Committee on Uniform Procedures and Legislative Guidelines

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ABSTRACT
The Committee on Uniform Procedures and Legislative Guidelines (UPLG) was established to study the methods of facilitating the licensure and temporary practice of engineers and surveyors previously qualified and licensed in other states and to promote effective procedures for uniform comity. The committee receives comments and suggestions about the *Model Law* and the *Model Rules* from Member Boards, professional organizations, and other NCEES committees and task forces.

In 2006–2007, the UPLG Committee was assigned seven charges. It has prepared four motions for Council action and also presents several recommendations to the Board of Directors.

TEXT

Charge 1

Develop a definition for "approved credits" and "approved course providers" for inclusion in the Model Rules *as appropriate.*

Background

Over the past six years, NCEES has devoted considerable time and resources to analyzing the adequacy of education requirements for engineering licensure. The Engineering Licensure Qualifications Task Force (ELQTF) was established in 2001 to evaluate the U.S. licensure system. It was made up of representatives from NCEES, engineering professional practice, government, industry, and education. At the 2003 Annual Meeting, ELQTF presented the following evaluation of education as part of its comprehensive report:

> "Engineering education is falling behind other professions in preparing students for practice. There has been a persistent decrease in the credit hours required for an engineering degree over the past several decades. At present, the nominal (but nonuniform) requirement is 128 semester hours, corresponding to an 8-semester (4-year) program of 4 to 6 courses per semester. Based on national averages, 128 semester hours represent the low point on a downward trend—driven partly by a state-centered desire to make the educational process as cost-efficient as possible and to compete for students across state lines … This inexorable decrease in credit hours … represents a net national loss in the depth of engineering education in core subjects."

The task force concluded that additional education would be necessary in the future to prepare students for engineering practice at the professional level.

The ELQTF report coincided with two publications that had similar conclusions. *The Engineer of 2020: Visions of Engineering in the New Century*, published by the National Academy of Engineering, expressed a need for future engineers to keep pace with "a bewildering array of new technologies" in an increasingly interconnected world. The American Society of Civil Engineers (ASCE) publication *Civil Engineering Body of Knowledge for the 21st Century* also saw a need for more engineering education. For more than a decade, ASCE has been implementing

a program to encourage "raising the bar" in engineering education. ASCE adopted Policy Statement 465 to formally advocate additional education beyond the bachelor's degree as a prerequisite for professional licensure. It based its conclusions on the steady decline in credit hours for graduation. ASCE pointed out that increased requirements in nontechnical areas have further reduced the number of technical subjects required. In addition, while engineering education requirements are decreasing, the body of knowledge required to practice engineering is exponentially growing, as much as doubling every 10 years.

In 2004, NCEES created the Licensure Qualifications Oversight Group (LQOG) to study the ELQTF report, assess the recommendations from the NCEES and Member Board perspectives, and prepare recommendations for consideration by the Council. LQOG supported the ELQTF conclusion that additional engineering education is needed. Its 2005 committee report stated, "At one time, the engineering profession was a leader, requiring more formal education to practice than other recognized professions. While other professions have increased educational requirements over the years, engineering has, in effect, decreased the requirements. The number of credit hours required for a bachelor's degree has steadily decreased over the years, and the curriculum emphasis has shifted. These changes have resulted in a decrease in core engineering courses, a decrease in technical breadth and depth, and an increase in general studies."

At the 2005 Annual Meeting, the Council passed an LQOG motion to charge the UPLG Committee with incorporating language requiring additional engineering education into the *Model Law* and *Model Rules*. At the 2006 Annual Meeting, UPLG presented a motion to incorporate the following language into the *Model Law* requiring additional engineering education for licensure, and the motion passed.

Model Law

130.10 General Requirements for Licensure

C. Professional Engineer or Professional Surveyor.
   1. As a Professional Engineer.
      c. Licensure by Examination (Effective January 1, 2015) – The following individuals shall be admitted to an 8-hour written examination in the principles and practice of engineering:
         (1) An engineer intern with a bachelor's degree, with an additional 30 credits of acceptable upper-level undergraduate or graduate-level coursework from approved course providers, and with a specific record of an additional 4 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.
         (2) An engineer intern with a master's degree in engineering from an institution that offers EAC/ABET-accredited programs, or the equivalent, and with a specific record of an additional 3 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.
         (3) An engineer intern with a doctorate in engineering acceptable to the board and with a specific record of an additional 2 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.
         (4) An individual with a doctorate in engineering acceptable to the board and with a specific record of an additional 4 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.

