PROFESSIONAL ENGINEER, LAND SURVEYOR & ARCHITECT SECTION MEETING

MINUTES

The Professional Engineer, Land Surveyor and Architect Sections of the Virginia Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects (APELSCIDLA Board) met on August 13, 2014, at the Department of Professional and Occupational Regulation, 9960 Mayland Drive, Richmond, Virginia, with the following members present:

Robert A. Boynton (Architect)
Charles F. Dunlap (LS)
Clint Good (Architect)
Wiley V. Johnson, III (PE)
Carolyn B. Langelotti (PE)
Patrick D. Leary (LS)
Nancy McIntyre (LS)
Andrew M. Scherzer (LA)
Christine Snetter (Architect)
Christopher M. Stone (PE)

Board staff present for all or part of the meeting were:

Kathleen (Kate) R. Nosbisch, Executive Director Amy Goobic, Administrative Assistant

Agency staff present for all or part of the meeting were:

Jay W. DeBoer, Director Mark Courtney, Senior Director, Regulatory & Public Affairs

No representative was present from the Office of the Attorney General.

Mr. Boynton, Chair, called the meeting to order at 1:25 p.m.

Call to Order

Mr. Johnson moved to approve the agenda as amended. Ms. McIntyre seconded the motion which was unanimously approved by members: Boynton, Dunlap, Good, Johnson, Langelotti, Leary, McIntyre, Snetter and Stone.

Approval of Agenda

Mr. James Slusser, Mr. Bob Marshall and Mr. Jeff Walker were in attendance, and did not wish to address the Sections during the Public Comment period. They indicated availability for any questions during the continued discussion on wastewater characterization.

Public Comment Period

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The discussion regarding wastewater characterization resumed, tabled during the earlier APELSCIDLA Board meeting. Ms. McIntyre suggested to again table the discussion, giving the PE and LS Sections time to review additional information and discuss possible revisions to the Guidance Document "Onsite Sewage Systems Designed by Professional Engineers & Onsite Soil Evaluators." Ms. McIntyre moved to table the discussion and revisit at the PE and LS Section meeting scheduled for November 19. Mr. Leary seconded the motion which was unanimously approved by members: Boynton, Dunlap, Good, Johnson, Langelotti, Leary, McIntyre, Snetter and Stone.

Discussion on Wastewater Characterization

Mr. Boynton nominated Ms. Snetter to serve as Chair of the Architect Section. Mr. Good seconded the motion which was unanimously approved by members: Boynton, Good and Snetter Election of Section Chairs

Mr. Johnson nominated Ms. Langelotti to serve as Chair of the Professional Engineers Section. Mr. Stone seconded the motion which was unanimously approved by members: Johnson, Langelotti and Stone.

Mr. Leary nominated Mr. Dunlap to serve as Chair of the Land Surveyor Section. Ms. McIntyre seconded the motion which was unanimously approved by members: Dunlap, Leary and McIntyre.

Section members reviewed the resolutions voted on at the NCARB Annual meeting in Philadelphia. The Architect section members agreed there were no issues with the resolutions.

NCARB Updates

Section members reviewed correspondence from Mr. Clifton Strickland, in which he expressed his support for the changes to the Broadly Experienced Architect (BEA) program. Mr. Strickland encouraged the Board to support the changes.

Ms. Nosbisch provided section members a position paper from the Florida Board of Architecture and Interior Design regarding the proposed changes to the IDP program. This was for informational purposes.

Discussion was held on the Board's responses to a query from NCARB regarding proposed changes to the IDP, BEA and BEFA.

Phase 1 - Streamlining the IDP:

- Does your Board agree, disagree, or have no position on the proposed change to focus solely on the required, or "core" hours, to complete the program? The Section members agree.
- If your Board disagrees, what are your concerns? N/A
- Does your Board need more time to address the proposed streamline change? If so, when do you expect to be able to provide us feedback? No
- Do you believe your Board will adopt the proposed change if approved? Yes.

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Phase 2 – Overhaul the IDP:

- Does your Board agree, disagree, or have no position on the proposed change to align the required programmatic experience areas with the phases of contemporary practice? The Section members agree.
- If your Board disagrees, what are your concerns? N/A
- Does your Board need more time to address the proposed overhaul change? If so, when do you expect to be able to provide us feedback? No
- Do you believe your Board will adopt the proposed change if approved? Yes.

Broadly Experienced Architect Changes Proposed for Discussion

- Does your Board agree, disagree, or have no position on the proposed change to the requirements for certification through the BEA program? The Section members disagree.
- If your Board disagrees, what are your concerns? Six years of experience reduced to one year is too big a difference.
- Does your Board need more time to address the proposed change? If so, when do you expect to be able to provide us feedback? **No**
- Do you believe your Board will adopt the proposed change if approved? Yes if it falls within the framework of the regulations.

Broadly Experienced Foreign Architect Changes Proposed for Discussion

- Does your Board agree, disagree, or have no position on the proposed change to the requirements for certification through the BEFA program? The Section members disagree.
- If your Board disagrees, what are your concerns? Requiring the ARE.
- Does your Board need more time to address the proposed change? If so, when do you expect to be able to provide us feedback? **No**
- Do you believe your Board will adopt the proposed change if approved? Yes if it falls within the framework of the regulations.

Staff will provide Board responses to NCARB.

Mr. Scherzer and Mr. Good departed the meeting at 2:00 p.m.

Departure of Mr. Scherzer and Mr. Good

Mr. Boynton handed the Chair position over to Mr. Leary for the NCEES matters.

Change of Chair

Mr. Leary reported that discussions at the NCEES Southern Zone meeting held in April, indicated concerns over the decreasing number of land surveyors and how to address this issue. He further commented that some states were eliminating non-degree paths to licensure which could lead to the further decline in numbers. Discussion was also held eliminating the state exams and incorporating into the CBT exam.

NCEES Update

Section members reviewed and voted on the following resolutions being

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presented at the NCEES Annual meeting, August 20-23, in Seattle, WA.

Committee on Bylaws

NCEES Resolutions for 2014 Annual Meeting

Bylaws Motion 1

Move that Bylaws 4.05 be amended as follows:

Section 4.05 Qualifications. Any member of NCEES who is a citizen of the United States and a member of a Member Board sometime during the calendar year in which the nomination occurs is eligible to hold an elective office. Associate members are not eligible to serve on the NCEES Board of Directors.

To be eligible for the office of President-Elect, a person shall have been a member of NCEES at least four-three years and attended at least two Annual Business Meetings. Additionally, members of the Board of Directors may run for President-Elect if their term on their state board has expired during their term as NCEES Vice-President or Treasurer; and they have obtained emeritus standing within the Council; and they have the approval of their state board; and it is their zone's rotation to elect a President-Elect; and they have been nominated by the zone. The President-Elect shall not be from the same zone as the President. Vice Presidents shall be from the zone that elects them.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

Bylaws Motion 2

Move that Bylaws 6.01 be amended as follows:

Section 6.01 Annual Business Meetings. The Annual Business Meeting of the Council shall be held at the time and place selected by the Board of Directors.

Notice of the Annual Business Meeting shall be mailed to each Member Board, member, associate member, and participating organization not less than four weeks prior to each meeting.

The Board of Directors shall prepare a consent agenda for each Annual Business Meeting. Individual motions may be removed from the consent agenda upon request by any Member Board.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

Bylaws Motion 3

Move that Bylaws 3.07 be amended as follows:

Section 3.07 Zones. The Member Boards of the Council shall be divided into four zones as follows: Central Zone: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; Northeast Zone: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia; Southern Zone: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, Virgin Islands (U.S.), Virginia; Western Zone: Alaska, Arizona, California, Colorado, Guam, Hawaii, Idaho, Montana, Nevada, New Mexico, Northern Mariana Islands, Oregon, Utah, Washington, Wyoming..

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

Committee on Finances

Finance Motion 1

Move that the adoption of the 2014–15 operating budget as shown in Appendix B be postponed to the end of the last business session in order to take into account any subsequent actions adopted by the Council that may affect this budget.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

Finance Motion 2

Move that the adoption of the 2014–15 capital budget as shown in Appendix C be postponed to the end of the last business session in order to take into account any subsequent actions adopted by the Council that may affect this budget.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.



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Move that FP 7 be amended as follows:

FP 7 Examination Charges

All examination charges will shall be reviewed and approved annually by the Council. The current exam prices are as follows:

Examination		Date	Effective
	Price	<u>Approved</u>	<u>Administration</u>
<u>Date</u>			
Computer-based FE*	\$225	8/13	1/14
Computer-based FS*	\$225	8/13	1/14
PE**	\$250	8/11	4/13
PS**	\$250	8/11	4/13
Structural Lateral Forces			
component**	\$400	8/09	4/11
Structural Vertical Forces	2000		5 92 5
component**	\$400	8/09	4/11

For computer-based examinations, examinees are required to pay NCEES directly.

Rationale

 This change is to make policy match how computer-based exam registration is carried out.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

Committee on Law Enforcement

Law Enforcement Motion 1

Move that Model Rules 240.15 B9 be adopted as follows:

Model Rules 240.15 Rules of Professional Conduct

- B. Licensee's Obligation to Employer and Clients
 - Licensees shall undertake assignments only when qualified by education or experience in the specific technical fields of engineering or surveying involved.
 - 2. Licensees shall not affix their signatures or seals to any plans or

^{*}Price includes exam development, scoring, and computer-based exam administration.

^{**}Price includes exam development, scoring, shipping, and materials. Exam administration fees will remain separate for paper-and-pencil exams.

- documents dealing with subject matter in which they lack competence, nor to any such plan or document not prepared under their responsible charge.
- Licensees may accept assignments and assume responsibility for coordination of an entire project, provided that each technical segment is signed and sealed by the licensee responsible for preparation of that technical segment.
- 4. Licensees shall not reveal facts, data, or information obtained in a professional capacity without the prior consent of the client, employer, or public body on which they serve except as authorized or required by law or rules.
- Licensees shall not solicit or accept gratuities, directly or indirectly, from contractors, their agents, or other parties in connection with work for employers or clients.
- Licensees shall disclose to their employers or clients all known or
 potential conflicts of interest or other circumstances that could
 influence or appear to influence their judgment or the quality of their
 professional service or engagement.
- Licensees shall not accept compensation, financial or otherwise, from more than one party for services pertaining to the same project, unless the circumstances are fully disclosed and agreed to in writing by all interested parties.
- 8. Licensees shall not solicit or accept a professional contract from a governmental body on which a principal or officer of their organization serves as a member. Conversely, licensees serving as members, advisors, or employees of a government body or department, who are the principals or employees of a private concern, shall not participate in decisions with respect to professional services offered or provided by said concern to the governmental body that they serve. (Section 150, Disciplinary Action, NCEES Model Law)
- 9. Licensees shall not use confidential information received in the course of their assignments as a means of making personal profit without the consent of the party from whom the information was obtained.

Rationale

Virtually all professional ethical standards prohibit the disclosure or use of a client's confidential information without the client's express consent. Indeed, *Model Rules* 240.15 B4 expressly prohibits such disclosure by professional engineers and licensed surveyors absent the client's consent (or as required by the law).

The rule change that was sent back by UPLG for further study would have permitted disclosure of confidential information so long as it was not detrimental to the client's interests. The rule did not contain a consent provision, so the licensee was presumably the party to determine whether it was detrimental to the client. As noted above, this standard would create an enormous exception to existing rule 240.15 B4 and would put NCEES ethical standards at complete odds with those governing other professions.

Existing *Model Rules* 240.15 B4 prohibits the disclosure of information obtained through an engagement. The rule does not address a licensee's use of such information. For instance, a licensed surveyor is engaged to prepare a survey of a client's Parcel 1. During the course of the engagement, the client requests that the survey be prepared in a specific manner because he or she intends to purchase adjoining Parcel 2 in approximately five years for a development that requires both parcels. Based upon that information, the licensed surveyor subsequently purchases Parcel 2.

Under this scenario, the licensed surveyor has not violated *Model Rules* 240.15 B4 because he or she did not reveal the information; rather, the licensee acted upon the information for his or her personal gain.

The Law Enforcement Committee is of the view that the use of confidential information obtained from a client should similarly be prohibited. This rule is not intended to restrict a licensee's use of general information relating to engineering or surveying that is obtained or acquired through the course of an engagement. Rather, the rule relates to information of a confidential nature that is given to the licensee by a client, employer, or public agency by which the licensee is engaged.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

Public Outreach/Communications Task Force

Public Outreach/Communications Motion 1

Move to adopt the position statement, Promotion of Licensure, as follows:

Position Statement XX Promotion of Licensure

The mission of NCEES is to advance licensure for engineers and surveyors in order to protect the health, safety, and welfare of the public. As such, the Council is committed to promoting and will promote the value of licensure to all audiences.

