on to the app that wasn't even released to the marketplace when we adopted it. This app, which we integrated with Eventpedia and netFORUM using the services of [Agilutions](#), eliminated a huge volume of paperwork and the need for attendees to stand in line to claim each session's credits, thus delivering real value, convenience and cost savings to both NSPE and our members. If you need more information, feel free to contact NSPE Director of Membership and Professional Development [Kim Granados](#).

NSPE is constantly looking for products and services that benefit members the most. We search for companies to partner with that will provide members with real savings as well as products that enhance your business.

NSPE members are now able to benefit from our new partnership with Citrix, where you can receive a 10% discount for life on Citrix products such as:

- ShareFile, which provides a professional way to access, share, sync, edit and store documents from any computer or mobile device.
- ShareConnect, which lets you remotely access desktop computers from another computer or mobile device.
- RightSignature, which allows you to send contracts, applications and other forms for instant e-signature.

For more information about Citrix products and to take advantage of this latest membership benefit, visit their [website](#)

Consistent with the board-approved business plan, NSPE's NICET division is on track with its comprehensive work plan to convert all (continuing) technician certification programs from the Work Element model (paper & pencil format) to the new Standard model (computer-based format).

Conversion of the NICET Highway Construction Inspection certification program began with Practice Analysis Workshops on May 2nd-4th for Levels I & II, and on July 25-27th for Levels III & IV. The Industry Validation Survey of the new program content ended August 29th. Item writing got underway for Levels I & II in July, with in-person Item Writing workshops scheduled for September and in-person Item Review workshops scheduled for October. We currently expect to release the new Levels I & II examinations for active testing in December 2016.

Conversion of the NICET Construction Materials Testing certification programs began with Practice Analysis Workshops for Soils on June 1st-3rd. The Industry Validation Survey for Soils was conducted in late June, and the final Practice Analysis Report was presented to NICET by our psychometric consultant on July 30th. The Practice Analysis Workshop for Asphalt was held on July 6-8th, and the Industry Validation Survey was concluded on August 12th. The final Practice Analysis Report is expected in early September. The third and final Practice Analysis Workshop for Concrete was held on August 17-19th. The Industry Validation Survey for Concrete is expected to be distributed on September 2nd. Assuming all continues to proceed as planned, we expect to release all Level I & II examinations for active testing in early 2017.

In a parallel effort to address the second business plan objective for this group, initial planning work is underway to approach divesting or eliminating certification programs that do not support a large enough stakeholder population to be financially viable to administer and maintain.

A pilot project to expand NICET testing and certification internationally will officially get underway on September 1st. Employees from three US-based fire protection companies (Tyco, Johnson Controls and Honeywell) will be participating in this initial Pilot Project in Mumbai and Bangalore, India through February 2017. The Fire Alarm Systems Levels I & II examinations are being made available initially to evaluate the validity of the US-based examinations and the work experience requirements for certification for employees of these US companies who work in India. If the initial results are successful, additional levels of Fire Alarm Systems testing will be made available to employers in India, and other international locations will then be evaluated.

NICET Chief Operating Executive Mike Clark and Communications Director Chip Hollis attended the AASHTO Subcommittee on Construction Conference in Big Sky, Montana August 14-18. They promoted NICET's redeveloped Transportation Construction Inspection and Construction Materials Testing certification programs, and provided updates on the redevelopment and implementation schedules. Mike Clark participated in both the Roadways & Structures and the Safety, Environmental & Workforce Development section meetings. Chip Hollis participated in the Safety, Environmental & Workforce Development section meetings and gave a brief presentation on NICET and credentialing for workforce development.

Uniting the PE Community

Traffic continues to build on the open forum in NSPE's Communities Platform, with a range of professional practice and technical issues being initiated by members, and vigorously discussed by their peers. We are closely monitoring levels of engagement for the tipping point when sufficient, critical mass is reached and the transition to more content-specific, separate fora can be achieved. (The timing and process for creation and launch of communities for volunteer components (committees, task forces, etc.) was outlined in my [last report](#).

Congratulations and welcome to Russell L. Romine, recently named the new Executive Director for the Kentucky Society of Professional Engineers. Romine comes to KYSPE after a brief retirement from the Kentucky Transportation Cabinet where he most recently served as the Deputy Secretary. Prior to that position, he worked as a top advisor to the KYTC Secretary for several years after serving in the Cabinet's Office of Budget and Fiscal Management.

Every year, NSPE and ACEC partner to administer the QBS Awards, recognizing entities that make exemplary use of the qualifications-based selection process at the federal, state and local levels. QBS Award winners serve as examples of how well the QBS process works. On August 29th, all applicants for the QBS Award were emailed and sent a hard copy of a letter notifying them as to the outcome of their application.

The following entities were awarded a 2016 Qualifications-Based Selection Merit Award:

- The City of Champaign, Illinois;
- The City of Rapid City, South Dakota; and
- The Maine Bureau of General Services.

The 2016 Qualifications-Based Selection Grand Award was awarded to the Mississippi Department of Transportation.

Congratulations to all the [award winners](#)!

On the lighter side, [Marvel Comics](#) announced last week that it will be featuring the importance of engineering, math, science, technology and the arts in "alternative covers" on several of its titles this November. "It's part of an effort," the company says, "to encourage young readers to double-down on their studies and explore fields said to lead to better jobs." Included will be the launch of a new Iron Man: a fifteen-year old engineering prodigy.

Agenda development for the NSPE Board of Directors meeting, September 23rd-24th in Alexandria, Virginia, is underway. Key areas of focus will be business plan implementation and monitoring (including metrics and aligning staff and volunteer efforts with the business plan) and of course, carrying forward the work on a new membership model and business plan.

NICET Board of Governors is meeting in Portland, OR on September 15-17, 2016. The meeting will kick-off with a simple reception for local technicians, employers, authorities and other stakeholders, followed by a day and a half business meeting on Friday and Saturday

And remember, you always have access to NSPE leadership resources in the [Leadership Toolbox](#). This includes [talking point](#) scripts and presentations for use by NSPE officers, board members, and other leaders during state visits, chapter meetings, or other venues to promote NSPE and its activities, updated on an at least quarterly basis. Current board members can access an online library of board meeting materials (past, current and future) through the online board book site, ([BoardBookIt](#)).

If you want to review NSPE's history and how that has been translated into current plans with a future-focus, NSPE's purpose, mission, vision and a history of the *Race for Relevance* and the resulting Strategic Plan is summarized in a section called "[Who We Are and What We Do](#)."