NSPE Policy: NSPE’s long-standing policy is to support the licensure of professional engineers in a generic fashion. Policy Statement #1737 is as follows:

“NSPE endorses and supports the concept of licensure of engineers only as a ‘professional engineer’ and opposes licensure status by designated branches or specialties.”

NSPE believes that additional licensure is divisive to the profession. Further, PEs already are bound to abide by the engineering code of ethics and “perform services only in areas of their competence.”

Current Practices in Jurisdictions: Forty-three of fifty-four engineering licensure jurisdictions license engineers only as professional engineers, consistent with NSPE’s policy above. Eleven states have discipline-specific licensure. For structural engineers, four states have “title acts” and seven states have “practice acts.” Most of these discipline-specific systems were established many years ago, starting in Illinois in 1915 and California in 1931.

Trends: There is no clear trend to establish discipline-specific practice acts for structural engineers. In the last 36 years, since 1974, only one previously generic licensure state has converted to a practice act for structural engineers.
**Title Acts:** These are statutes that require a “structural engineer” license in order to call yourself a structural engineer. Title acts have no meaning with respect to who may design any kind of structure, that is, they have no practice implications. *Many in the engineering profession see title acts as meaningless.*

**Practice Acts:** These are statutes that preclude other professional engineers from designing structures above the threshold established in the statute. In Illinois, that would be any structure, regardless of complexity, including, for example, a low retaining wall. In California, the statute pertains only to schools and hospitals. And there are variations on that theme in between. Defining the appropriate threshold is a gray area. In some jurisdictions, the threshold is set by an arbitrary number of building stories, or by an arbitrary length of a bridge span. This becomes a regulated threshold as opposed to a professional decision on the part of the professional engineer as to project complexity. That project complexity is not dictated by an arbitrary building height or bridge span, but rather by the type of structure and the individual set of design conditions. There is little to no evidence to support that these arbitrary thresholds on the practice of structural engineering protect the public to any greater degree than in states where generic licensure is used. Defining or creating additional regulatory limits on the practice of engineering beyond the definition of engineering is of little value. *Thresholds of project complexity and required advanced qualifications do not need to be regulated in order to protect the public health, safety and welfare, in structural engineering, or in any other engineering discipline.*
**Structural Engineering Initiatives:** The National Council of Structural Engineering Associations has an established goal of seeking structural engineering practice acts in all U.S. jurisdictions. The American Society of Civil Engineers’ Structural Engineering Institute has a policy to encourage all jurisdictions to separately license structural engineers as a “post-PE” credential. This would require that an engineer obtain a PE license first, as a professional engineer, and then subsequently obtain an SE license, as a structural engineer. The ASCE-SEI policy does not mention title acts or practice acts. The NCSEA and ASCE-SEI policies are different. A separate ASCE overall policy supports a variety of different ways of recognizing advanced “post-PE” credentials, other than separate licensure, including specialty certification.

**Public Health, Safety, and Welfare:** NSPE and structural engineers, alike, hold paramount the public health, safety, and welfare. NSPE contends that public health, safety, and welfare is best served by ensuring that all professional engineers practice within their area of expertise. In geotechnical engineering, for instance, a simple foundation investigation could well be accomplished in the public interest by an engineer primarily trained in either structural engineering or geotechnical engineering. A major structure on soft soils, however, requires the services of a geotechnical engineer with advanced qualifications, not an engineer primarily trained and experienced in structural engineering. The area of expertise is determined appropriately by the individual professional engineer. Structural engineering is the same. The simplest of structures, perhaps a low retaining wall, could be designed by a civil, geotechnical, or structural engineer. A practice act, such as the one in Illinois, would preclude civil engineers from designing low retaining walls, which is not in the public interest. Complex structures, without question, must be designed by those with advanced qualifications, with expertise
matching the design requirements. All engineering disciplines equally share this same issue. More complex projects require professional engineers with more advanced qualifications.

Engineering Licensure is About Assuring Minimal Competence – The purpose of engineering licensure is to assure a minimum level of competence to protect the public health, safety and welfare. Licensure is not used in our system to differentiate advanced skillsets. It takes a different level of qualifications in terms of education and/or experience to design:

a. An HVAC system for a 70 story building vs. an HVAC system for a single story commercial building, or;

b. An interstate highway vs. a small subdivision roadway, or;

c. An electrical control and wiring system for a nuclear power plant vs. an electrical control and wiring system for a small office building, or;

d. A major urban water treatment plant vs. a small community water system disinfection facility, or;

e. A 70 story structure vs. a low retaining wall.

And yet, we don’t separately license the engineers who are responsible for these and other very wide ranges of project complexity by establishing thresholds of project complexity above which more advanced licensure is required. It is the responsibility of the individual professional engineer to judge his or her area of competence.

Advanced Qualifications: How can advanced engineering qualifications be recognized? One way is through specialty certification. Specialty certifications issued after initial licensure as a professional engineer, such as those offered by NCSEA; ASCE’s “Diplomate, Water Resources
Engineer” certification; and the American Academy of Environmental Engineers’ “Board Certified Environmental Engineer” certification program are good examples. These “post-P.E.” certifications require documentation of advanced qualifications in the specific field of practice.

Another way is for PE boards to use their online roster designations to reflect advanced qualifications. In many generic licensure states, professional engineers may submit documentation of their education, experience, and examinations to obtain a roster designation in a given discipline (i.e., “STR” for structural). A PE board, by its policy, could choose, for example, to issue the STR roster designation only to those with appropriate education and experience in structural engineering, and who also have passed the 16-hour NCEES structural engineering examination. This system can work similarly for other engineering disciplines. This simple program can be implemented without statute changes, probably without rule changes, and is entirely consistent with both NSPE and ASCE policies. There’s no controversy with this approach, except among structural engineers who wish to establish practice acts, and it is a clear and understandable recognition of advanced qualifications.

For additional information, see:
- PE Magazine Article: [http://www.nspe.org/PEmagazine/pe_1007_Structural_Licensing.html](http://www.nspe.org/PEmagazine/pe_1007_Structural_Licensing.html)

or