Rationale

This position statement serves to recognize that engineers and surveyors play a vital role in protecting the health, safety, and welfare of everyone. As such, promoting licensure to create awareness related to its value and overall affects to the public should not be limited to any particular audience.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

Advisory Committee on Council Activities

ACCA Motion 1

Move that EAP 5 be amended as follows:

EAP 5 NCEES Examinations Offered by a Member Board Within Its Jurisdiction

- A. A member board may offer NCEES examinations only in its jurisdiction. The member board must make suitable arrangements to protect the confidentiality and security of the examinations according to NCEES guidelines. Administration of examinations must conform to the NCEES scheduled timeframes for examinations. Individual applicants should apply to the sponsoring jurisdiction in accordance with that jurisdiction's operating policies and procedures. This policy does not preclude an examinee from sitting for a CBT examination in a different jurisdiction.
- B. NCEES may provide directly to a university or college FE or FS examination data that will help measure <u>learning</u> outcomes of the total engineering or surveying education.
- C. Member boards are encouraged to sponsor or otherwise facilitate use of the FE and FS examinations <u>results</u> for <u>internal use of institutional</u> outcomes assessment, but such use should not subordinate or endanger the function, concept, or security of the FE or FS examination's primary purpose as the first examination for professional licensure, in keeping with the underlying mission of protection of public health, safety, and welfare.
- D. This policy does not preclude a member board from offering the examinations at an NCEES-approved site to U.S. military personnel stationed at military bases outside the United States.

Rationale

ACCA proposes amending EAP 5 to clarify the intent of the outcomes assessment as it applies to NCEES FE and FS examinations and to clarify that military sites must be approved.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

ACCA Motion 2

Move that EAP 10 be amended as follows:

EAP 10 NCEES Examinations Offered to a Foreign Entity NCEES may contract to provide NCEES examinations to a foreign entity (outside the geographic jurisdiction of a member board), subject to the approval of the Council. The Upon receiving a request, the chief executive officer may be authorized by the NCEES board of directors to enter into discussions with a foreign entity concerning the administration of NCEES

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examinations at a foreign site. The discussions will include an assurance that NCEES examinations will be administered in full compliance with all NCEES examination policies and procedures. All costs borne by NCEES to carry out this provision will be reimbursed.

The NCEES board of directors is authorized to permit all computer-based examinations to be administered at a NCEES-approved test site to students in their senior year and graduates of foreign engineering programs that have attained ABET accreditation or the equivalent as determined by NCEES. At a minimum, all costs borne by NCEES to carry out this provision will be reimbursed. Computer-based examinations shall not be administered at a foreign site outside the NCEES-approved testing windows.

Except as allowed under EAP 2, pencil-and-paper NCEES examinations shall not be administered at a foreign site prior to the examinations being administered in member boards' jurisdictions and computer based NCEES examinations shall not be administered at a foreign site outside the approved testing windows. NCEES may contract to provide administration of NCEES examinations that are offered in pencil-and-paper format to a foreign entity subject to the approval of the Council. Based upon a determination that these conditions will be met, a draft agreement that defines areas of responsibility for the foreign entity and NCEES may be created. The agreement will require, at a minimum, that all costs borne by NCEES to carry out the provisions of the agreement will be reimbursed.

For any agreement approved by the Council, NCEES will establish minimum criteria for candidates of the foreign entity that are in general conformance with the existing NCEES Model Law and Model Rules. NCEES will retain the score information for examinees of foreign entities and will transmit that information to any member board when requested.

The examinations may be used to assist examinees interested in applying for licensure as a professional engineer or surveyor with an NCEES member board as well as an outcomes assessment tool to assist in measuring the outcomes of a foreign-based education system.

However, in the event that the examinee elects to use the results of the examination for the purpose of applying for licensure, the member board may not be precluded from imposing any additional requirements related to state licensure, including but not limited to educational and experience requirements.

Rationale

The general requirements for qualifying for the FE exam, as contained in the NCEES *Model Law*, require a candidate to be a college senior or graduate of an engineering program of 4 years or more accredited by the Engineering Accreditation Commission of ABET (EAC/ABET), or the equivalent, or an engineering master's program accredited by EAC/ABET. As of April 1, 2013, there were 252 engineering programs at 50 foreign institutions in 19

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countries that have attained full EAC/ABET accreditation.

This revision would help achieve the policy adopted by the Council to allow the FE exam to be used "as an outcomes assessment tool to assist in measuring the outcomes of a foreign-based education system." The proposed change would not negate existing requirements for authorization of a foreign entity to offer the PE or PS exams while these exams are still offered in pencil-and-paper format.

Also, computer-based exams would not be authorized unless the region has an NCEES-approved testing center in full compliance with all NCEES-required security protocols.

Board of directors' position No position, non-consent agenda

The Sections supported the motion.

ACCA Motion 3

Move that PS 21 be amended as follows:

PS 21 International Activities

- A. The Council should continue its current involvement in the international arena within the following guidelines:
 - 1. All substantive agreements and model documents shall be approved by the full Council before execution.
 - Access to non-CBT examinations by either educational institutions or national organizations shall be approved by the full Council before execution.
 - Access to CBT examinations at an NCEES-approved test site for applicants from an ABET-accredited program or the equivalent as determined by NCEES may be approved by the board of directors.
 - 24. All agreements and model documents shall be clearly non-binding on member boards.
 - 35. Unless specifically provided for in the Council budget, services rendered to other nations shall be funded by the requesting nation to a level that ensures no net loss of Council funds.
- B. In identifying the qualifications for the right of licensure to practice engineering and surveying, NCEES shall always inform foreign jurisdictions that the qualifications for licensure in the United States, by and through its state and territorial jurisdictions, include education, experience, and examination. NCEES shall further emphasize the welfare of the public in safeguarding life, health, safety and property, ethical conduct, and the benefit to humanity. Constraints such as citizenship, residency, establishment of local office, or similar restrictions shall be discouraged.
- C. NCEES shall stress to all national and foreign jurisdictions the need for the development of a database of their licensing requirements. All

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requirements for practice should have a goal of global mutuality.

- D. NCEES shall work with foreign jurisdictions toward establishment of an international system for evaluation of education, experience, examination, practice, and ethical conduct.
- E. NCEES shall function as a resource for other nations that desire to establish or improve their education, experience, examination, and ethics requirements for licensure to practice engineering and surveying.
- F. NCEES shall work with foreign jurisdictions toward mutual development of international law enforcement procedures.
- G. NCEES shall work with foreign jurisdictions to emphasize the importance of current international intellectual property protection.

Rationale

For foreign schools with EAC/ABET-accredited status and which have an approved Pearson VUE test center in the area, testing administration would be approved by the board of directors (currently all foreign contracts are voted on by the full Council at the annual meeting). This would apply only to students of the specific institution. Where that institution requests that both the FE and PE exam are to be administered, the current exam administration policy would remain in effect to ensure that the pencil-and-paper exams can be administered in accordance with all NCEES-related policies.

Board of directors' position No position, non-consent agenda

The Sections supported the motion.

ACCA Motion 4

Move that the term "health, safety, and welfare," as currently used in the NCEES vision and mission statements, be used throughout all applicable NCEES manuals and documents.

Rationale

ACCA believes that using "health, safety, and welfare" throughout the NCEES documents is appropriate because these terms are used widely by member boards and are included in the NCEES mission and vision. The reason for not including "life" and "property" is that these terms would be understood to be included when the public health, safety, and welfare is referenced.

Board of directors' position Endorses, non-consent agenda

The Sections supported the motion.

ACCA Motion 5

Move that the word "safeguard" be used throughout all NCEES documents with regard to the term "health, safety, and welfare."

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Rationale

Either "safeguard" or "protect" are acceptable and could be interchangeable within NCEES documents; however, the committee feels that "safeguard" is most appropriate.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

ACCA Motion 6

Move that the following position statement on diversity be adopted in the *Manual of Policy and Position Statements*.

Position Statement XX

NCEES is committed to advancing licensure to all groups and recognizes the benefits a diverse population of licensed engineers and surveyors provides in shaping the future of professional licensure. NCEES encourages diversity in member boards. Through efforts that promote the value of professional licensure, it strives to create a diverse population of qualified volunteers—without regard to age, race, gender, sexual orientation, religion, color, national origin, or disability—at all levels in order to safeguard the health, safety, and welfare of the public.

Rationale

This statement will formalize the NCEES position on diversity efforts.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

Committee on Education

Education Motion 1

Move that NCEES develop an online CPC registry that will allow registrants to upload, track, and maintain a record of CPC activities. The registry should maintain a record of CPC information that is consistent with the requirements described in the NCEES *CPC Guidelines* and delineated in the CPC standard report form.

In addition, the CPC registry should include the following:

- Provide an estimate of a registrant's compliance with the CPC requirements of a majority of jurisdictions.
- Identify and summarize CPC activities offered by a recognized provider of quality CPC courses (such as those offered by IACET-approved

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providers and national technical societies).

Rationale

A CPC registry will enhance mobility by providing a tool for licensees to maintain CPC activities in a consistent format. While approval of CPC activities, as always, is the responsibility of individual boards, the registry will provide a consistent report format. This is not an offer for NCEES to provide a list of courses that are approved, but rather a line item in a licensee's CPC report that designates that the activity was provided by a certified provider. In addition, identifying recognized providers of quality CPC courses will provide a level of assurance of the usefulness of CPC activity towards enhancing a licensee's professional skills and abilities. Finally, creation of a CPC registry will serve as a learning opportunity and support the creation of a similar registry useful for the implementation of an education registry for the master's-or-equivalent requirement.

Board of directors' position Endorses, non-consent agenda

The Sections supported the motion.

Education Motion 2

Move that the UPLG Committee be charged with modifying *Model Law* 130.10, General Requirements for Licensure, to replace the phrase "or the equivalent" with "meets the NCEES Engineering Education Standard."

Rationale

Model Law 130.10 currently uses the term "or the equivalent" as follows.

The following shall be considered as minimum evidence that the applicant is qualified for certification as an engineer intern. A college senior or graduate of an engineering program of 4 years or more accredited by the Engineering Accreditation Commission of ABET (EAC/ABET), or the equivalent, or an engineering master's program accredited by EAC/ABET shall be admitted to the NCEES Fundamentals of Engineering (FE) examination. Upon passing such examination and providing proof of graduation, the applicant shall be certified or enrolled as an engineer intern, if otherwise qualified.

Motion 2 is to replace the phrase "or the equivalent" with the NCEES Engineering Education Standard. This standard provides appropriate criteria for evaluating the equivalency of coursework from non-ABET-accredited programs compared to EAC/ABET review.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

Committee on Examination Policy and Procedures

EPP Motion 1

Move that EAP 1G be adopted as follows:

EAP 1 Administration of Examinations

- A. Guidelines and Procedures. NCEES will publish examination administrative procedures that will provide guidelines and procedures for member boards in the use of NCEES engineering and surveying examinations. The guidelines and procedures will cover matters concerning security, use, scoring, and general administration of such examinations for the purposes for which they are designated to ensure fairness and equality to all jurisdictions and examination candidates.
- B. Testing Regulations. Member boards or their designated representative will provide to each candidate approved to take NCEES examinations information regarding regulations to be observed during the examinations and actions that may be taken in the event of a testing irregularity.
- C. Candidate Admission. Approval of candidates applying to take NCEES examinations shall be by the individual member boards or their designated representative. Candidates must be qualified for admission under the prevailing licensure statutes applicable in the jurisdiction where application is made. Only preauthorized board members, board staff, proctors, designated representatives, and candidates actually taking an examination will be permitted in the examination room. Candidates not allowed admission to the morning session of a pencil-and-paper examination will not be admitted to the afternoon session.
 Once approved to sit for an NCEES examination, candidates will be required to obtain a unique identification number from NCEES. Only candidates with an NCEES-supplied identification number will be allowed admission into the examination site.
- D. Candidates who have passed an examination may not retake that same examination unless required by a member board.
- E. A candidate for a CBT exam may take the examination only one time per testing window and no more than three times in a 12-month period.
- F. The Committee on Examination Audit shall include, as part of its auditing responsibilities, a review of the examination administrative procedures manual for content and effectiveness.
- G. If a member board bans an examinee from registering for an examination, it shall be the responsibility of that member board to notify NCEES of the specific terms and reasons for the ban. NCEES will make this information available to all member boards. The decision as to whether another member board agrees to honor the terms of the original member board's decision to ban this examinee's registration will remain with the individual member boards.

