



**National Society of
Professional Engineers®**

TO: NSPE Board of Directors

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

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

DATE: 16 March 2016

RE: Board Update: March 1-15, 2018

President-elect Kodi Verhalen, PE, Esq., F.NSPE, and I had the opportunity to represent NSPE at the annual NCEES Participating Organizations Liaison Council (POLC) meeting in Atlanta on March 5th. NCEES, of course, consists of the engineering licensing boards from each state and territory. The POLC (of which NSPE is a member) provides an opportunity for all the stakeholder organizations whose memberships are regulated by NCEES member boards to participate in information sharing and strategic collaboration discussions. 19 such groups, from the American Institute of Chemical Engineers through the Society of Naval Architects and Marine Engineers, participated.

All of the other stakeholder organizations at the meeting represented vertical markets within the professional engineering profession. NSPE represents a horizontal swath that cuts across all those vertical markets, speaking for the value of the PE and the interests of licensed professional engineers in all disciplines and technical specialties. (It should be remembered that most if not all of NSPE's members are also members of one or more of the other organizations represented in Atlanta). As such, we brought a unique perspective to the discussions, and NCEES was very generous in providing NSPE with substantial time on the agenda to emphasize the issues of interest and concern that we all share in common.

We reminded the assembly that, from its very beginning, NSPE's sole focus has been the *license*: first, passing licensure laws in every state and territory and then, once that was accomplished, engaging in ongoing efforts to define, promote and protect the credibility and integrity of that license as an effective tool for ensuring that engineering is practiced by technically competent individuals who place the public's health, safety and welfare paramount.

Consistent with that role and focus, we noted that in 2013 NSPE published a first edition of the [Professional Engineering Body of Knowledge](#). Then, working through the American Association of Engineering Societies' lifelong learning task force, we successfully saw to it that much of the content of that body of knowledge was incorporated into the [Competency Model](#) developed with and now being promoted through the US Department of Labor.

We noted that NSPE's content populates the first four tiers of this industry-standard competency model, covering personal competency through industry-wide technical competencies, and stressed to the technical societies the great opportunity for each of them to add a fifth, discipline-specific tier to the model, to complete it for their specialty.

The meeting also provided an opportunity for NSPE to inform the stakeholders on how it has become an increasingly activist, advocacy organization in the past few years, and to stress the need for all of our organizations to look beyond their purely parochial (regional or discipline) interests to support efforts to protect the PE license.

The prize from victory in establishing a licensing regime that is now an integral part of professional and public life is sometimes a dangerous complacency. The PE cannot be taken for granted and assumed to be inviolate. Cases in point: instances where appropriate enforcement of professional practice definitions are waived through industrial exemptions; new technology areas emerging and growing at a faster pace than the thought being given to where PEs should be involved (e.g.; autonomous vehicles); and QBS laws, in place federally and in many states, but that face constant challenge.

The need for aggressive advocacy, however has never been greater than it is today. We provided a [written report](#) outlining some of the regulatory, legislative and executive initiatives in recent years that pose a genuine and existential threat to the PE:

- Attacks on licensure as a barrier to employment and economic development;
- Fragmenting the PE through discipline-specific licensure;
- The proliferation of certifications, which can confuse the status of the PE, particularly when written into local or municipal regulations as a requirement for practice, without reference to state-level licensing requirements; and
- Lack of effective enforcement of licensure laws by state boards, whether as a result of lack of resources, lack of clout within the state executive, or legal timidity.

In all these areas, NSPE stressed:

- What happens in one state or municipality, impacts us all.
- What happens to one discipline, impacts us all.

We welcomed and encouraged the technical societies represented to recognize that macro view and engage with us and with the state licensing boards that are the tip of the spear in licensure to attack these matters directly.

1. Advocacy

In a major victory for the role of the PE in protecting the public, on Monday, March 14th, the Environmental Protection Agency (EPA) published a [proposed rule](#) (pursuant to [Executive Order 13650](#)) that will step up safety requirements at chemical and other facilities that handle hazardous materials. This action is in response to catastrophic chemical facility incidents in the United States, including the explosion that occurred at the West Fertilizer facility in West, Texas, on April 17, 2013 killing 15 people. Consistent with NSPE's past requests, the EPA proposes requiring the use of PEs in its Risk Management Programs. Specifically, the EPA proposes requiring PEs as

part of the audit team in third party certifications in order to ensure the involvement of “*competent* auditors that also have an *ethical obligation* to perform unbiased work” in the interest of protecting the public health safety and welfare. NSPE will be filing comments in support of these provisions.