The 2005–2006 UPLG Committee recommended that an appropriate committee be charged in 2006–2007 with specifically defining "approved credits" and "approved course providers." This year's UPLG Committee was given Charge 1 as a result.

Proposed Language
The committee developed the following language, which it presented at the four zone interim meetings.

Model Rules
230.15 Acceptable Coursework

A. The term "acceptable upper-level undergraduate or graduate-level coursework" used in Section 130.10 C.1.c of the *Model Law* is interpreted to mean the following:
    1. In technical topic areas, acceptable coursework shall be
        a. A combination of upper-level undergraduate and graduate-level courses or all graduate-level courses in engineering, sciences, or mathematics at institutions that have a program or programs accredited by EAC/ABET; and/or
        b. Such courses that are equivalent in intellectual rigor and learning assessment to upper-level undergraduate and/or graduate-level courses offered at institutions that have a program or programs accredited by EAC/ABET in the discipline of the coursework.
    2. In professional practice topic areas, acceptable coursework shall be courses related to skills directly relevant to the individual's practice, including but not limited to the following: communications, contract law, economics, engineering management, ethics, finance, institutional management, physical asset management, project management, public policy, and quality management. Such courses shall be equivalent in intellectual rigor and learning assessment to upper-level undergraduate and/or graduate courses offered at institutions that have a program or programs accredited by EAC/ABET in the discipline of the coursework.
B. At least 20 of the 30 credits shall consist of coursework as defined in 230.15 A.1 above. At least 10 credits of the coursework in the technical topic area shall be graduate-level coursework.
C. The term "approved course provider" used in Section 130.10 C.1.c in the *Model Law* is interpreted to mean an institution or organization that offers courses meeting the definitions of acceptable coursework in Section 230.15 A.1 and/or Section 230.15 A.2 as defined above. Such institutions shall offer EAC/ABET-accredited programs. Such organizations shall offer courses accredited by an alternative NCEES-approved accrediting body.
D. The term "credit" as used above is defined as 1 semester hour or its equivalent.

In developing this language, the UPLG Committee focused on the reasons behind the move toward the new education requirements for engineering licensure. One of the major reasons is to recover some of the technical depth-and-breadth education courses that have been reduced in engineering programs over the past few decades. Another reason is the increase in the body of knowledge needed to practice engineering.

The committee felt it was important to separate acceptable coursework into two distinct categories: technical topic areas and professional practice topic areas.

In technical topic areas, acceptable coursework would consist of upper-level undergraduate and graduate-level courses in engineering, sciences, or mathematics at institutions that have a program or programs accredited by EAC/ABET and/or courses that are equivalent in intellectual rigor and learning assessment to these courses. At least 20 of the required 30 credits would have to be in the technical topic area; all of the 30 credits could be in the technical topic area. Of these 20 credits, at least 10 must be taken at the graduate level. This requirement reflects the fact that some technical courses that previously were part of an undergraduate curriculum can now be found only as part of graduate programs. This proposed language is flexible enough to allow someone pursuing a master's degree to apply all of his or her technical courses toward the requirement. It would also allow someone who is not enrolled in a master's program to enroll in individual undergraduate or graduate courses to satisfy the requirement.

Not all of the 30 credits would have to be in a technical topic area, though. Up to 10 could be in a professional topic area instead. Acceptable coursework in this area would be courses related to skills directly relevant to the individual's practice. The proposed language includes a list of courses that can serve as examples. This is not an all-inclusive, exhaustive list; the proper courses to take would in large part depend on the particular engineering discipline's body of knowledge required to show minimum competency. Such courses would have to be equivalent in intellectual rigor and learning assessment to upper-level undergraduate and/or graduate courses offered at institutions that have a program or programs accredited by EAC/ABET.

With regard to the term "approved course providers," the committee appreciates that a wide variety of institutions and organizations will be interested and capable of providing the coursework needed to fulfill the plus-30 requirement. It is important that any and all qualified institutions and organizations wishing to provide the plus-30 coursework be allowed to do so. However, it is essential that these institutions and organizations have the proper credentials for providing courses that meet sufficient academic rigor and assessment criteria. The proposed language requires institutions such as universities to offer EAC/ABET-accredited programs. To be considered an approved course provider, other organizations (for example, technical societies, consulting engineering firms) must offer courses accredited by an alternative NCEES-approved accrediting body. Such a body currently does not exist, but the committee believes that such an entity will exist in the future by necessity. This language is designed to allow the courses that engineers need but that are not necessarily taught in an EAC/ABET-accredited program to be made available by other course providers.