Rationale

The proposed language addresses how individuals banned or not allowed to

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test in a NCEES jurisdiction are handled by NCEES and other jurisdictions.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

EPP Motion 2

Move that be EDP 8A and 8B amended as follows:

EDP 8 Deleting/Combining/Renaming a Discipline or Module from the Examination Program

- A. If in two consecutive administrations of pencil-and-paper examinations, there have been fewer than 50 total first-time examinees from NCEES jurisdictions in a specific PE, PS, or FS examination or module, or if in a two-year period, there are fewer than 1,000 first-time examinees from NCEES jurisdictions in a specific FE discipline module, the Committee on Examination Policy and Procedures (EPP) shall review the desirability of continuing the subject examination or module and make one of the following recommendations to the board of directors:
 - 1. Continue to prepare the examination or module.
 - 2. Discontinue the examination or module.
 - 3. Put the examination or module on probation and recommend specific remedial action that may include combining the examination with another examination or other such action as the EPP Committee deems appropriate. If such remedial action fails to increase total first-time takers to a level that meets the minimum candidate requirements and time period as specified above, the EPP Committee shall recommend appropriate action to the board of directors.
- B. If the population of first-time examinees from NCEES jurisdictions for any NCEES CBT examination or module is not adequate to provide for accurate psychometric analysis, the EPP Committee shall review the desirability of continuing the subject examination or module and make one of the following recommendations to the board of directors:
 - 1. Continue to prepare the examination or module.
 - 2. Discontinue the examination or module.
 - 3. Put the examination or module on probation and recommend specific remedial action that may include combining the examination with another examination or other such action as the EPP Committee deems appropriate. If such remedial action fails to increase total first-time takers to a level that meets the minimum candidate-requirements and time period as specified above, the EPP Committee shall recommend appropriate action to the board of directors.

Rationale

The proposed changes reflect current exam usage review under pencil-andpaper and CBT exams.

Board of directors' position

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Endorses, consent agenda

The Sections supported the motion.

EPP Motion 3

Move that EAP 1A and 8B be amended as follows:

EAP 1 Administration of Examinations

A. Guidelines and Procedures. NCEES will publish examination administrative procedures that will provide guidelines and procedures for member boards in the use of NCEES engineering and surveying examinations. The guidelines and procedures will cover matters concerning security, use, scoring, and general administration of such examinations for the purposes for which they are designated to ensure fairness and equality to all fair and equitable treatment of jurisdictions and examination candidates.

EAP 8 Release and Use of Examination Results

B. NCEES shall strive to ensure that the validity and integrity of the examinations are preserved and examinees are treated fairly in a fair and equitable manner. NCEES reserves the right to treat exam scores as final and not subject to change after one year has passed from the date of release from NCEES to the member boards. If there is a post-roster change within a year of the date NCEES releases the examination results roster to the member boards, then NCEES will notify the member board only if the post-roster change alters a candidate's status from "fail" to "pass."

NCEES reserves the right to notify the member boards at any time if it learns that a candidate engaged in any improper conduct relating to the exam on which the score was obtained or took any action that jeopardized the security of any other NCEES exam or exam administration.

Rationale

The proposed language will provide consistent language between EAP 1, EAP 7, and EAP 8 regarding the treatment of examinees.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

EPP Motion 4

Move that EAP 1 be amended as follows:

EAP 1 Administration of Examinations

A. Guidelines and Procedures. NCEES will publish examination administrative procedures that will provide guidelines and procedures for

- member boards in the use of NCEES engineering and surveying examinations. The guidelines and procedures will cover matters concerning security, use, scoring, and general administration of such examinations for the purposes for which they are designated to ensure fairness and equality to all jurisdictions and examination candidates.
- B. Testing Regulations. Member boards or their designated representative will provide to each candidate approved to take NCEES examinations information regarding regulations to be observed during the examinations and actions that may be taken in the event of a testing irregularity.
- C. Candidate Admission. Approval of candidates applying to take NCEES examinations shall be by the individual member boards or their designated representative. Candidates must be qualified for admission under the prevailing licensure statutes applicable in the jurisdiction where application is made. Only preauthorized board members, board staff, proctors, designated representatives, and candidates actually taking an examination will be permitted in the examination room. To sit for an NCEES examination, candidates will be required to obtain a unique identification number from NCEES. Only candidates with an NCEES-supplied identification number will be allowed admission into the examination site. Candidates not allowed admission to the morning session of a pencil-and-paper examination will not be admitted to the afternoon session.
- D. For pencil-and-paper examinations, only preauthorized board members, board staff, proctors, designated representatives, and candidates actually taking an examination will be permitted in the examination room. Once approved to sit for an NCEES examination, candidates will be required to obtain a unique identification number from NCEES. Only candidates with an NCEES-supplied identification number will be allowed admission into the examination site.
- <u>**ĐE**</u>. Candidates who have passed an examination may not retake that same examination unless required by a member board.
- EF. A candidate for a CBT exam may take the examination only one time per testing window and no more than three times in a 12-month period.
- FG. The Committee on Examination Audit shall include, as part of its auditing responsibilities, a review of the examination administrative procedures manual for content and effectiveness.

Rationale

The proposed language in EAP 1C addresses a candidate's admission to an examination and includes updates to reflect CBT exams. The new section following EAP 1C is proposed to address who is permitted in pencil-and-paper exams.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

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EPP Motion 5

Move that EAP 13 be amended as follows:

EAP 13 Exam Administration Proctors for Administration of Pencil-and-Paper Examinations

Any person who teaches a refresher course <u>or is actively involved in</u> preparation of non-NCEES-sponsored review material for an NCEES <u>penciland-paper</u> examination shall not serve as a proctor for any NCEES examination.

Rationale

The proposed language further defines individuals who cannot serve as proctors for pencil-and-paper examinations.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

EPP Motion 6

administration.

Move that EAP 8F be deleted in its entirety and that EAP 10 be amended as follows:

EAP 8 Release and Use of Examination Results

- A. Because the examination results are the property of the member boards of NCEES, examinee results shall be released only to the respective member boards or their designee.
- B. NCEES shall strive to ensure that the validity and integrity of the examinations are preserved and examinees are treated fairly. NCEES reserves the right to treat exam scores as final and not subject to change after one year has passed from the date of release from NCEES to the member boards. If there is a post-roster change within a year of the date NCEES releases the examination results roster to the member boards, then NCEES will notify the member board only if the post-roster change alters a candidate's status from "fail" to "pass."
 NCEES reserves the right to notify the member boards at any time if it learns that a candidate engaged in any improper conduct relating to the exam on which the score was obtained or took any action that jeopardized the security of any other NCEES exam or exam
- C. Examination results for any examinee suspected of an exam irregularity will be provided in perpetuity to the affected member board in a report segregated from all other examinee score reports. This special report will identify the examinee and provide the examinee score information. After the release of the special score report, NCEES will provide the member board with the results of any analysis conducted or other information pertaining to the suspected irregularity. The member board will conduct a review and notify NCEES of its findings and any action taken. An examination irregularity is one that potentially compromises the exam

integrity or provides individual candidates with benefits not afforded to other candidates.

D. Examination results for any examinee who fails to comply with the conditions stated in the Testing Regulations are subject to invalidation by NCEES in accordance with the list below. Exam irregularities that may be grounds for exam invalidation by the member boards are included in the second list below. The identity of any examinee whose results are invalidated and the reason for invalidation will be provided to the affected member board. Examinees identified by post-exam collusion analysis are subject to EAP 8C above.

The following are the items in the Testing Regulations that are grounds for a candidate to be dismissed from the exam room and for a candidate's exam results to be invalidated by NCEES:

- Having a cell phone in his or her possession
- Having a device with copying, recording, or communication capabilities in his or her possession. These include but are not limited to cameras, pagers, PDAs, radios, headsets, tape players, calculator watches, electronic dictionaries, electronic translators, transmitting devices, and digital media players such as iPods.
- Having a calculator that is not on the NCEES-approved list
- Removing pages from his or her exam booklet on pencil-and-paper examinations
- Leaving the exam area without authorization
- The following are the items in the Testing Regulations that are grounds for a candidate's exam results to be invalidated by a member board:
- Having loose papers, legal pads, writing tablets, or unbound notes in his or her possession
- Using a non-NCEES writing instrument or eraser to complete any portion of the exam
- Beginning the exam before the proctor instructs him or her to do so
- Failing to stop writing immediately when time is called on penciland-paper examinations
- Writing on anything other than the exam booklet or answer sheet;
 writing in the FE Supplied-Reference Handbook
- Violating any other terms stated in these regulations that are cause for dismissal or exam invalidation
- The following item in the Testing Regulations falls under collusion and is already grounds for invalidation by the member boards:
- Copying from another examinee's answer sheet or colluding with other examinees
- E. All communications relating to an examinee's results should be between the examinee and the board to which the examinee applied to be licensed.
- F. When examinations are offered outside the boundaries of NCEES jurisdictions and are not to be used for licensing, the results may be returned to the sponsoring organization.

considered and referred to as one 16-hour examination. For the Structural Engineering examination, a candidate may sit for either component in separate exam administrations but must receive acceptable results on both components within a five-year period in order to pass the examination. Receiving an acceptable result on only one 8-hour component shall not be sufficient for any licensure purposes.

EAP 10 NCEES Examinations Offered to a Foreign Entity NCEES may contract to provide NCEES examinations to a foreign entity (outside the geographic jurisdiction of a member board), subject to the approval of the Council. The chief executive officer may be authorized by the NCEES board of directors to enter into discussions with a foreign entity concerning the administration of NCEES examinations at a foreign site. The discussions will include an assurance that NCEES examinations will be administered in full compliance with all NCEES examination policies and procedures. Except as allowed under EAP 2, pencil-and-paper NCEES examinations shall not be administered at a foreign site prior to the examinations being administered in member boards' jurisdictions and computer-based NCEES examinations shall not be administered at a foreign site outside the approved testing windows. Based upon a determination that these conditions will be met, a draft agreement that defines areas of responsibility for the foreign entity and NCEES may be created. The agreement will require, at a minimum, that all costs borne by NCEES to carry out the provisions of the agreement will be reimbursed.

For any agreement approved by the Council, NCEES will establish minimum criteria for candidates of the foreign entity that are in general conformance with the existing NCEES *Model Law* and *Model Rules*. NCEES will retain the score information for examinees of foreign entities and will transmit that information to any member board when requested.

The examinations may be used to assist examinees interested in applying for licensure as a professional engineer or surveyor with an NCEES member board as well as an outcomes assessment tool to assist in measuring the outcomes of a foreign-based education system.

However, in the event that the examinee elects to use the results of the examination for the purpose of applying for licensure, the member board may not be precluded from imposing any additional requirements related to state licensure, including but not limited to educational and experience requirements.

Examinee performance data from examinations provided to a foreign entity shall not be included in exam evaluation or development, to establish cut scores, or included in exam result statistics for NCEES jurisdictions.

Examinee performance data from exams provided to a foreign entity may be evaluated and reported separately.

NCEES may release examinee performance data to an ABET accredited foreign educational program or to the foreign governing body or professional organization as provided in the contract or as approved by the board of directors.

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Rationale

The proposed language clarifies the use and release of exam results offered by a foreign entity.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

EPP Motion 7

Move that EDP 17 be amended as follows:

EDP 17 Examination Audits

The Examination Audit Committee shall audit all examinations developed by NCEES. The following constraints shall be used:

- A. Pencil-and-paper examinations
 - 1. All benchmark exams shall be audited.
 - 2. Each exam <u>shall</u> be audited at least once between benchmark exam audits.
 - 3. No There shall be no more than four years between audits.
- B. CBT examinations
 - 1. The CBT item pool for all benchmark exams representative examinations (as created by the testing service psychometrician) from the benchmark item pool shall be audited.
 - 2. Each exam Representative examinations shall be audited at least once between benchmark exam-item pool audits.
 - 3. No There shall be no more than four years between audits.

The president-elect shall, in developing charges for the Examination Audit Committee, develop a list of examinations for audit in consultation with the current chair of the Examination Audit Committee and the NCEES examination services director. Circumstances may prevail that would affect which examinations are selected for audit in a given year.

The Examination Audit Committee shall review each exam audited as to its conformance with specified criteria set forth in the Examination Audit Committee procedures.

Rationale

The proposed language is to define the use of a CBT representative exam for exam audits.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

EPP Motion 8

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Move that EAP 8A and 8E-8G be amended as follows:

EAP 8 Release and Use of Examination Results

- A. Because the examination results are the property of the member boards of NCEES, examinee results shall be released only to the respective member boards or their designee. Examination results shall be released only to the respective member board, to its designee, or directly to examinees as directed by the member board.
- B. NCEES shall strive to ensure that the validity and integrity of the examinations are preserved and examinees are treated fairly. NCEES reserves the right to treat exam scores as final and not subject to change after one year has passed from the date of release from NCEES to the member boards. If there is a post-roster change within a year of the date NCEES releases the examination results roster to the member boards, then NCEES will notify the member board only if the post-roster change alters a candidate's status from "fail" to "pass."
 NCEES reserves the right to notify the member boards at any time if it learns that a candidate engaged in any improper conduct relating to the exam on which the score was obtained or took any action that jeopardized the security of any other NCEES exam or exam administration.
- C. Examination results for any examinee suspected of an exam irregularity will be provided in perpetuity to the affected member board in a report segregated from all other examinee score reports. This special report will identify the examinee and provide the examinee score information. After the release of the special score report, NCEES will provide the member board with the results of any analysis conducted or other information pertaining to the suspected irregularity. The member board will conduct a review and notify NCEES of its findings and any action taken. An examination irregularity is one that potentially compromises the exam integrity or provides individual candidates with benefits not afforded to other candidates.
- D. Examination results for any examinee who fails to comply with the conditions stated in the Testing Regulations are subject to invalidation by NCEES in accordance with the list below. Exam irregularities that may be grounds for exam invalidation by the member boards are included in the second list below. The identity of any examinee whose results are invalidated and the reason for invalidation will be provided to the affected member board. Examinees identified by post-exam collusion analysis are subject to EAP 8C above.

