Report of the NSPE Licensure and Qualifications for Practice Committee
to the NSPE Board of Directors

March 20, 2013

1. **NSPE Engineering BOK** – The March, 2013 draft of the NSPE Engineering Body of Knowledge, intended to apply to all engineering disciplines, is attached to the main agenda for the April board meeting for board members’ information. This draft is concurrently out for review and input by NSPE interest groups, and by active teams of reviewers from IEEE, ASCE, AIChe and ASABE. We have invited other engineering societies to provide input as well. Input is due back to NSPE (Art Schwartz) no later than June 15, 2013.

Any NSPE board member wishing to provide detailed input regarding the BOK is encouraged to do so. Please contact Art Schwartz to obtain a WORD file to facilitate your input in track changes mode.

The L&QP Committee hopes to finalize the first edition of the NSPE Engineering BOK in 2013.

2. **Success in the Offing – Early Taking of the PE Exam** – NSPE has advocated through a Position Statement adopted by the NSPE Board of Directors that engineers be allowed to take the PE examination at any time after obtaining a degree from an EAC ABET accredited program and passing the FE exam. Engineer Interns would still need to have the requisite number of years of progressive engineering experience prior to becoming licensed.

At the NCEES POLC meeting in March, NCEES President Gene Dinkins announced that the NCEES ACCA Committee has unanimously recommended that the NCEES Model Law be modified to remove the requirement of years of engineering experience between the FE and PE exams. This is the Model Law change that is required to encourage this change to be considered in all states. NCEES will likely be voting on the concept of this Model Law change at their annual meeting this August. The next step will be to consider this change, which is already in place in Illinois, Nevada, New Mexico and Arizona, in all states.

3. **More Success - Engineering Education Accreditation Criteria** – Through a Position Statement adopted by the NSPE Board of Directors, NSPE has advocated that accreditation criteria for baccalaureate level engineering programs include a list of specific professional practice outcomes not now included in ABET criteria. In February, 2013, the American Academy of Environmental Engineers and Scientists (AAEES) became the first engineering society to propose to ABET to incorporate these outcomes in accreditation program criteria, by proposing to include risk/uncertainty, project management, public policy and sustainability in the environmental engineering program criteria. Other engineering societies are considering following suit, and NSPE will continue to advocate the inclusion of these outcomes in educational criteria applicable to all engineering disciplines.
NSPE Licensure and Qualifications for Practice Committee Members:

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William F. Fendley, P.E., F.NSPE (Observer)

Arthur E. Schwartz, CAE, JD
Staff Liaison - NSPE L&QP Committee
1. NSPE Report to the POLC

NSPE’s written report is attached. Verbal comments were made regarding recent events as follows:

a. In accordance with NSPE’s position regarding including professional practice outcomes in engineering education accreditation criteria, it was noted that the environmental engineers (AAEES) have recently proposed to ABET to incorporate risk/uncertainty, project management, public policy and sustainability in their baccalaureate level program criteria. NSPE urged other engineering societies to consider doing the same. Civil engineering is considering following suit.

b. The L&QP Committee recently learned that a statute change to delete industrial exemptions in the Canadian province of Ontario became effective in January, 2013, and political reactions have begun there as industries became aware of the law change. This bears watching by NCEES and NSPE as an example of the political process in removing industrial exemptions.

c. NSPE reiterated its plea delivered by NSPE President Dan Witliff at the August, 2012 NCEES Annual Meeting Engineers Forum for action to ease the burden of professional engineers in complying with onerous and duplicated CPC documentation requirements in multiple states.

d. In response to an overture by Gregg Brandow of the Structural Engineering Institute of ASCE, NSPE responded by concurring that a task force of NCEES might best address ways of licensing structural engineers other than through separate licensure in states that license engineers only as professional engineers.

2. Current NCEES Activities of Interest to NSPE

a. Early Taking of the PE Exam – NCEES president Gene Dinkins announced that the NCEES ACCA Committee has unanimously recommended that the NCEES Model Law be amended to remove the required number of years between passing of the FE exam and taking of the PE exam, thus allowing the PE exam to be taken at any time after passing of the FE exam. The requisite number of years of engineering experience would still be required prior to licensure. This initiative has been advocated by NSPE and is consistent with a position statement adopted by the NSPE Board of Directors about three years ago. If this NCEES motion passes in August, the next step will be for NSPE to inform its state societies and encourage them to take action at a state level to provide this
flexibility. This has potential to significantly increase the number of licensed professional engineers in the future. In the words of Gene Dinkins, “this has a number of upsides, and no downsides that we could think of”. This was first proposed to the NCEES Council 12 years ago, and the concept has taken that long to take hold. Change in the engineering profession happens slowly.

b. Computer Based Testing (CBT) - The FE and FS examinations are converting to CBT with a January, 2014 launch date. Candidates will be able to take the exam at examination centers throughout the US with flexible scheduling. PE exams are to be converted “as soon as possible”, but that will be some years in the future likely in a phased fashion.

c. NCEES Engineering Award – This award, given to university engineering programs for incorporating engineering practice in curricula, has become exceptionally popular. Last year, a $25,000 grand prize was awarded to Florida Atlantic University, and five $7,500 prizes were awarded to runners-up, of 30 applicants. NCEES is considering expanding the program and the prize money. NSPE was involved in the “hatching” of this idea, and Bernie Berson of NSPE sits on the judging panel.

d. Licensure Mobility – NCEES is considering an “Enhanced Record Holder Program” for Model Law Engineers to streamline current procedures to assure that MLE’s can obtain a license in a new participating state in a day or two. This works currently in some states, and can work in others.