The criteria for evaluating this type of class for acceptability in satisfying the requirements for acceptable coursework should be a future charge for the appropriate committee. The UPLG Committee also recommends that in the future the president charge the appropriate committee to define the term "equivalent in intellectual rigor and learning assessment" as mentioned above.

Reaction to the Proposed Language

The proposed language generated a great deal of debate at the zone meetings. Some of the suggestions and concerns are as follows:

- Do not require the 10 hours of graduate credit as described in paragraph B of the proposed language. Instead, allow upper-level undergraduate and/or graduate level credits.
- Define the 10 hours of professional practice courses more specifically. (Some attendees did not realize that all 30 hours could be technical. Others believed that all of the 30 hours should all be technical.)
- Will there be enough places—other than the campus of a major university—where one can earn the extra credits?
- Provide a more specific definition of course requirements.
- Comity will be a problem if states don't accept the language universally.
- How will the requirement be implemented? In trying to define a known entity, who will say what's acceptable?
- What will happen if someone has more than 120 hours when he or she receives a degree? Who will evaluate the courses? Will NCEES take on this responsibility?

At the Board of Directors' meeting in May, the Board decided to request that the UPLG Committee withdraw the motion from its report this year so that the committee can revisit the charge next year to address these and other concerns that came up at the zone meetings. The UPLG Committee agreed to this recommendation and will therefore not present a motion to adopt this proposed language at the Annual Meeting.

Charge 2

Propose revisions to the definition of a Model Law Engineer and Model Law Structural Engineer to incorporate the requirement for additional education credits beyond the bachelor's of science degree.

The UPLG Committee will move to incorporate the plus-30 language into the *Model Rules* definitions of Model Law Engineer and Model Law Structural Engineer found in Section 210.20. The new language is found in 210.20 B.2 and 210.20 B.3 and is listed below the current definitions remaining in effect until 2015. The proposed language states that, as of January 1, 2015, both the Model Law Engineer and Model Law Structural Engineer will have graduated from an engineering program accredited by EAC/ABET and will have completed an additional 30 credit hours of acceptable upper-level undergraduate or graduate coursework from approved course providers. These definitions are compatible with the requirements for "Licensure by Examination" now included in *Model Law* 130.10 C.1.

Regarding experience requirements, one year's credit for a master's degree and an additional year's credit for a doctorate degree would be acceptable for the 2015 definitions of Model Law Engineer and Model Law Structural Engineer. The current *Model Rules* addresses only one year of experience credit for graduate engineering degrees. Graduate degree course requirements for the Model Law Structural Engineer (6 semester hours or 9 quarter hours) for 2015 remain the same as the current rules specify.

In its review of these *Model Law* definitions, the UPLG Committee noted that there is no language in these definitions stating explicitly that a Model Law Engineer or Model Law Structural Engineer must actually be licensed in order to meet the criteria for the model definitions. It includes such language in the proposed 2015 definitions and further proposes revisions to the current definitions of Model Law Engineer, Model Law Structural Engineer, and Model Law Surveyor for consistency and clarification. The key point is that individuals must be licensed in at least one jurisdiction and satisfy all of the *Model Law* requirements of education, exams, and experience.

Charge 3

Propose revisions as necessary to ensure that the Model Rules *are consistent with revisions to the* Model Law *concerning the requirement for additional educational credits beyond the bachelor's of science degree in order to obtain licensure.*

This charge is a result of a recommendation of the UPLG Committee last year. The question was whether some of the language in *Model Rules* 230.20 A.9 could be unclear as to whether an engineer with a Ph.D. who has waived the FE exam needs two years' or four years' experience. The language about additional education added to the *Model Law* spells it out clearly. The *Model Rules* does not.

Under the current *Model Law* and *Model Rules*, engineer interns who possess an M.S. may waive one year of the required four years' experience. Engineer interns with a Ph.D. may waive two years. But Ph.D.'s who are not engineer interns—that is, doctorates who waive the FE exam in qualifying to sit for the PE exam—must still have four years' experience. Because of the possibility for confusion in interpreting experience requirements, the UPLG Committee planned to propose language to make it clear that someone must have met the requirements to become an engineer intern (someone who has passed the FE exam) to be allowed the experience credit for an M.S. or Ph.D.