The Department of Transportation (DOT) has announced a hearing in Washington, DC, to be held on April 8th, on the development and deployment of autonomous vehicles. An additional hearing will also be held in California, at a date to be determined. Meanwhile, the National Highway Transportation and Safety Administration (NHTSA) has released a [report](#) regarding what obstacles exist to development and deployment of AV under the *Federal Motor Vehicle Safety Act*. Consistent with NSPE’s leadership role in [arguing for the need](#) for a consistent and comprehensive Federal/state approach to ensuring appropriate attention to the public health, safety and welfare (including the involvement of PEs), NSPE is preparing for involvement in these Federal hearings.

On March 2nd, NSPE Vice President Tom Roberts, P.E., F.NSPE, a former President of the Kansas Society of Professional Engineers, testified before the Kansas House Transportation and Public Safety Budget Subcommittee to protect and promote the continued use of Qualifications-Based Selection (QBS) in Kansas. In response to an audit recommendation suggesting that the state move away from QBS, NSPE Vice President Roberts testified in support of the tremendous value of utilizing the QBS method stating that “Numerous studies...illustrate the long term value of the QBS process. Data shows cost savings through fewer change orders during construction, lower costs for preservation and sustainability, and ensuring the state gets exactly the project it wants and needs the first time. If the state (instead) asks a firm to submit an estimated cost upfront, you are forcing that firm to pick the approach to take on the project and robbing the client of choice. QBS allows them to select the firm that is the best fit, then let the client dictate the scope of work with help from the consulting engineer based on client needs, budget and timeline.” NSPE submitted a [letter in support](#) on February 11th, which was included in KSPE’s testimony as part of the public record. KSPE will be testifying on this issue again on March 15th, when the Kansas Senate holds a similar committee hearing. NSPE Vice President Roberts will again be testifying on behalf of NSPE and KSPE.

2. Member Value

Staff is following up with McKinley Advisers on the lengthy work sessions held with the board last month in Washington in preparation for the April 27th board of directors’ conference call which will be devoted entirely to narrowing down on a path forward to “Engineering a Sustainable Future for Integrated Membership.” More intense analysis of the survey data (the collection of which was only just completed at the time of the board meeting), benchmarking and a strawman proposal for a new membership business and dues model that reduces barriers to three-tier (fully integrated) membership (based on the board’s input in February) will be reviewed, and discussions of next steps to engage other stakeholders (particularly state societies) will occur at that time.

In the meantime, the first of our three short-term membership campaigns (NSPE Unite, discussed below) has been launched, and the lapsed member and career-stage campaigns should be hitting the streets in the weeks ahead.

Registration is open now for the [2016 Professional Engineers Conference](#), a joint meeting of NSPE and the Texas Society of Professional Engineers, in Dallas, Texas, offering a rich program (and the opportunity to earn up to 15 PDHs) for all professional engineers and those on the path to licensure. Planned programs and events include:

- Engineering AT&T Stadium, home of the Dallas Cowboys
- Engineering impacts of drone technology
- Changing regulations of the professional engineer
- What professional engineers need to know about autonomous vehicles
- Moving toward the microgrid
- Dallas' \$798 million transportation project
- Innovating your engineering future
- Advances in electronics manufacturing and 3D printing
- Hydraulic fracturing
- The \$517 million reconstruction of Dallas' Love Field Airport

Attendees may also add to their conference registration a tour of AT&T Stadium or a tour of Southern Methodist University's Lyle School of Engineering and the Bush Presidential Library.

I urge each of you to encourage your members to make the most of their career, contribute their talent to the profession, and join a proud network of your engineering peers by attending this major, one-of-a-kind event.

State societies and national/state leaders are also reminded of the value in promoting the fact that NSPE membership includes 15 free on-demand streaming seminars that members can conveniently view from home or office. At the end of each seminar, a quiz will be available for those who need it to meet their state's continuing education requirements. As our recent, comprehensive survey of members confirmed, this is a highly valued benefit of our integrated, three-tier membership.

2016 courses include:

- Ethics Forum: A Conversation About Conflicts of Interest, Confidentiality, and the Public Health and Safety;
- Fast Future! Ten Uber-Trends Changing Everything in Business and our World; and,
- Win the War for People, among others

Learn more and access the full list [here](#).

3. Content

President-elect Kodi Verhalen was [profiled](#) in the latest issue of the American Society for Engineering Education's (ASEE) *Prism* magazine. It offers a stereotype-busting picture of the engineering profession and its future.



Introducing our new podcast, *NSPE Speaks*, now available for direct [subscription](#) and [download](#) and from the [iTunes store](#). In it, NSPE staff provide news for the professional engineer, updates on advocacy and outreach from NSPE and state societies, ethics cases to ponder, interviews with PEs and others, and off-the-beaten-path topics. Regular new additions will follow. (A second podcast, targeted to state and national leaders, is in the works. The first edition should be coming to you within the week.)