3. NCEES Initiatives in the Coming Year

NCEES President Elect Patty Mamola of Nevada outlined her priorities for consideration in 2013-2014. These included the CBT transition, continued work on the NCEES strategic plan, enhanced mobility, foreign experience evaluation, a more concise definition of the practice of engineering for the Model Law, public awareness of licensure, and consideration of ways to encourage input from younger engineers in NCEES activities.

Submitted By:

Craig N. Musselman, P.E., F.NSPE

March 10, 2013
Report to the NCEES Participating Organizations Liaison Committee (POLC)

from the

National Society of Professional Engineers

March, 2013

The National Society of Professional Engineers appreciates the opportunity to meet with the leadership of NCEES each year to provide input on current topics in the profession, and to hear of current NCEES initiatives. NSPE and NCEES share common objectives. NSPE’s licensure related priority activities in 2013 are outlined below.

Industrial Exemptions

In 2012, NSPE prepared an information packet which was forwarded to all state societies of NSPE providing the results of last year’s NCEES and NSPE policy changes on this matter, a detailed listing of the presence or absence of exemptions for either utilities or manufacturing businesses, or both, in each state, and guidance on the legislative process to change state engineering statutes. NSPE and its state societies look forward to working closely in support of state licensure boards as state legislative initiatives are considered.

Continuing Professional Development Comity

NSPE President Dan Witliff, P.E. provided comments at the Engineers’ Forum at the 2012 NCEES Annual Meeting advocating that action be taken by states to improve comity among states regarding Continuing Professional Development (CPD). Engineers who are licensed in many states are reporting difficulty in complying with CPD requirements due to the fact that states’ definitions of acceptable CPD activities and their reporting requirements vary. NSPE advocates that most professional engineers should be able to document compliance in all states by documenting compliance with requirements in his or her home state.

Licensure of Veterans as Professional Engineers

In 2013, NSPE is surveying state boards of licensure to gather information on practices followed by state boards to appropriately facilitate the licensure of returning veterans who are qualified to be licensed as professional engineers. NSPE will consider adopting a position statement later this year advocating best practices.

Engineering Education Outcomes Position Statement

NSPE has adopted a position statement advocating that the engineering education of all engineers who are on a licensure track include the attainment of additional outcomes beyond those currently required by ABET accreditation criteria including leadership, risk and uncertainty, public policy, project management, business aspects of engineering, and sustainability. This change is advocated over the long term, in a ten year horizon.
Additional Engineering Education as a Prerequisite for Licensure

NSPE has long supported NCEES’ initiative to increase engineering education requirements for licensure in the future through the Model Law and Model Rules provisions effective as of 2020. NSPE looks forward to playing a significant role in the implementation of appropriate changes in engineering education requirements on a state by state basis.

Licensure of Federal Engineers

NSPE adopted a position statement in 2012 that recommends Federal agency policies regarding the licensure of Federal engineers. Currently, policies and practices regarding licensure vary significantly from agency to agency.

NSPE Engineering Body of Knowledge

In 2012, NSPE has initiated a challenging process to formulate an Engineering Body of Knowledge (BOK), applicable to all engineering disciplines. This BOK follows and builds upon previous works of the National Academy of Engineering, “The Engineer of 2020” and “Educating the Engineer of 2020”, as well as the BOK’s prepared previously for civil engineering by the American Society of Civil Engineers, and for environmental engineering by the American Academy of Environmental Engineers. This will be a multi-year process for NSPE. NSPE is working closely with representatives of interested technical societies in reviewing and editing the Engineering BOK documents. The input of all engineering societies is encouraged and would be welcome.

Discipline Specific versus Generic Licensure

NSPE continues its long-standing policy to support the licensure of professional engineers as opposed to discipline specific licensure in the majority of jurisdictions which have historically maintained generic licensure systems. In recent years, several structural engineering organizations have advocated that all jurisdictions convert to discipline specific licensure with separate licenses for structural engineers. We believe that change not to be necessary in order to protect the public health, safety and welfare, and contend that licensing board practices other than discipline specific licensure can accomplish similar objectives. NSPE has distributed educational materials to all state societies on this issue, and stands ready to provide additional information and assistance to state societies as requested as state legislative initiatives are deliberated.

Submitted by: Craig N. Musselman, P.E.

February 5, 2013