At its May meeting, the Board of Directors expressed concerns about the credit for experience afforded the full-time master's degree candidate versus no credit available to the part-time master's degree candidate. It asked the UPLG Committee to revisit the issue next year rather than presenting a motion related to this at the Annual Meeting this year. The committee agreed to do so.

Recommendations
When addressing Charges 1, 2, and 3, the committee discussed potential conflicts in existing language of the *Model Law, Model Rules*, and *Manual of Policy and Position Statements*. The first of these concerns how much experience a person with an advanced degree should be credited with. In 2015, the master's degree will become, in effect, the minimum education needed for engineering licensure. If someone is approved to sit for the FE exam based on earning a master's degree, should he or she still be allowed to waive a year from the experience requirement? What if the person earns a master's after passing the FE exam? Should that continue to count for a year's experience as it does now? The committee recommends that the president charge the appropriate committee with addressing the issue of whether beginning in 2015 a master's degree should still automatically mean waiving a year of the experience requirement. The UPLG Committee also recommends that the appropriate committee be charged with proposing revisions to the *Manual of Policy and Position Statements*, specifically Position Statements 4, 8, and 14, so that they will not conflict with the new language if it passes.

Charge 4

Propose revisions to the Model Law*, Section 130 C.1.b, to delete the phrase "to the board" to reflect that various Member Boards have authorized ELSES to qualify candidates for seating for the PE exam.*

The committee recommends no changes to current *Model Law* wording in Section 130.10 C.1.b. The existing language allows boards to delegate responsibility for evaluating education and experience to staff or outside agencies, such as ELSES. The committee's position is that the boards are ultimately responsible for determining acceptable education and experience and for approving candidates to sit for an exam in their respective jurisdictions.

Charge 5

Propose revisions to Section 240.30 of the Model Rules *concerning continuing professional competency requirements as recommended by the Continuing Professional Competency (CPC) Task Force.*

This charge resulted from the Council vote at the 2006 Annual Meeting to charge UPLG with incorporating into the *Model Rules* language recommended by the CPC Task Force. The committee's recommendation is shown in Motion 2. The only change the UPLG Committee has made to the language presented by the CPC Task Force and approved by the Council is to change the word "NCEES" to "Model" in describing the CPC renewal standard. When the Council debated the language proposed by the CPC Task Force in 2006, one delegate expressed concern that the language uses "NCEES" in the *Model Rules*, which is usually avoided. The chair of the CPC Task Force said at the time that it could be left to the discretion of UPLG to ensure that the language added to the *Model Rules* is structured accordingly for that document. Because "Model Law Engineer" and "Model Law Surveyor" are accepted as a standard by all jurisdictions, the UPLG Committee believes that "Model CPC Renewal Standard" is a title that can be accepted universally.

Charge 6

Propose revisions to the Model Rules *to further define the practice of engineering and surveying as jointly proposed by the UPLG and Law Enforcement committees.*

This charge results from the Council vote at last year's Annual Meeting to charge UPLG with incorporating into the *Model Rules* language regarding activities excluded from the practice of engineering and surveying. The increasing use of national advertising and the Internet have blurred the lines between offering to practice in a specific jurisdiction and merely telling prospective clients—wherever they may be—of one's abilities. Electronic advertising, white papers, and news articles that might be construed as advertisements can show up worldwide and certainly outside of the jurisdiction of the licensee. This change to the *Model Rules* is designed to avoid any ambiguity. However, it does not allow practice without licensure and will not be detrimental to the public. This

year's committee recommends that the language the UPLG and Law Enforcement committees agreed upon in 2006 be added as a new section of the *Model Rules* as shown in Motion 3.

Charge 7

Propose a revision to Section 130.10 C of the Model Law *concerning experience requirements in order to ensure that these requirements conform to all other sections of the* Model Law *and the* Model Rules*.*

The *Model Law* currently states that an engineer intern or a person with a Ph.D. must have an additional four years of experience. Most people interpret this to mean four years of experience after becoming an intern. However, *Model Rules* 210.20 B states that someone must complete four years of acceptable engineering/surveying experience after confirmation of a bachelor of science degree in an engineering/surveying program. To eliminate this conflict between the two documents, the UPLG Committee recommends deleting the words "an additional" in the *Model Law* as shown in Motion 4. Because the *Model Rules* clearly defines what the experience should be, no further descriptor is needed in the *Model Law*.