The following are the items in the Testing Regulations that are grounds for a candidate to be dismissed from the exam room and for a candidate's exam results to be invalidated by NCEES:

- Having a cell phone in his or her possession
- Having a device with copying, recording, or communication capabilities in his or her possession. These include but are not limited to cameras, pagers, PDAs, radios, headsets, tape players, calculator watches, electronic dictionaries, electronic translators, transmitting devices, and digital media players such as iPods.

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- Having a calculator that is not on the NCEES-approved list
- Removing pages from his or her exam booklet on pencil-and-paper examinations
- Leaving the exam area without authorization

The following are the items in the Testing Regulations that are grounds for a candidate's exam results to be invalidated by a member board:

- Having loose papers, legal pads, writing tablets, or unbound notes in his or her possession
- Using a non-NCEES writing instrument or eraser to complete any portion of the exam
- Beginning the exam before the proctor instructs him or her to do so
- Failing to stop writing immediately when time is called on penciland-paper examinations
- Writing on anything other than the exam booklet or answer sheet;
 writing in the FE Supplied-Reference Handbook
- Violating any other terms stated in these regulations that are cause for dismissal or exam invalidation

The following item in the Testing Regulations falls under collusion and is already grounds for invalidation by the member boards:

- Copying from another examinee's answer sheet or colluding with other examinees
- E. All communications relating to an examinee's results should be between the examinee and the board to which the examinee applied to be licensed.
- FE. When examinations are offered outside the boundaries of NCEES jurisdictions and are not to be used for licensing, the results may be returned to the sponsoring organization.
- GF. The Structural Engineering examination shall be considered and referred to as one 16-hour examination. For the Structural Engineering examination, a candidate may sit for either component in separate exam administrations but must receive acceptable results on both components within a five-year period in order to pass the examination. Receiving an acceptable result on only one 8-hour component shall not be sufficient for any licensure purposes.

Rationale

The proposed language clarifies and defines the release of exam results.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

EPP Motion 9

Move that EDP 1 be amended as follows:

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EDP 1 Examinations Titles

It shall be the policy of NCEES in all publications and correspondence to refer to the respective examinations only as follows:

- A. Fundamentals of Engineering (FE) examination
- B. Principles and Practice of Engineering (PE) examination, including the Structural Engineering (SE) examination The PE examinations are designated Group I or Group II as recommended by the Committee on Examinations for Professional Engineers (EPE) and approved by the board of directors.
 - 1. Group I examinations are prepared solely by NCEES.
 - 2. Group II examinations are prepared jointly by NCEES and a society that agrees to sponsor the examination in its discipline.
- C. Fundamentals of Surveying (FS) examination
- D. Principles and Practice of Surveying (PS) examination

The purpose of the examinations is to assess licensure candidates' abilities to practice competently as engineers or surveyors and to assist member boards in the regulation of the practice of engineering and surveying as it relates to the welfare of the public in safeguarding life, health, and property.

Rationale

The policy title was renamed for clarity. The purpose of the NCEES exams was added to the policy.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

Definition of Engineering Task Force

Definition of Engineering Motion 1

Move that the Model Law 110.20 A1 be amended as follows:

Model Law 110.20 Definitions

A. Engineer

Engineer—The term "Engineer," within the intent of this Act, shall
mean an individual who is qualified to practice engineering by reason
of special knowledge and use of the mathematical, physical, and
engineering sciences and the principles and methods of engineering
analysis and design, acquired by engineering education and
engineering experience engineering education, training, and
experience in the application of engineering principles and the
interpretation of engineering data.

Rationale

The proposed revisions are to provide greater clarity to the definition of engineering.

Board of directors' position

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Endorses, consent agenda

The Sections do not support this motion as it does not address examinations. Discussion held to offer an amendment at the Annual meeting.

Definition of Engineering Motion 2

Move that the *Model Law* 110.20 A5 be amended as follows:

Model Law 110.20 Definitions

A. Engineer

- 5. Practice of Engineering The term "Practice of Engineering," as used in this Act, shall mean any service or creative work, the adequate performance of which requires engineering education, training, and experience in the application of special knowledge of the mathematical, physical, and engineering sciences to such services or creative work as the following:
 - Consultation, investigation, expert technical testimony, evaluation, planning, design, design coordination, and/or commissioning of engineering works, products, and systems
 - b. Planning the use of land, air, and/or water
 - c. Teaching of advanced engineering subjects
 - d. Performing engineering surveys and studies
 - The review and/or management of construction for the purpose of monitoring and/or ensuring compliance with drawings and specifications

Any of the items above that embraces such services or work, either public or private, in connection with any utilities, structures, buildings, machines, equipment, processes, work systems, projects, communication systems, transportation systems, and industrial or consumer products, or equipment of a control systems, communications, mechanical, electrical, hydraulic, pneumatic, chemical, environmental, or thermal nature, insofar as they involve safeguarding life, health, or property, and including such other professional services as may be necessary to the planning, progress, and completion of any engineering services are considered the practice of engineering.

Design coordination includes the review and coordination of those technical submissions prepared by others, including as appropriate and without limitation, consulting engineers, architects, landscape architects, surveyors, and other professionals working under the direction of the engineer.

Engineering surveys include all survey activities required to support the sound conception, planning, design, construction, maintenance, and operation of engineered projects, but exclude the surveying of real property for the establishment of land boundaries, rights of way, easements, and the dependent or independent surveys or resurveys of the public land survey system.

A person shall be construed to practice or offer to practice engineering, within the meaning and intent of this Act, who practices any discipline or branch of the profession of engineering; or who, by verbal claim, sign, advertisement, letterhead, card, or in any other way represents the person to be a professional engineer, or through the use of some other title implies that the individual is a professional engineer or that the person is licensed or authorized under this Act; or who holds the person out as able to perform, or who does perform any engineering service or work or any other service designated by the practitioner which is recognized as engineering.

A. Engineer

5. Practice of Engineering—The term "Practice of Engineering," as used in this Act, shall mean any service or creative work requiring engineering education, training, and experience in the application of engineering principles and the interpretation of engineering data to engineering activities that potentially impact public health, safety, property, and welfare.

The services may include, but not be limited to, providing planning, studies, designs, design coordination, drawings, specifications, and other technical submissions; teaching of engineering design courses; performing surveying that is incidental to the practice of engineering; and reviewing construction or other design products for the purposes of monitoring compliance with drawings and specifications related to engineered works.

Surveying incidental to the practice of engineering excludes the surveying of real property for the establishment of land boundaries, rights of way, easements, and the dependent or independent surveys or resurveys of the public land survey system.

A person shall be construed to practice engineering, within the meaning and intent of this Act, if he or she does any of the following:

- a. Practices any discipline of the profession of engineering or holds
 himself or herself out as able and entitled to practice any
 discipline of engineering
- b. Represents himself or herself to be a professional engineer by verbal claim, sign, advertisement, letterhead, or card or in any other way
- c. Through the use of some other title, implies that he or she is a professional engineer or licensed under the act

Rationale

The proposed revisions are to provide greater clarity to the definition of engineering and greater specificity to incidental surveys performed by a

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professional engineer.

Board of directors' position No position, non-consent agenda

The Sections supported the motion.

Committee on Member Board Administrators

MBA Motion 1

Move that the UPLG Committee be charged with incorporating the following language into *Model Law* 130.10 C:

Model Law 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.
 - 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.
 - a. Licensure by Comity
 - (1) An individual holding a certificate of licensure to engage in the practice of engineering issued by a proper authority of any jurisdiction or any foreign country, based on requirements that do not conflict with the provisions of this Act and possessing credentials that are, in the judgment of the board, of a standard not lower than that specified in that provides proof of minimal competency and comparable to the applicable licensure act in effect in this jurisdiction at the time such certificate was issued may, upon application, which may include a Council Record with NCEES, be licensed without further examination except as required to examine the applicant's knowledge of statutes, rules, and other requirements unique to this jurisdiction; or *******

Rationale

By making this change in the *Model Law*, mobility would no longer hinge on a set of regulations that were in effect in the recent or distant past. For the sake of mobility and public protection, comity licensure could now be based upon a set of criteria that is reasonable and justifiable and that allows the member boards to fulfill their statutory duties of protection of the public. With these obsolete concepts, many qualified professional engineers and surveyors cannot get licensed in many jurisdictions; this is contrary to what the mission of NCEES is about.

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The recommended next step would be to adopt regulatory language or a policy to define what that minimal set of criteria should be to determine minimum competency for comity applicants. Factors that should be considered would include the following:

- Licensed in another jurisdiction for ____ years without disciplinary action;
 and/or
- If requirements for licensure that were in effect at the time of original license would have been met; and/or
- If the licensee can show proof of obtaining the required number of professional development hours; and/or
- Lack of criminal action.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

Committee on Examinations for Professional Surveyors

EPS Motion 1

Move that PS 9 be amended as follows:

PS 9 Bachelor of Science Degrees in Surveying Engineering, Surveying and Mapping, and Geodesy

NCEES recommends that the boards of licensure require any applicant who applies for licensure to practice surveying in any jurisdiction of the United States and who has not previously been licensed to practice by one of the boards of licensure for professional surveyors be required to first demonstrate that in the cases of four year surveying degrees, such applicant possesses a four-year bachelor NCEES recommends that licensure applicants who are not already licensed to practice surveying in any jurisdiction possess a four-year bachelor of science degree acquired through the successful completion of a program for said degree accredited by the Engineering Accreditation Commission of ABET (EAC/ABET), the Applied Science Accreditation Commission of ABET (ASAC/ABET), Engineering Technology Accreditation Commission of ABET (ETAC/ABET), or a board-approved substantially equivalent program.*

NCEES expects all its examination preparation to follow current *Model Law* and *Model Rules*. Model Law Surveyors should be utilized to do the following:

- Prepare FS examination content review
- <u>pPrepare FS examinations items</u>, and Model Law Surveyors should be utilized to
- <u>eE</u>stablish <u>cut scores for FS</u> examinations. <u>cut scores</u>

The content of the FS examination shall test the knowledge focuses on a knowledge content review obtained from an FS content review (a formal

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survey of practicing surveyors designed to identify the tasks performed by the profession with regard to health, safety, and welfare of the public and the knowledge necessary to perform those tasks). Such knowledge is generally obtained <u>in-by earning</u> a baccalaureate surveying degree that will enable the individual to protect the public.

Recognizing that newly accredited proposed EAC/ABET, ASAC/ABET, or ETAC/ABET programs must spend several years in development before attaining accredited status, NCEES recommends that all applicants be considered as having graduated from an EAC/ABET-, ASAC/ABET-, or ETAC/ABET-accredited program if their program is/was accredited within three years after their graduation.

* Refer to the NCEES position paper "Benefits of a Four-Year Degree Requirement for Surveying Licensure" (2011), available as a PDF on ncees.org under My NCEES.

Rationale

Paragraph 1: The language in the first paragraph is hard to follow and somewhat of a run-on sentence. The Council recommends, and has for some time, that applicants (not already licensed) for surveying licensure possess a four-year baccalaureate degree. In the late 1990s and prior to a content review, the NCEES board of directors voted to make the FS exam more reflective of the curriculum taught in a four-year program. The words used were "knowledge-based exam," and the PS exam was to remain a "practiced-based exam." This action morphed into the present definition of a Model Law Surveyor, which requires a 4-year degree as described in this position.

Paragraph 2: To be defensible, professional licensure exam preparation needs to follow a prescribed procedure (demand, PAKS and/or content review, blueprint, item writing, bench mark exams, cut scores, etc.). Most of this is carefully crafted and explained in the NCEES *Exam Development Procedures Manual*. What is in the *Model Laws* and *Model Rules* is not relevant to exam content or preparation procedures. There could be some guidance assumed here relative to the statement in the first paragraph.

Similarly with regard to the FS exam (again knowledge based and reflecting our Model Law Surveyor requirements), the Council should encourage Model Law Surveyors to carry out the three functions that have been identified. A professional surveyor with only a high school education, with a liberal arts degree, or with other degree most likely will not have the depth and breadth of the knowledge to opine on what is necessary at time of licensure (at the fundamental level), to prepare FS items, or to be a meaningful participant in a cut-score study. However, there are many non-Model Law Surveyors that are capable and competent to do those functions.