A new News & Publications section of the website provides members with a central location where they'll find top stories from PE, the latest advocacy news, Daily Designs articles (login required), links to interesting engineering content from around the web, and a scrolling Twitter feed for @PEMag.

4. Collaboration

Who's Looking Out for the PE? This question has a three-part answer: NSPE, the network of state societies, and individual members. A recent PE magazine article on advocacy efforts highlights the network of state societies that have the best interests of the professional engineer in mind and work diligently to define, promote, and protect the professional engineer's role in society. These examples show how PEs, working together, can create a better, stronger profession. Read the [round-up](#) in *PE* magazine's March/April issue.

NSPE has been contacted by the India Council of Engineering and Technology (ICET) seeking a memorandum of understanding with NSPE. (A similar agreement exists between ICET and ASCE.) NSPE will acknowledge receipt of this request and explore the opportunity as time and resources permit. It has come to our attention that several state associations may also have received the same email request from ICET, which apparently broadly contacted engineering organizations within the United States without understanding the coordinated relationship between national and the states. If your state society receives a request, it is not necessary for you to respond or follow up.

5. Member Engagement

NSPE Unite is an opportunity to be recognized for your active support of the profession. When you help NSPE to grow, you are supporting not only NSPE but also the professional development of licensed PEs throughout the country.

Anyone who becomes a part of NSPE Unite by recruiting even just one member will be recognized on NSPE.org, on NSPE's social media, and in *PE* magazine. Inaugural members of NSPE Unite will also be entered into a raffle to win complimentary registration to the [2016 Professional Engineers Conference](#) or a \$500 American Express gift card. Three prize recipients will be selected in a random drawing.



[Access more information and the NSPE Unite toolkit.](#)

NSPE has partnered with the [Global Innovation Exchange](#): the first global marketplace for innovations that address humanity's greatest challenges across all disciplines. Created by the US

Agency for International Development in collaboration with more than 80 partners (including NSPE), the Exchange brings together innovators, funders, researchers, experts, and others to identify, support, and scale high-impact solutions. The Exchange seeks to connect innovators with the people they need to help them develop, distribute, and scale their solution to a problem in the developing world.

We encourage individual members and state societies to access the Exchange now. After setting up a profile, under "assistance offered" select the options that describe what you're capable of providing. To be clear, selecting any of these options will not obligate you to provide such assistance, or to provide it for free.

6. Professional and Leadership Development for the Licensed Professional Engineer



Congratulations to NSPE's 2016 Federal Engineer of the Year Award winner, Major Josh Aldred, P.E., of the 8th Civil Engineer Squadron in the US Air Force. The highly competitive award, sponsored by NSPE's Professional Engineers in Government, honors engineers employed by a federal agency with at least 50 engineers worldwide.

As operations flight commander at Kunsan Air Base in the Republic of Korea, Aldred is responsible for managing 170 military and Korean civilian engineers under an annual operating budget of \$4.9 million. He oversees the maintenance of 1,083 facilities and the daily maintenance of the air base's \$260 million airfield.

[View highlights from the 2016 FEYA ceremony on NSPE's YouTube channel.](#)

[Hear an interview with Aldred in the new *NSPE Speaks* podcast.](#)

[Learn more about the Federal Engineer of the Year Award and see all the finalists and agency winners.](#)

7. Finance, Administration, Operations and Staff Alignment

Following up on your input and the discussions at the board's February meeting in Washington, staff continues to develop and refine a baseline operational budget for FY2017 (which begins July 1, 2016) including three-year projections, and to support the board in establishing a three-year business plan for the organization to align the NSPE budget and finances with organizational priorities, including the evaluation, identification and recommendation of proper funding levels.

Vice President Tom Roberts, Treasurer Julia Harrod and I all participated in the NICET Board of Governors' meeting March 11-12th in Little Rock, Arkansas. It was an extremely productive meeting, focusing on better integrating this vital component of NSPE's business model within our mission-driven plans. A detailed report on the meeting from Vice President Roberts has been distributed to the board.

Finally, please remember that access to NSPE leadership resources is always available to you in the Leadership Toolbox at www.nspe.org/toolbox. You will need to log in with your user name and password.

This includes [links](#) to current 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. There are three versions of the presentation to suit your presentation style and skill – an animated PowerPoint with moving graphics and text, a static PowerPoint with no animation, and a Word document with an outline overview of the presentation.

You will also find other [sample presentations](#) for volunteer leaders, [sample](#) promotional and other materials for membership, advocacy, association management, meetings, governance and other areas, and the [latest advocacy news](#).

There is also great material on NSPE's purpose, mission, vision and a history of the *Race for Relevance* and the resulting Strategic Plan in a section called "[Who We Are and What We Do](#)."

You can also review a detailed calendar of NSPE and state society events on the website at: www.nspe.org/AboutNSPE/Events/index.html.