Additional Recommendations

The UPLG Committee has a final recommendation related to surveying language in *Model Rules* Section 210.25, Inclusions and Exclusions of Surveying Practice, that results from communication the committee received from a state board member this past year. The concern is that the word "authoritative" is used throughout the section as a qualifier to the practice of surveying. The definitions of "authoritative" range from absolute power to implied authority. The language could leave room for different interpretations of what definition is intended. Someone could interpret the NCEES language to mean that anybody can practice surveying as long as that person says that it's not an "authoritative" location. If non-surveyors are practicing surveying, they could make the argument that they were not determining exact, final, commanding, or legal boundaries, that they don't have any authority, and that their clients were made aware of this. The UPLG Committee recommends that the appropriate committee be charged with reviewing this entire section in light of this concern.

Respectfully submitted, the **Committee on Uniform Procedures and Legislative Guidelines:**

Howard C. Harclerode II, P.E., Chair

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MOTIONS

Mr. President, I request the privilege of the floor to make the following motions on behalf of the Committee on Uniform Procedures and Legislative Guidelines.

1. Move that *Model Rules* Section 210.20 be amended as follows:

Model Rules

210.20 Definitions

B. The following definitions are included in *Model Rules* only:

1. Model Law Engineer – The term "Model Law Engineer" refers to a person who has obtained licensure in at least one jurisdiction as the result of satisfying the following conditions:
   a. Is a graduate of an engineering program accredited by the Engineering Accreditation Commission of ABET, Inc. (EAC/ABET)
   b. Passes the 8-hour NCEES Fundamentals of Engineering (FE) exam and an 8-hour NCEES Principles and Practice of Engineering (PE) exam using the NCEES cut score (*Section 110.20, Definitions, NCEES* Model Law)
   c. Completes 4 years of acceptable engineering experience after confirmation of a bachelor of science degree in an engineering program, which may include up to 1 year of experience for a graduate engineering degree
   d. Has a record clear of disciplinary action
2. Model Law Engineer (effective January 1, 2015) – The term "Model Law Engineer" refers to a person who has obtained licensure in at least one jurisdiction as the result of satisfying the following conditions:
   a. Is a graduate of an engineering program accredited by the Engineering Accreditation Commission of ABET, Inc. (EAC/ABET) and has completed an additional 30 credits of acceptable upper-level undergraduate and/or graduate-level coursework from approved course providers
   b. Passes the 8-hour NCEES Fundamentals of Engineering (FE) exam and an 8-hour NCEES Principles and Practice of Engineering (PE) exam using the NCEES cut score
   c. Completes 4 years of acceptable engineering experience after confirmation of a bachelor of science degree in an engineering program. Acceptable engineering experience may include up to 1 year of experience for an engineer intern with a master's degree in engineering from an institution that offers EAC/ABET-accredited programs and up to 2 years of experience for an engineer intern with a doctorate in engineering from an institution that offers EAC/ABET-accredited programs
   d. Has a record clear of disciplinary action

~~2.~~3. Model Law Surveyor – The term "Model Law Surveyor" refers to a person who has obtained licensure in at least one jurisdiction as the result of satisfying the following conditions:
   a. Is a graduate of an EAC/ABET-accredited Surveying Engineering Group program, a Surveying and Mapping Group program accredited by the Applied Science Accreditation Commission of ABET (ASAC/ABET)
   b. Passes the 8-hour NCEES Fundamentals of Surveying (FS) exam and a 6-hour NCEES Principles and Practice of Surveying (PS) exam using the NCEES cut score
   c. Completes 4 years of acceptable surveying experience after confirmation of a bachelor of science degree in a surveying/geomatics program, which may include up to 1 year of experience for a graduate surveying/geomatics degree
   d. Has a record clear of disciplinary action

   The jurisdiction may require a Model Law Surveyor to pass its state-specific exam for surveyors.