Paragraph 3: As written, this paragraph it is not accurate and does not match the *Exam Development Procedures Manual*. The FS exam is knowledgebased and not curriculum-based as stated in the NCEES position paper Professional Engineer, Land Surveyor & Architect Sections Meeting Minutes August 13, 2014 Page 31 of 60

"Benefits of a Four-Year Degree Requirement for Surveying Licensure." This position paper is referenced in PS 9. The last portion of this sentence states what the exam will accomplish or do. The position paper states that exam is not the most effective method for public protection, only one leg of the total process. See rationale in Paragraphs 1 and 2 above.

Board of directors' position

Does not endorse, non-consent agenda

Board of directors' rationale

The NCEES board of directors does not support this modification to PS 9. The board's opposition is based on the existing conflicts between current language in the *Model Law* and *Model Rules*. The board is of the opinion that no modifications should be endorsed for PS 9 pending further action by the Council to remedy the conflicts between the *Model Law* and *Model Rules*.

The Sections do not support the motion.

Committee on Uniform Procedures and Legislative Guidelines

UPLG Motion 1

Move that the *Model Rules* 210.20 B be amended as follows:

Model Rules 210.20 Definitions

- B. The following definitions are included in the *Model Rules* only:
 - Model Law Engineer—The term "Model Law Engineer" refers to an individual who has obtained licensure as a professional engineer in at least one jurisdiction as the result of satisfying the following conditions:
 - a. Is a graduate who has earned Earns one of the following:
 - A bachelor's degree in engineering from a program accredited by the Engineering Accreditation Commission of ABET (EAC/ABET)
 - (2) A master's degree in engineering from a program accredited by the Engineering Accreditation Commission of ABET (EAC/M-ABET)
 - Passes the NCEES Fundamentals of Engineering (FE)
 examination and an NCEES Principles and Practice of
 Engineering (PE) examination using the NCEES cut score
 - c. Meets one of the following experience requirements:
 - Completes 4 years of acceptable engineering experience after confirmation of a bachelor of science degree in an engineering program accredited by EAC/ABET
 - (2) Completes 3 years of acceptable engineering experience after confirmation of a bachelor of science degree in engineering from an EAC/ABET-accredited engineering program and holds a master's degree in engineering
 - (3) Completes 3 years of acceptable engineering experience after confirmation of a master's degree in engineering from an

EAC/M-ABET-accredited engineering program

- (4) Completes 2 years of acceptable engineering experience and has an earned doctoral degree in engineering from an institution that offers EAC/ABET-accredited programs
- d. Has a record clear of disciplinary action
 To maintain Model Law Engineer status, the individual must
 maintain a record clear of disciplinary action pursuant to NCEES
 Model Law, Section 150.10.
- 2. Model Law Engineer 2020 (effective January 1, 2020)—The term "Model Law Engineer 2020" refers to an individual who has obtained licensure as a professional engineer in at least one jurisdiction as the result of satisfying the following conditions:
 - a. Is a graduate who has earned Earns one of the following:
 - A bachelor's degree in engineering from a program accredited by EAC/ABET and has completed a master's or earned doctoral degree in engineering from an institution that offers EAC/ABET-accredited programs, or the equivalent
 - (2) A bachelor's degree in engineering from a program accredited by EAC/ABET and has completed additional coursework as defined in Section 230.10 D
 - (3) A master's degree in engineering from a program accredited by EAC/M-ABET
 - b. Passes the NCEES FE examination and an NCEES PE examination using the NCEES cut score
 - c. Meets one of the following experience requirements:
 - Completes 4 years of acceptable engineering experience after confirmation of a bachelor of science degree in an engineering program accredited by EAC/ABET
 - (2) Completes 3 years of acceptable engineering experience after confirmation of a bachelor of science degree in engineering from an EAC/ABET-accredited engineering program and holds a master's degree in engineering
 - (3) Completes 3 years of acceptable engineering experience after confirmation of a master's degree in engineering from an EAC/M-ABET-accredited engineering program
 - (4) Completes 2 years of acceptable engineering experience and has an earned doctoral degree in engineering from an institution that offers EAC/ABET-accredited programs
 - d. Has a record clear of disciplinary action To maintain Model Law Engineer 2020 status, the individual must maintain a record clear of disciplinary action pursuant to NCEES Model Law, Section 150.10.
- 3. Model Law Surveyor—The term "Model Law Surveyor" refers to an individual who has obtained licensure as a professional surveyor in at least one jurisdiction as the result of satisfying the following conditions:
 - a. Is a graduate of Graduates from an EAC/ABET-accredited Surveying Engineering Group program, a Surveying and Geomatics Group program accredited by the Applied Science

- Accreditation Commission of ABET, Inc. (ASAC/ABET), or a Surveying and Geomatics Group program accredited by the Engineering Technology Accreditation Commission of ABET, Inc. (ETAC/ABET)
- Passes the NCEES Fundamentals of Surveying (FS) examination and the NCEES Principles and Practice of Surveying (PS) examination 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 accredited by ASAC/ABET, EAC/ABET, or ETAC/ABET, which may include up to 1 year of experience for a graduate with a surveying/geomatics degree
- d. Has a record clear of disciplinary action
 The jurisdiction may also require a Model Law Surveyor to pass its state-specific examination for surveyors. To maintain Model Law Surveyor status, the individual must maintain a record clear of disciplinary action pursuant to NCEES *Model Law*, Section 150.10.
- 4. Model Law Structural Engineer—The term "Model Law Structural Engineer" refers to an individual who has obtained licensure in at least one jurisdiction as the result of satisfying the following conditions:
 - a. Is a graduate who has earned Earns one of the following:
 - (1) A bachelor's degree in engineering from a program accredited by EAC/ABET
 - (2) A master's degree in engineering from a program accredited by EAC/M-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.
 - Passes the NCEES FE examination
 - d. Passes one of the following:
 - (1) 16 hours of NCEES structural examinations, 8 hours of which were from the SE II taken prior to January 1, 2011
 - (2) 16-hour state-written structural examinations taken prior to 2004
 - (3) NCEES SE II plus 8-hour state-written structural examinations taken prior to January 1, 2011
 - (4) NCEES 16-hour Structural Engineering (SE) examination taken after January 1, 2011
 - e. Meets one of the following experience requirements:
 - Completes 4 years of acceptable structural engineering experience after confirmation of a bachelor of science degree in an engineering program accredited by EAC/ABET
 - (2) Completes 3 years of acceptable structural engineering experience as an engineer intern after confirmation of a bachelor of science degree in engineering from an EAC/ABET-accredited engineering program and holds 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)
- (3) Completes 3 years of acceptable structural engineering experience as an engineer intern after confirmation of a master's degree in engineering from an EAC/M-ABETaccredited engineering program that includes at least 6 semester (9 quarter) hours of structural engineering (in addition to the 18 hours noted above)
- (4) Completes 2 years of acceptable structural engineering experience as an engineer intern and has an earned doctoral degree in engineering focused on structural engineering from an institution that offers EAC/ABET-accredited programs
- f. Has a record clear of disciplinary action
 To maintain Model Law Structural Engineer status, the individual
 must maintain a record clear of disciplinary action pursuant to
 NCEES *Model Law*, Section 150.10.
- 5. Model Law Structural Engineer 2020 (effective January 1, 2020)— The term "Model Law Structural Engineer 2020" refers to an individual who has obtained licensure in at least one jurisdiction as the result of satisfying the following conditions:
 - a. Is a graduate who has earned Earns one of the following:
 - (1) A bachelor's degree in engineering from a program accredited by EAC/ABET and has completed a master's or earned doctoral degree in engineering from an institution that offers EAC/ABET-accredited programs, or the equivalent
 - (2) A bachelor's degree in engineering from a program accredited by EAC/ABET and has completed additional coursework as defined in Section 230.10 D
 - (3) A master's degree in engineering from a program accredited by EAC/M-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 NCEES FE examination
 - d. Passes one of the following:
 - (1) 16 hours of NCEES structural examinations, 8 hours of which were from the SE II taken prior to January 1, 2011
 - (2) 16-hour state-written structural examinations taken prior to 2004
 - (3) NCEES SE II plus 8-hour state-written structural examinations taken prior to January 1, 2011
 - (4) NCEES 16-hour SE examination taken after January 1, 2011
 - e. Meets one of the following experience requirements:
 - (1) Completes 4 years of acceptable structural engineering experience after confirmation of a bachelor of science degree in an engineering program accredited by EAC/ABET
 - (2) Completes 3 years of acceptable structural engineering experience as an engineer intern after confirmation of a bachelor of science degree in engineering from an EAC/ABET-accredited engineering program and holds 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)
- (3) Completes 3 years of acceptable structural engineering experience as an engineer intern-after confirmation of a master's degree in engineering from an EAC/M-ABET-accredited engineering program that includes at least 6 semester (9 quarter) hours of structural engineering (in addition to the 18 hours noted above)
- (4) Completes 2 years of acceptable structural engineering experience as an engineer intern and has an earned doctoral degree in engineering focused on structural engineering from an institution that offers EAC/ABET-accredited programs
- f. Has a record clear of disciplinary action To maintain Model Law Structural Engineer 2020 status, the individual must maintain a record clear of disciplinary action pursuant to NCEES *Model Law*, Section 150.10.

Rationale

Changing "is a graduate who has earned" to "Earns" makes the structure of the list parallel to the others. Striking "as an engineer intern" in the Model Law Structural Engineer sections makes the definition consistent with that of the Model Law Engineer and Model Law Surveyor sections.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 2

Move that the Model Rules 220.10 A and B be amended as follows:

Model Rules 220.10 Organization of the Board

- A. Composition and Selection of <u>Vacancy on</u> the Board The board consists of <u>finsert number</u>] professional engineers, <u>finsert number</u>] professional surveyors, and <u>finsert number</u>] public members, who are appointed by the governor. They are appointed on a staggered basis so that the terms of members expire at different times. The term of each member is <u>finsert number</u>] years. Each member holds office until the expiration of the term for which appointed or until a successor has been appointed and has qualified. If a vacancy on the board occurs for any reason and the governor fails to appoint a successor within 3 months, the board has the power to fill the vacancy <u>may appoint a provisional member</u> until the governor makes an appointment. (Section 120.10, Board Appointments, Terms, NCEES Model Law)
- B. Qualifications of Members
 - 1. Each professional engineer member of the board shall be a citizen of the United States, a resident of this jurisdiction, and licensed as a professional engineer in this jurisdiction. The member must have a

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- record of the lawful practice of engineering as a professional engineer for at least 12 years, of which 5 years must have been in responsible charge of engineering projects.
- 2. Each professional surveyor member of the board shall be a citizen of the United States, a resident of this jurisdiction, and licensed as a professional surveyor in this jurisdiction. The member must have a record of the lawful practice of surveying as a professional surveyor for at least 12 years, of which 5 years must have been in responsible charge of surveying projects.
- 3. Each public member of the board must shall not be or have been a professional engineer or professional surveyor and shall be a citizen of the United States and resident of this jurisdiction. (Section 120.20, Board Qualifications, NCEES Model Law)

Rationale

In its review, UPLG discussed that some of the language in the *Model Rules* is exactly the same as that of the language in the *Model Law*, without additional information or clarification. In some of these cases, the committee felt that the language in the rules is not needed. In several of the motions, it proposes to delete some of the duplicated language.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 3

Move that the *Model Rules* 220.10 C and D be amended as follows:

Model Rules 220.10 Organization of the Board

C. Officers

The board elects *for appoints*] or appoints annually from its membership as officers a chairperson, a vice chairperson, and a secretary. (*Section 120.50, Board Organization and Meetings, NCEES* Model Law)

D. Meetings

- 1. The board holds at least [insert number] regular meetings each year. Other meetings may be called as prescribed by law. (Section 120.50, Board Organization and Meetings, NCEES Model Law)
- Notices of meeting dates and times are normally given several
 months-[insert amount of time required] in advance for all the regular
 meetings of the year. For special meetings, 5 days' [insert number of
 days] notice must be given.
- 3. Place of meetings is determined in advance by members of the board.
- 4. All meetings are open to the public unless the meeting is closed for reasons defined by the laws of this jurisdiction.