~~3.~~4. Model Law Structural Engineer – The term "Model Law Structural Engineer" refers to a person who has obtained licensure in at least one jurisdiction as the result of satisfying the following conditions:
   a. Is a graduate of an engineering program accredited by the Engineering Accreditation Commission of ABET, Inc. (EAC/ABET)
   b. Passes a minimum of 18 semester (27 quarter) hours of structural analysis and design courses. At least 9 of the semester (14 quarter) hours must be structural design courses.
   c. Passes the 8-hour NCEES Fundamentals of Engineering (FE) examination
   d. Passes 16 hours of structural examinations consisting of one of the following:
      (1) NCEES structural examinations, 8 hours of which are SE II
      (2) 16-hour state-written structural examinations taken prior to 2004
      (3) NCEES SE II plus 8-hour state-written examinations
   e. Completes 4 years of acceptable structural engineering experience after confirmation of a bachelor's degree. A maximum of 1 year of credit may be given for graduate engineering degrees that include at least 6 semester (9 quarter) hours of structural engineering (in addition to the 18 hours noted above).
   f. Has a record clear of disciplinary action.

5. Model Law Structural Engineer (effective January 1, 2015) – The term "Model Law Structural Engineer" refers to a person who has obtained licensure in at least one jurisdiction as the result of satisfying the following conditions:
   a. Is a graduate of an engineering program accredited by the Engineering Accreditation Commission of ABET, Inc. (EAC/ABET) and has completed an additional 30 credits of acceptable upper-level undergraduate and/or graduate-level coursework from approved course providers
   b. Passes a minimum of 18 semester (27 quarter) hours of structural analysis and design courses. At least 9 of the semester (14 quarter) hours must be structural design courses.
   c. Passes the 8-hour NCEES Fundamentals of Engineering (FE) examination
   d. Passes 16 hours of structural examinations consisting of one of the following:
      (1) NCEES structural examinations, 8 hours of which are SE II
      (2) 16-hour state-written structural examinations taken prior to 2004
      (3) NCEES SE II plus 8-hour state-written examinations
   e. Completes 4 years of acceptable structural engineering experience after confirmation of a bachelor's of science degree in an engineering program and has completed an additional 30 credits of acceptable coursework. A maximum of 1 year of experience may be credited to engineer interns with a master's degree in engineering that includes at least 6 semester (9 quarter) hours of structural engineering (in addition to the 18 hours noted above). A maximum of 2 years of experience may be credited to engineer interns with a doctorate in engineering focused on structural engineering.
   f. Has a record clear of disciplinary action

2. Move that *Model Rules* Section 240.30 be amended as follows:

Model Rules

240.30 Continuing Professional Competency

The continuing professional competency guidelines are set forth below for the purpose of providing consistency in those jurisdictions that adopt mandatory requirements or for those jurisdictions that wish to encourage voluntary usage. The purpose of the continuing professional competency requirement is to demonstrate a continuing level of competency of professional engineers and/or professional surveyors.

A. Introduction
Every licensee shall meet the continuing professional competency requirements of these regulations for professional development as a condition for licensure renewal.

B. Definitions
Terms used in this section are defined as follows:
1. Professional Development Hour (PDH) – A contact hour (nominal) of instruction or presentation. The common denominator for other units of credit.
2. Continuing Education Unit (CEU) – Unit of credit customarily used for continuing education courses. One continuing education unit equals 10 hours of class in approved continuing education course.
3. College/Unit Semester/Quarter Hour – Credit for course in ABET-approved programs or other related college course approved in accordance with article E of this section.
4. Course/Activity – Any qualifying course or activity with a clear purpose and objective which will maintain, improve, or expand the skills and knowledge relevant to the licensee's field of practice. Regular duties are not considered qualified activities.
5. Dual Licensee – A person who is licensed as both an engineer and a surveyor.

C. Requirements
Every licensee is required to obtain the equivalent of 15 ~~(30 if biennial)~~ PDHs ~~units during the renewal period~~ per year. If a jurisdiction chooses a biennial or triennial renewal period, the requirement would be 30 PDHs or 45 PDHs, respectively, obtained anytime during the renewal period. If a licensee exceeds the annual requirement in any renewal period, a maximum of 15 PDHs ~~units~~ may be carried forward into the subsequent renewal period. PDHs ~~units~~ may be earned as follows:
1. Successful completion of college courses
2. Successful completion of continuing education courses
3. Successful completion of short courses/tutorials and distance-education courses offered through correspondence, television, videotapes, or the Internet
4. Presenting or attending qualifying seminars, in-house courses, workshops, or professional or technical presentations made at meetings, conventions, or conferences
5. Teaching or instructing in 1 through 4 above
6. Authoring published papers, articles, books, or accepted licensing examination items
7. Active participation in professional or technical societies
8. Patents