Rationale

The change in C is for consistency with the *Model Law*. The changes in D are to make it easier for boards to insert their specific jurisdictional

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requirements.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 4

Move that the *Model Rules* 220.10 E be deleted as follows:

Model Rules 220.10 Organization of the Board

E. Quorum

A quorum of the board shall consist of no fewer than [insert number] professional engineer members, [insert number] professional surveyor members, and [insert number] public members. (Section 120.50, Board Organization and Meetings, NCEES Model Law)

Rationale

UPLG is moving to strike this language because it repeats exact language from the *Model Law* without providing additional information or clarification.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 5

Move that the Model Rules 220.10 H be amended as follows:

Model Rules 220.10 Organization of the Board

H. Compensation and Expenses

When attending to the work of the board, each member shall-receive compensation as prescribed by the laws of this jurisdiction or by board regulation approved by the appropriate legislative body or authority be entitled to the maximum allowable per diem set by the board. This includes meetings of committees of the board and time spent in necessary travel. Further, members shall be reimbursed for all actual traveling, incidental, and clerical expenses necessarily incurred in carrying out the duties of the members of the board. (Section 120.30, Board Compensation, Expenses, NCEES Model Law)

Rationale

This change is for consistency with the *Model Law*.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 6

Move that the *Model Rules* 220.10 L be amended as follows:

Model Rules 220.10 Organization of the Board

L. Records

The Freedom of Information Act requires that most records, papers, and reports of the board are public in nature and may be obtained from the board upon written request and payment of costs of reproduction, handling, and mailing. Other records, papers, and reports, most of which are confidential, are not considered to be public in nature and are not available except when required by court action or the jurisdiction's public records laws. These include, but are not limited to, examination material for examinations not yet given, file records of examination problems and solutions, examinations scores, letters of inquiry and reference concerning applicants, transcripts of college courses and grades, e-mail addresses, board inquiry forms concerning applicants, pending and closed complaints and investigative files until a formal hearing may commence or until final disciplinary action is taken, cases dismissed without disciplinary action, all other materials of like confidential nature, and information otherwise protected by law. (In part from Section 120.80 E, Records and Reports, NCEES Model Law)

Rationale

The change is so that the language will be compatible with specific jurisdictional requirements.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 7

Move that the *Model Rules* 220.10 N be deleted as follows:

Model Rules 220.10 Organization of the Board

N. Declaratory Rulings

A declaratory ruling is a board response to a request by a member of the public who has inquired about the applicability of any statutory provision or of any regulation or order of the board.

- 1. This board may issue, when requested, declaratory rulings to those persons who are affected by a statutory provision or rule with respect to the applicability of any statutory provision or of any regulation or order of the board.
- 2. Sufficient facts must be supplied in the request to provide the board basis for the issuance of a declaratory ruling.
- Requests for declaratory rulings must be in writing and must specifically state that it is a request for a declaratory ruling.

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4. Declaratory rulings will be provided in accordance with [insert applicable jurisdiction law].

Rationale

UPLG feels that this language does not belong in the *Model Rules* because it is too limiting. The *Model Law* gives the board broad power. By spelling this out so specifically in the rules, the language could legally limit what the board has the power to do.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 8

Move that the Model Rules 220.20 be amended as follows:

Model Rules 220.20 Adoption and Amendment of Rules and Regulations
A. Adoption of Rules and Regulations

Rules and regulations are adopted by this board under the provision of the laws governing the practice of engineering or surveying that may be reasonably necessary for the proper performance of its duties and the regulations of the proceedings before it. They must not be inconsistent with the constitution and laws of this jurisdiction. All rules or regulations adopted, amended, or repealed by this board shall comply with the provision of the administrative procedures act of this Jurisdiction. [insert chapter, title, code, jurisdiction, date]

(Section 120.60, Board Powers, NCEES Model Law)

B. Petition for Adoption, Amendment, or Repeal of Rules and Regulations
An interested person may petition the board requesting the promulgation,
amendment, or repeal of a rule or regulation. The petition shall be
submitted in the following form:

Petition to Adopt, Amend, or Repeal a Rule or Regulation

1.	Name of Petitioner:
	Address of Petitioner:
	Phone #:
2.	Describe the proposed change. (Clearly and concisely describe the proposed changes showing either the new proposal or an amendment with deletions and additions or a statement to repeal a quoted regulation.)
3	Purpose of proposed change (Describe what effect the proposed
٥.	change will have and why you believe it should be made.)
4	Signature of petitioner and date Signature:
	Date:
	Within 30 days, the board shall either deny the petition in writing

C. Procedure for Adoption, Amendment, or Repeal of Rules and Regulations

Procedures for adoption, amendment, or repeal of rules and regulations of this board shall be in compliance with the jurisdiction licensing and administrative procedures act (other names of such acts are likely) of this jurisdiction.

- 1. Regulation is defined as a statement by the board that prescribes law or policy and has legal effect.
- 2. The board must file a notice of proposed promulgation, amendment, or repeal of regulations with the legislative council (or other legislative authority). The notice must be published at least 2 weeks prior to the final promulgation, amendment, or repeal of the regulation and include:
 - A statement of the time, place, and nature of the public hearing at which the proposed, amended, or repealed regulation shall be considered
 - b. Reference to the specific statute that authorizes the promulgation, amendment, or repeal of the particular regulation
 - e. Either the provisions of or a synopsis of the proposed, amended, or repealed regulation

The board must also publish the notice of the proposed promulgation, amendment, or repeal of regulations in accordance with jurisdiction law prior to the final promulgation, amendment, or repeal of the regulation, which shall include:

- a. A statement of time, place, and manner in which interested persons may present their views thereon
- b. A statement of either the terms or substance of the intended action or a description of the subjects and issues involved
- 3. A public hearing on the proposed, amended, or repealed regulation, which shall give interested persons an opportunity to be heard through submission of written data, views, or argument with or without opportunity for oral presentation. Further, an opportunity for oral hearing must be granted if requested by 25 persons, by a government subdivision or agency, or by an association having not less than 25 members. All written and oral submissions respective to the proposed, amended, or repealed regulation must be considered.

D. Publication

If a promulgated, amended, or repealed regulation is to be enacted, the approved regulation must be filed with the proper authority so that it will be published in the jurisdiction register.

- E. Promulgating, Amending, or Repealing Rules in Emergency Situations
 An emergency situation is defined as "an imminent peril to the public health, safety, or welfare." The regulation must be filed with the proper legislative authority (legislative council) with the reasons requiring emergency promulgation. The promulgation, amendment, or repeal of the rule may then be done under the provisions of the jurisdiction specifically stated for emergency proceedings.
- F. Compliance with Administrative Procedures Act All rules or regulations adopted, amended, or repealed by this board shall

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comply substantially with the provision of the administrative procedures act of this Jurisdiction. [insert chapter, title, code, jurisdiction, date]

Rationale

Paragraphs A and F were combined into one paragraph. UPLG proposes striking the rest of the language because these types of regulations are made through the state regulatory change process. A licensing board does not have the authority to do this. The model language should not include language that is referring to a function of another state agency, rather than to the licensing board.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 9

Move that the Model Rules 220.30 be amended as follows:

Model Rules 220.30 Fees

A. Changes in Fee Schedule

Changes in the fee schedule are made by board regulation in accordance with applicable jurisdiction law.

- BA. Application Fees
 - \$[insert amount]—For professional engineer and professional surveyor licensure, as provided in the NCEES Model Law, Section 130.20 B
 - \$[insert amount]—For engineer intern and surveyor intern certification, as provided in the NCEES Model Law, Section 130.20 B
 - \$[insert amount]—For firm certificate of authorization, as provided in the NCEES Model Law, Section 160.40 B
 - 4. When the issuance of a certificate to an applicant is denied, the fee paid shall be retained as an application fee. Applications received without the proper fee will be returned to the applicant. (Section 130.20 C, Application and Fees, NCEES Model Law and Section 160.40 C, Application and Fees, NCEES Model Law)
- CB. Examination Fees
 - Examination fees are determined from time to time by <u>the</u> board regulation in accordance with the provisions of [insert applicable jurisdiction law].
 - 2. The current fees in effect may be obtained from the board.
 - 3. Fees for regrading examinations manual verification of exam results are the same as those charged by NCEES.
 - 4. The examination fees will not be returned to an applicant.

DC. Roster

The fee for a copy of the annual [biennial or other] roster shall be determined by the board based on costs for its publication.

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ED. Renewal Fees

- 1. Renewal fees are payable before the last day of the month of [insert month] each year (other intervals).
- Each licensee and firm holding a certificate of authorization will be notified by the board of the expiration date of his or her certificate of licensure or authorization and the amount of the renewal fee at least 1 month before the expiration date.
- 3. Amount of Renewal Fee—The renewal fee is set by regulation of the board in accordance with the provisions of [insert applicable jurisdiction law].
- 4. Penalties for Late Renewal—Renewal fees in arrears are subject to a penalty for late renewal in accordance with jurisdiction law. After 6 months, a new application may be required to be filed to continue to practice engineering or surveying in this jurisdiction.
 (In part from Section 140.20, Expirations, Renewals, and Reinstatement to Active Practice, NCEES Model Law and Section 160.50, Expirations and Renewals, NCEES Model Law)

FE. Duplicate Certificate Fees

The fee for the issuance of a duplicate certificate or enrollment document to a licensee, firm, or intern is determined by regulation of the board in accordance with the provision of [insert applicable jurisdiction law]. (Section 140.30, Issuance of Duplicate Certificates, NCEES Model Law and Section 160.60, Issuance of Duplicate Certificates, NCEES Model Law)

Rationale

UPLG proposes to delete paragraph A because the language applies to the entire state framework and is therefore not needed; the remaining paragraphs in the section make that clear. The language changes in paragraph C are housekeeping changes to make the language match current practice.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 10

Move that the Model Rules 230.10 A be amended as follows:

Model Rules 230.10 Education Requirements Approved by the Board

A. Undergraduate Engineering Program

The term "an engineering program of 4 years or more" used in Section 130.10 A of the NCEES *Model Law* is interpreted by this board to mean:

- 1. A bachelor's degree in an engineering program accredited by EAC/ABET at the time of the awarding of the degree. (The board may accept the degree if accreditation is received within a-[insert the prescribed period of time].)
- 2. A bachelor's degree in an engineering program not accredited by EAC/ABET, such as those programs recently developed or programs

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offered by foreign schools, but deemed by the board to be substantially equivalent to those programs that have been accredited by EAC/ABET

Rationale

These are housekeeping changes to make the language match current practice and to recognize that ABET accredits programs offered by foreign schools.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 11

Move that the Model Rules 230.40 A be amended as follows:

Model Rules 230.40 Examinations

- A. Classification of Engineering Examinations This jurisdiction or its designee will provide the following examinations, prepared and furnished by NCEES, meeting the requirements of this jurisdiction for licensure as a professional engineer:
 - 1. Examination in tThe NCEES Fundamentals of Engineering (FE) examination, and
 - Examination in <u>t</u>The NCEES Principles and Practice of Engineering (PE) examination in the appropriate engineering discipline (In part from Section 130.30, Examinations, NCEES Model Law)
 - 3. The NCEES Structural Engineering (SE) examination shall be considered and referred to as one 16-hour examination. The SE examination consists of two 8-hour components: the Vertical Forces (gravity/other) and Incidental Lateral component and the Lateral Forces (wind/earthquake) component. A candidate must receive acceptable results on both 8-hour components to pass the SE examination. A candidate may sit for each component in separate exam administrations but must receive acceptable results on both components within a 5-year period. Receiving acceptable results on only one 8-hour component shall not be sufficient for licensure purposes.

Rationale

These are housekeeping changes. Adding "or its designee" acknowledges that the FE and FS exams are administered through NCEES via a testing provider. The other changes are editorial.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 12

Move that the Model Rules 230.40 B and 230.10 D be amended as follows:

Model Rules 230.40 Examinations

- B. Eligibility of Applicant for an Engineering Examination
 - Applicants for licensure as a professional engineer will be permitted to sit for the PE examination upon satisfactorily fulfilling all application requirements of this jurisdiction.
 - 2. No applicant may sit for the PE examination until the board has established that the applicant is eligible for the examinations.
 - Effective January 1, 2020, a graduate of an EAC/ABET-accredited bachelor's program may request that credits earned in excess of the institution's requirements for the applicable degree be applied to satisfy the requirements for an additional 30 credits of acceptable upper-level undergraduate and/or graduate level coursework.
 - 43. Engineering doctorate degree applicants with an undergraduate degree from an EAC/ABET-accredited program and a doctorate degree in engineering from an institution that offers EAC/ABETaccredited undergraduate programs in the doctorate degree field of engineering and with experience that meets the qualifications defined by the board may sit for the PE examination without having taken or passed the FE examination.

Model Rules 230.10 Education Requirements Approved by the Board

- D. Post-Graduate Minimum Required Education
 - The term "acceptable amount of coursework" used in Section 130.10 C.1.c of the *Model Law* is interpreted to mean the following:
 - 1. A minimum of an additional 30 credits of coursework, none of which were used to fulfill the bachelor's degree requirement
 - All 30 additional credits shall be equivalent in intellectual rigor and learning assessments to upper-level undergraduate and/or graduate courses offered at institutions that have a program accredited by EAC/ABET.
 - 3. Of the minimum required 30 additional credits, a minimum of 15 credits must comply with Section 230.10 C.1.
 - 4. Effective January 1, 2020, a graduate of an EAC/ABET-accredited bachelor's program may request that credits earned in excess of the institution's requirements for the applicable degree be applied to satisfy the requirements for an additional 30 credits of acceptable upper-level undergraduate and/or graduate-level coursework.
 - 45. The term "credit" is defined as a semester hour, or its equivalent, from an approved course provider as defined in Section 230.10 B.