D. Units
The conversion of other units of credit to PDHs ~~units~~ is as follows:

1. 1 College or unit semester hour	45 PDHs
2. 1 College or unit quarter hour	30 PDHs
3. 1 Continuing Education Unit	10 PDHs
4. 1 Hour of professional development in course work, seminars, or professional or technical presentations made at meetings, conventions, or conferences	1 PDH
5. For teaching in 1 through 4 above, apply multiple of 2*	

~~6. Each published paper, article, or book 10 PDH~~

6. Publications
   a. Each published peer-reviewed paper or book in the licensee's area of professional practice 10 PDHs
   b. Each published paper or article (other than 6.a above) in the licensee's area of professional practice 5 PDHs
7. Active participation in professional and technical societies~~y~~ (each organization) 2 PDHs
8. Each patent 10 PDHs

* Teaching credit is valid only for the first offering or presentation. Full-time faculty may not claim teaching credit associated with their regular duties. ~~Teaching credit is valid for teaching a course or seminar for the first time only. Teaching credit does not apply to full-time faculty.~~

E. Determination of Credit
The board of licensure has final authority with respect to approval of courses, credit, PDH value for courses, and other methods of earning credit.
1. Credit for college or community college approved courses will be based upon course credit established by the college.
2. Credit for qualifying seminars and workshops will be based on 1 PDH ~~unit~~ for each hour of attendance. Attendance at qualifying programs presented at professional and/or technical society meetings will earn PDHs ~~units~~ for the actual time of each program.
3. Credit determination for activities D6 and D8 is the responsibility of the licensee (subject to review as required by the board).
4. Credit for activity D7, active participation in professional and technical societies (limited to 2 PDHs per organization), requires that a licensee serve as an officer and/or actively participate in a committee of the organization. PDHs ~~credits~~ are not earned until the end of each year of service is completed.

F. Recordkeeping
The licensee is responsible for maintaining records to be used to support credits claimed. Records required include, but are not limited to (1) a log showing the type of activity claimed, sponsoring organization, location, duration, instructor's or speaker's name, and PDHs ~~credits~~ earned; and (2) attendance verification records in the form of completion certificates or other documents supporting evidence of attendance.

G. Exemptions
A licensee may be exempt from the professional development educational requirements for one of the following reasons:
1. New licensees by way of examination or comity shall be exempt for their first renewal period.
2. A licensee serving on temporary active duty in the armed forces of the United States for a period of time exceeding 120 consecutive days in a year shall be exempt from obtaining the PDHs ~~professional development hours~~ required during that year.

3. Licensees experiencing physical disability, illness, or other extenuating circumstances may apply for an exemption or an extension of time to obtain the credits, subject to the review and approval of the board. Supporting documentation must be furnished to the board.
4. Licensees who list their occupation as "Retired" or "Inactive" on the board-approved renewal form and who further certify that they are no longer receiving any remuneration from providing professional engineering or surveying services shall be exempt from the PDHs ~~professional development hours~~ required. In the event such a person elects to return to active practice of professional engineering or surveying, PDHs ~~professional development hours~~ must be earned before returning to active practice for each year exempted, not to exceed the annual requirement for 2 years.

H. Reinstatement
A licensee may bring an inactive license to active status by obtaining all delinquent PDHs ~~units~~. However, if the total number required to become current exceeds 30, then 30 shall be the maximum number required.

~~I. Comity/Out-of-Jurisdiction Resident~~
~~The CPC requirements for <jurisdiction> will be satisfied when a non-resident certifies to be licensed in and having met the mandatory CPC requirements of any jurisdiction approved and listed by <jurisdiction>.~~

I. Requirements for Renewal
To renew a license, an applicant must either meet the requirements of <jurisdiction> or meet the requirements of the Model CPC renewal standard for the number of consecutive reporting periods corresponding to the CPC requirements of <jurisdiction> (i.e., biennium or other). A reporting period for the Model CPC renewal standard is defined as January 1–December 31 of one calendar year.

J. Dual Licensees
The number of PDHs ~~units~~ required shall remain 15, at least one-third of which shall be obtained in each profession.

K. Forms
All renewal applications will require the ~~completion of a continuing education form~~ certification of continuing professional competency (CPC) credits as specified by the board ~~outlining PDH credit claimed~~. The licensee must supply sufficient detail on a CPC ~~the~~ form to permit audit verification~~,~~ and retain any backup documentation. The licensee must certify and sign the ~~continuing education~~ CPC form~~,~~ and submit the form, if required, with the renewal application and fee or upon notification of audit.