Rationale

The language change is to move it to a more appropriate place—Education Requirements—since it does not discuss examinations.

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Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 13

Move that the Model Rules 230.60 A be amended as follows:

Model Rules 230.60 Applications

A. Types of Applications

Licensure as a professional engineer or professional surveyor or certification as an engineer intern or surveyor intern requires that an applicant present his or her qualifications on forms prescribed by this board.

- Applications for licensure as a professional engineer or professional surveyor are accepted from those who believe that they are qualified by education and experience, according to laws of this jurisdiction, to be licensed as a professional engineer or a professional surveyor.
- Applications for certification as an engineer intern or a surveyor intern are accepted from those who believe that they have the necessary qualifications for licensure according to the laws of this jurisdiction, as a professional engineer or a professional surveyor except for that of <u>education and</u> experience.
- 3. Those who are college seniors in at least a 4-year program leading to a bachelor's degree in an engineering program may register with NCEES directly to take the NCEES Fundamentals of Engineering (FE) examination or, if required, apply to the board for admission to the FE examination.
- To be certified as an engineer intern, an application for certification may be submitted to the board upon passing the FE examination and graduating meeting the education requirements.
- 5. Those who are college seniors in at least a 4-year program leading to a bachelor's degree in a surveying program may register with NCEES directly to take the NCEES Fundamentals of Surveying (FS) examination or, if required, apply to the board for admission to the FS examination.
- To be certified as a surveyor intern, an application for certification
 may be submitted to the board upon passing the FS examination and
 graduating meeting the education and experience requirements.
- Applications for licensure properly executed and issued with verification by NCEES will be accepted in lieu of the same information that is required on the form prescribed and furnished by this board. (In part from Section 130.20, Application and Fees, NCEES Model Law)

Rationale

This is to make it clear that a candidate for engineer or surveyor intern status must meet the education requirements of a jurisdiction and, in the case of surveyor interns, experience requirements if that jurisdiction requires them.

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Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 14

Move that the Model Rules 230.60 B1 and B2 be amended as follows:

Model Rules 230.60 Applications

- B. Completing Applications
 - 1. All applications made to this board must be subscribed to completed on the forms used by the applicant prescribed and furnished by the board. (Section 130.20, Application and Fees, NCEES Model Law)
 - 2. When space provided on forms is inadequate, supplementary sheets provided by this board are to be used.

Rationale

These are housekeeping changes for current practice.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 15

Move that the *Model Rules* 230.60 F be deleted as follows:

Model Rules 230.60 Applications

F. Retention of Records of Applications

All approved applications showing the name, date of birth, date of application, education, experience and other qualifications of applicant, type of examination required, and the date of granting the applicant's licensure or certification are maintained on file. Current addresses, business association, licensure number, and licensee's major disciplines may be shown in a current roster each year.

In accordance with a retention schedule of applications by this board, the following minimum retention time will be observed after which the applications may be destroyed:

- 1. Examination inactive file 5 years
- 2. Deceased 3 years after death
- 3. Inactive 1 year
- 4. Denied 1 year

An application from which a violation of the licensure act was shown will be retained in a file by this board.

Rationale

These requirements are included in a state's public records law, so they are not needed as a framework here.

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Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 16

Move that the *Model Rules* 240.10 D be amended as follows:

Model Rules 240.10 Licensure

D. Reissuance of Certificate

When a certificate of licensure, certificate of authorization, or enrollment card is lost, destroyed, or mutilated, it will be replaced upon request by a licensee, firm, or intern in good standing who has paid a fee established by regulation of the board jurisdiction. (Section 140.30, Issuance of Duplicate Certificates, NCEES Model Law and Section 160.60, Issuance of Duplicate Certificates, NCEES Model Law)

Rationale

This is a housekeeping change.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 17

Move that the *Model Rules* 240.15 C3 be amended as follows:

Model Rules 240.15 Rules of Professional Conduct

- C. Licensee's Obligation to Other Licensees
 - Licensees shall not <u>injure or</u> attempt to injure, maliciously or falsely, directly or indirectly, the professional reputation, prospects, practice, or employment of other licensees, nor indiscriminately criticize other licensees' work. (Section 150, Disciplinary Action, NCEES Model Law)

Rationale

This change is for clarification.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 18

Move that the *Model Rules* 240.20 B be amended as follows:

Model Rules 240.20 Seals

B. Seal of Licensee

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When an applicant is granted licensure, he or she <u>may must</u> obtain a seal. It may be a rubber stamp. It shall contain the following:

- 1. Jurisdiction of licensure
- 2. Licensee's name
- 3. License number
- 4. The words "Professional Engineer" and discipline [if licensed by] or "Professional Surveyor" (In part from Section 140.10 C, Certificates of Licensure, Seals, NCEES Model Law)

Rationale

This change is for consistency with the Model Law.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 19

Move that the Model Rules 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 and 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.

Rationale

The first sentence is a commentary rather than a rule so should not be included. The second change is an editorial change.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 20

Move that the Model Rules 240.40 A and D be amended as follows:

Model Rules 240.40 Expirations, Renewals, and Reinstatement to Active Practice

A. A renewal notice will be mailed sent annually or as required by this jurisdiction by the board during the month of [insert month] to the last known address of [xx number of days] prior to the license expiration date

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to every individual licensed under the licensure act and to every firm holding a certificate of authorization showing the expiration date of their license or certificate and the amount of the fee for renewal.

D. Renewal fFees_received within 1 month or more after the renewal date will be assessed an additional fee established by the board.

Rationale

These are housekeeping changes to allow notices to be sent electronically and an editorial change.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 21

Move that the Model Law 130.10 be amended as follows:

Model Law 130.10 General Requirements for Licensure Education, experience, and examinations (as described in the Model Rules) are required for licensure as a professional engineer or professional surveyor.

- A. As an Engineer Intern—The following shall be considered as minimum evidence that the applicant is qualified for certification as an engineer intern. A college senior or graduate of an engineering program of 4 years or more accredited by the Engineering Accreditation Commission of ABET (EAC/ABET), or the equivalent, or an engineering master's program accredited by EAC/ABET shall be admitted to the NCEES Fundamentals of Engineering (FE) examination. Upon passing such examination and providing proof of graduation, the applicant shall be certified or enrolled as an engineer intern, if otherwise qualified.
- B. As a Surveyor Intern The following shall be considered as minimum evidence that the applicant is qualified for certification as a surveyor intern.
 - 1. A college senior or graduate of a surveying program of 4 years or more accredited by EAC/ABET, the Engineering Technology Accreditation Commission of ABET (ETAC/ABET), the Applied Science Accreditation Commission of ABET (ASAC/ABET), or the equivalent, shall be admitted to the NCEES Fundamentals of Surveying (FS) examination. Upon passing such examination and providing proof of graduation, the applicant shall be certified or enrolled as a surveyor intern, if otherwise qualified;
 - 2. A graduate of a program related to surveying of 4 years or more as approved by the board and with a specific record of 2 years of progressive experience in surveying shall be admitted to the FS examination. Upon passing such examination and providing proof of graduation, the applicant shall be certified or enrolled as a surveyor intern, if otherwise qualified; or
 - 3. A graduate of a program of 4 years or more as approved by the board and with a specific record of 4 years of progressive experience in

surveying shall be admitted to the FS examination. Upon passing such examination and providing proof of graduation, the applicant shall be certified or enrolled as a surveyor intern, if otherwise qualified.

- 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.
 - a. Licensure by Comity^{3,4}
 - (1) An individual holding a certificate of licensure to engage in the practice of engineering issued by a proper authority of any jurisdiction or any foreign country, based on requirements that do not conflict with the provisions of this Act and possessing credentials that are, in the judgment of the board, of a standard not lower than that specified in the applicable licensure act in effect in this jurisdiction at the time such certificate was issued may, upon application, which may include a Council Record with NCEES, be licensed without further examination except as required to examine the applicant's knowledge of statutes, rules, and other requirements unique to this jurisdiction; or
 - (2) An individual holding an active Council Record with NCEES, whose qualifications as evidenced by the Council Record meet the requirements of this Act, may, upon application, be licensed without further examination except as required to examine the applicant's knowledge of statutes, rules, and other requirements unique to this jurisdiction.
 - b. Licensure by Examination (Effective until January 1, 2020) The following individuals shall be admitted to the NCEES Principles and Practice of Engineering (PE) examination and, upon passing such examination and providing proof of graduation, shall be licensed as a professional engineer, if otherwise qualified:
 - (1) An engineer intern with a bachelor's degree in engineering and with a specific record of 4 years or more of progressive engineering experience of a grade and a character which indicate to the board that the applicant may be competent to practice engineering
 - (2) An engineer intern who satisfies one of the following education and experience requirements:
 - (a) Following a bachelor's degree in engineering from an institution that offers EAC/ABET-accredited programs, earns a master's degree in engineering and
 - establishes a specific record of 3 years or more of

- progressive engineering experience of a grade and a character which indicate to the board that the applicant may be competent to practice engineering
- (b) Following a master's degree in engineering from an EAC/M-ABET-accredited program, establishes a specific record of 3 years or more of progressive engineering experience 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 an earned doctoral degree in engineering acceptable to the board and with a specific record of 2 years or more of progressive engineering experience of a grade and a character which indicate to the board that the applicant may be competent to practice engineering
- (4) An individual with an earned doctoral degree in engineering acceptable to the board and with a specific record of 4 years or more of progressive engineering experience of a grade and a character which indicate to the board that the applicant may be competent to practice engineering
- c. Licensure by Examination (Effective January 1, 2020)⁵—The following individuals shall be admitted to the PE examination and, upon passing such examination and providing proof of graduation, shall be licensed as a professional engineer, if otherwise qualified:
 - (1) An engineer intern who satisfies one of the following education and experience requirements:
 - (a) Following the bachelor's degree, an acceptable amount of coursework resulting in a master's degree in engineering from an institution that offers EAC/ABET accredited programs, or the equivalent, and with a specific record of 3 years or more of progressive engineering experience of a grade and a character which indicate to the board that the applicant may be competent to practice engineering
 - (b) Following a master's degree in engineering from an EAC/M-ABET-accredited program, a specific record of 3 years or more of progressive engineering experience of a grade and a character which indicate to the board that the applicant may be competent to practice engineering
 - (c) Following the bachelor's degree, an acceptable amount of coursework as defined in NCEES Model Rules Section 230.10 D from approved course providers and a specific record of 4 years or more of progressive engineering experience of a grade and a character which indicate to the board that the applicant may be competent to practice engineering
 - (d) Following a bachelor's degree from an EAC/ABETaccredited program that has a minimum of 150 semester credit hours, of which at least 115 are in math, science, and engineering combined and at least 75 of the 115 are in

- engineering, a specific record of 4 years or more of progressive engineering experience 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 an earned doctoral degree in engineering acceptable to the board and with a specific record of 2 years or more of progressive engineering
- experience of a grade and a character which indicate to the board that the applicant may be competent to practice engineering
- (3) An individual with an earned doctoral degree in engineering acceptable to the board and with a specific record of 4 years or more of progressive engineering experience 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 applicant's qualifications may be reviewed at an interview if the board deems it necessary. The following shall be considered as minimum evidence satisfactory to the board that the applicant is qualified for licensure as a professional surveyor.

a. Licensure by Comity

- (1) An individual holding a certificate of licensure to engage in the practice of surveying issued by a proper authority of any jurisdiction or any foreign country, based on requirements that do not conflict with the provisions of this Act and possessing the credentials that are, in the judgment of the board, of a standard not lower than that specified in the applicable licensure act in effect in this jurisdiction at the time such certificate was issued may, upon application, which may include a Council Record with NCEES, be licensed without further examination except as required to examine the applicant's knowledge of statutes, rules, and other requirements unique to this jurisdiction; or
- (2) An individual holding an active Council Record with NCEES, whose qualifications as evidenced by the Council Record meet the requirements of this Act, may, upon application, be licensed without further examination except as required to examine the applicant's knowledge of statutes, rules, and other requirements unique to this jurisdiction.
- b. Licensure by Examination A surveyor intern with a specific record of 4 years or more 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 the

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NCEES Principles and Practice of Surveying examination and any required state-specific examination(s). Upon passing all examination(s), the applicant shall be licensed as a professional surveyor, if otherwise qualified

<u>Model Law 130.10 General Requirements for Licensure</u>
<u>Education, experience, and examinations (as described in the Model Rules)</u>
are required for licensure as a professional engineer or professional surveyor.