L. Model CPC Renewal Standard
The Model CPC renewal standard requires licensees to acquire 15 PDHs in one calendar year in compliance with the provisions of A, B, C, D, E, and J above. Licensees meeting this standard shall document their CPC activities on the Model CPC standard reporting form.

3. Move that *Model Rules* Section 210.30 be adopted as follows:

Model Rules

Section 210.30 Clarifications to the Offering of Engineering and Surveying Practice

The following items are not considered offering to practice engineering or surveying in the solicitation of work, provided that the engineer or surveyor is licensed in another jurisdiction:

A. Advertising in publications or electronic media, provided there is no holding out of professional services in jurisdictions where not licensed
B. Responding to letters of inquiry regarding requests for proposals, provided there is written disclosure that the engineer/surveyor and firm are not licensed in this jurisdiction and the response is limited to inquiries regarding scope of project and to demonstrate interest

C. Responding to letters of inquiry from prospective clients, provided there is written disclosure that the engineer/surveyor and firm are not licensed in this jurisdiction and the response is limited to inquiries regarding scope of project and to demonstrate interest
D. Mere use of the title/designation Professional Engineer, licensed engineer, P.E., Professional Surveyor, licensed surveyor, P.S., or the like in correspondence or business cards

Regardless of the above, proposals may not be submitted, contracts signed, or work commence until the engineer/surveyor and firm become licensed in the jurisdiction.

4. Move that *Model Law* Section 130.10 C.1.b, C.1.c, and C.2.b be amended as follows:

Model Law

Section 130.10 General Requirements for Licensure

C. Professional Engineer or Professional Surveyor – To be eligible for admission to the examination for professional engineers or professional surveyors, an applicant must be of good character and reputation and shall submit five references acceptable to the board with his or her application for licensure, three of which references shall be professional engineers or professional surveyors having personal knowledge of the applicant's engineering or surveying experience.
   1. As a Professional Engineer – The following shall be considered as minimum evidence satisfactory to the board that the applicant is qualified for licensure as a professional engineer.
      b. Licensure by Examination – An engineer intern or an individual with a doctorate in engineering acceptable to the board and with a specific record of ~~an additional~~ 4 years or more of progressive experience on engineering projects of a grade and a character which indicates to the board that the applicant may be competent to practice engineering shall be admitted to an 8-hour written examination in the principles and practice of engineering. Upon passing such examinations, the applicant shall be granted a certificate of licensure to practice engineering in this jurisdiction, provided the applicant is otherwise qualified.
      c. Licensure by Examination (Effective January 1, 2015) – The following individuals shall be admitted to an 8-hour written examination in the principles and practice of engineering:
         (1) An engineer intern with a bachelor's degree, with an additional 30 credits of acceptable upper-level undergraduate or graduate-level coursework from approved course providers, and with a specific record of ~~an additional~~ 4 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.
         (2) An engineer intern with a master's degree in engineering from an institution that offers EAC/ABET-accredited programs, or the equivalent, and with a specific record of ~~an additional~~ 3 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.
         (3) An engineer intern with a doctorate in engineering acceptable to the board and with a specific record of ~~an additional~~ 2 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.
         (4) An individual with a doctorate in engineering acceptable to the board and with a specific record of ~~an additional~~ 4 years or more of progressive experience on engineering projects of a grade and a character which indicate to the board that the applicant may be competent to practice engineering.

2. As a Professional Surveyor – The evaluation of a professional surveyor applicant's qualifications involves consideration of education, technical, and surveying experience, exhibits of surveying projects with which the applicant has been associated, recommendations by references, and a review of these categories during an examination. The surveyor intern applicant's qualifications may be reviewed at an interview if the board deems it necessary. The following shall be considered as minimum evidence to the board that the applicant is qualified for licensure as a professional surveyor.
   b. Licensure by Examination – A surveyor intern with a specific record of ~~an additional~~ 4 years of combined office and field experience satisfactory to the board in surveying, of which a minimum of 3 years' progressive experience has been on surveying projects under the supervision of a professional surveyor, shall be admitted to an 8-hour written examination in the principles and practice of surveying. Upon passing such examination, the applicant shall be granted a certificate of licensure to practice surveying in this jurisdiction, provided the applicant is otherwise qualified.