A. Certification or Enrollment as an Engineer Intern

The following shall be considered as minimum evidence that the applicant is qualified for certification as an engineer intern.

- Graduating from an engineering program of 4 years or more accredited by the Engineering Accreditation Commission of ABET (EAC/ABET), or the equivalent, or an engineering master's program accredited by EAC/ABET
- 2. Passing the NCEES Fundamentals of Engineering (FE) examination
- B. Licensure as a Professional Engineer
 - 1. General Requirements
 - To be eligible for licensure, an individual must meet all of the following requirements:
 - (a) Be of good character and reputation
 - (b) Satisfy the education criteria set forth below
 - (c) Satisfy the experience criteria set forth below
 - (d) Pass the applicable examinations set forth below
 - (e) Submit five references acceptable to the board
 - 2. Comity Licensure for a Professional Engineer

The following shall be considered as minimum evidence satisfactory to the board that the applicant is qualified for licensure by comity as a professional engineer:

- a. An individual holding a certificate of licensure to engage in the practice of engineering issued by a proper authority of any jurisdiction or any foreign country, based on requirements that do not conflict with the provisions of this Act and possessing credentials that are, in the judgment of the board, of a standard not lower than that specified in the applicable licensure act in effect in this jurisdiction at the time such certificate was issued may, upon application, which may include a Council Record with NCEES, be licensed without further examination except as required to examine the applicant's knowledge of statutes, rules, and other requirements unique to this jurisdiction; or
- b. An individual holding an active Council Record with NCEES, whose qualifications as evidenced by the Council Record meet the requirements of this Act, may, upon application, be licensed without further examination except as required to examine the applicant's knowledge of statutes, rules, and other requirements unique to this jurisdiction.
- 3. Initial Licensure as a Professional Engineer

 An applicant who presents evidence of meeting the applicable education, examination, and experience requirements as described

below shall be eligible for licensure as a professional engineer.

a. Education Requirements

An individual seeking licensure as a professional engineer shall possess one or more of the following education qualifications:

- 1. Before January 1, 2020
 - (a) A bachelor's degree in engineering from an EAC/ABETaccredited program
 - (b) A master's degree in engineering from an institution that offers EAC/ABET-accredited programs
 - (c) A master's degree in engineering from an EAC/M-ABETaccredited program
 - (d) An earned doctoral degree in engineering acceptable to the board
- 2. On or after January 1, 2020
 - (a) A bachelor's degree in engineering from an EAC/ABETaccredited program, plus an acceptable amount of coursework resulting in a master's degree in engineering from an institution that offers EAC/ABET-accredited programs, or the equivalent
 - (b) A bachelor's degree in engineering from an EAC/ABETaccredited program, plus an acceptable amount of coursework as defined in NCEES *Model Rules* Section 230.10 D from approved course providers
 - (c) A bachelor's degree from an EAC/ABET-accredited program that has a minimum of 150 semester credit hours, of which at least 115 are in math, science, and engineering combined and at least 75 of the 115 are in engineering
 - (d) A master's degree in engineering from an EAC/M-ABETaccredited program
 - (e) An earned doctoral degree in engineering acceptable to the board

b. Examination Requirements

An individual seeking licensure as a professional engineer shall take and pass the NCEES Fundamentals of Engineering (FE) examination and the NCEES Principles and Practice of Engineering (PE) examination.

c. Experience Requirements

An individual seeking licensure as a professional engineer shall present evidence of a specific record of progressive engineering experience satisfying one of the following described below. This experience should be of a grade and character that indicate to the board that the applicant may be competent to practice engineering.

- 1. Before January 1, 2020
 - (a) An individual with a bachelor's degree in engineering per 1(a) above: 4 years of experience after the bachelor's degree is conferred
 - (b) An individual with a master's degree in engineering per 1(b) or 1(c) above: 3 years of experience after the

master's degree is conferred

- (c) An individual with an earned doctoral degree in engineering acceptable to the board and has passed the FE exam: 2 years of experience
- (d) An individual with an earned doctoral degree in engineering acceptable to the board and who has elected not to take the FE exam: 4 years of experience
- 2. On or after January 1, 2020
 - (a) An individual with a bachelor's degree in engineering and a master's degree in engineering from an institution that offers EAC/ABET-accredited programs per 2(a) above: 3 years of experience after the bachelor's degree is conferred
 - (b) An individual with a bachelor's degree in engineering and an acceptable amount of coursework as defined in NCEES Model Rules Section 230.10 D from approved course providers per 2(b) above: 4 years of experience after the bachelor's degree is conferred
 - (c) An individual with a bachelor's degree from an EAC/ABET-accredited program that has a minimum of 150 semester credit hours, of which at least 115 are in math, science, and engineering combined and at least 75 of the 115 are in engineering per 2(c) above: 4 years of experience after the bachelor's degree is conferred
 - (d) An individual with a master's degree in engineering from an EAC/M-ABET-accredited program per 2(d) above: 3 years of experience after the master's degree is conferred
 - (e) An individual with an earned doctoral degree in engineering acceptable to the board and has passed the FE exam: 2 years
 - (f) An individual with an earned doctoral degree in engineering acceptable to the board and who has elected not to take the FE exam: 4 years of experience
- C. Certification or Enrollment as a Surveyor Intern
 Completion of one of the following shall be considered as minimum evidence that the applicant is qualified for certification or enrollment as a surveyor intern.
 - Graduating from a surveying program of 4 years or more accredited by EAC/ABET, the Engineering Technology Accreditation Commission of ABET (ETAC/ABET), the Applied Science Accreditation Commission of ABET (ASAC/ABET), or the equivalent
 - Graduating from a program related to surveying of 4 years or more as approved by the board and with a specific record of 2 years of progressive experience in surveying
 - 3. Graduating from a program of 4 years or more as approved by the board and with a specific record of 4 years of progressive experience in surveying

In addition to satisfying one of the above requirements, the applicant

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shall pass the NCEES Fundamentals of Surveying (FS) examination.

- D. Licensure as a Professional Surveyor
 - 1. General Requirements
 - To be eligible for licensure, an individual must meet all of the following requirements:
 - (a) Be of good character and reputation
 - (b) Satisfy the education criteria set forth below
 - (c) Satisfy the experience criteria set forth below
 - (d) Pass the applicable examinations set forth below
 - (e) Submit five references acceptable to the board
 - 2. Comity Licensure for a Professional Surveyor

The following shall be considered as minimum evidence satisfactory to the board that the applicant is qualified for licensure by comity as a professional surveyor:

- a. An individual holding a certificate of licensure to engage in the practice of surveying issued by a proper authority of any jurisdiction or any foreign country, based on requirements that do not conflict with the provisions of this Act and possessing credentials that are, in the judgment of the board, of a standard not lower than that specified in the applicable licensure act in effect in this jurisdiction at the time such certificate was issued may, upon application, which may include a Council Record with NCEES, be licensed without further examination except as required to examine the applicant's knowledge of statutes, rules, and other requirements unique to this jurisdiction; or
- b. An individual holding an active Council Record with NCEES, whose qualifications as evidenced by the Council Record meet the requirements of this Act, may, upon application, be licensed without further examination except as required to examine the applicant's knowledge of statutes, rules, and other requirements unique to this jurisdiction.
- 3. Initial Licensure as a Professional Surveyor

A surveyor intern with a specific record of 4 years or more of combined office and field experience satisfactory to the board in surveying, of which a minimum of 3 years of progressive experience has been on surveying projects under the supervision of a professional surveyor, shall be admitted to the NCEES Principles and Practice of Surveying examination and any required state-specific examination(s). Upon passing these examinations, the applicant shall be licensed as a professional surveyor, if otherwise qualified.

Rationale

The language was reorganized to separate the three legs of engineering licensure—education, examination, and experience—so that they are all still required for licensure but are independent of one another. As described in the report, UPLG received this motion after last year's annual meeting, when ACCA proposed a motion that the three requirements be separated from each other to be in line with the *Model Rules*. The Council passed the motion to do this. UPLG is not proposing to separate the requirements for surveying

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licensure because that is beyond the scope of this year's charge; it does have a recommendation for a future committee to be charged with considering whether to make the surveying language parallel to that of the engineering language.

In reviewing this language and separating the three requirements, the committee realized that some things were not clear in the original *Model Law* language. The main question was when experience begins—upon graduation or upon passing the FE/FS exam. The general consensus was that it begins after graduation. It asked for feedback from the NCEES board of directors at the board's February 2014 meeting, and the board agreed that it begins after graduation. This language reflects that timing.

In addition, at last year's annual meeting, the MBA Committee moved for UPLG to be charged with incorporating changes to the sections on engineer intern and surveyor intern to reflect the current process used for registering for computer-based exams. UPLG reviewed the language and incorporated it into sections A and C above.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

UPLG Motion 22

Move that the language in *Model Law* 170.70, Grandfathering of Photogrammetrists, be amended as follows and moved to *Model Law* 130.10 under licensure as a professional surveyor:

Model Law 170.70 Grandfathering of Photogrammetrists

- X. Grandfathering of Photogrammetrists—In the event that the board chooses to license photogrammetrists as professional surveyors and a photogrammetrist does not qualify under the sections above, the board may license the photogrammetrist as a professional surveyor using the following requirements and procedure.
 - (1) Any The individual was practicing surveying in this jurisdiction as of [insert date], using photogrammetric technologies in this jurisdiction as of [insert date] with and has at least 8 years' experience in the profession, two or more of which shall have been in responsible charge of photogrammetric surveying and/or mapping projects meeting ASPRS Aerial Photography and Mapping Standards or U.S. National Mapping Standards, shall, upon application, be licensed as a professional surveyor in this jurisdiction, provided:
 - (2) The applicant files an application with the board by [insert date]. Thereafter, no photogrammetrist shall be licensed without meeting the requirements for licensure as a professional surveyor set forth by the board for all other applicants.
 - A.(3) The applicant submits certified proof of graduation from high

school, high school equivalency, or a higher degree; or certified proof of a bachelor's degree in surveying or a related field of study approved by the board, which may be substituted for four of the above required years of experience; or certified proof of a master's degree in surveying or a related field of study approved by the board, which may be substituted for a maximum of five of the above required years of experience.

- B.(4) The applicant submits proof of employment in responsible charge of photogrammetric surveying and/or mapping projects, practicing within any jurisdiction, including itemized reports detailing methods, procedures, amount of the applicant's personal involvement, and the name, address, and telephone numbers of the client for five projects completed under the supervision of the applicant within the United States. A final map for each of the five projects shall also be submitted.
- C.(5) The applicant submits five references as to the applicant's character and quality of work, five all of which shall be from professional surveyors or professional engineers currently practicing within the scope of their license in an area of surveying.
- D. The applicant files an application with the board within 2 years, next after [insert period of time]. Thereafter, no photogrammetrist shall be licensed without meeting the requirements for licensure as a professional surveyor set forth by the board for all other applicants.

Rationale

During its review of the *Model Law*, the 2012–13 UPLG Committee recommended that Section 170.70, Grandfathering of Photogrammetrists, be reviewed to determine if it is still appropriately written and needed in *Model Law*. This provision was thus reviewed this year under a joint charge with the EPS Committee. Based on this review, the committees recommend that this provision remain in *Model Law* but be moved to 130.10, as it is a pathway to licensure as a professional surveyor for an experienced practicing photogrammetrist who is eligible to be licensed as a professional surveyor. This provision may apply and is intended to benefit those jurisdictions that include the practice of photogrammetry within the definition of the practice of surveying.

The EPS Committee recommended, and UPLG agreed, to move the language to *Model Law* 130.10 C2c, which includes licensure requirements for surveyors. However, because UPLG is proposing Motion 21 to reorganize 130.10, it has left the numbering in this proposed motion as an X. If Motion 21 passes, this language would fall under the new 130.10 D, Licensure as a Professional Surveyor.

Board of directors' position Endorses, consent agenda

The Sections supported the motion.

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Board of Directors

The board of directors has one motion for Council action.

Board of Directors Motion

The board of directors moves to authorize the NCEES chief executive officer to negotiate a contract, in accordance with EAP 10, for examinations and/or examination services between NCEES and the Chinese Institute of Engineers (CIE) for offering the examinations in Taiwan.

Rationale

EAP 10 allows NCEES, with the approval of the Council, to contract to provide NCEES examinations or assistance in preparing examinations to an appropriately sanctioned licensing body of a foreign government. CIE asked NCEES to consider offering its exams in Taiwan.

In February 2014, President Mamola and CEO Carter visited Taipei, Taiwan, at the invitation of CIE. They met with CIE leadership and discussed the required security protocol necessary for the administration of NCEES examinations. Later, they visited with officials as the Taiwan Ministry of Examinations and two major engineering institutions in Taipei that could provide adequate and secure space for the administration of the PE exam. Pearson VUE has an existing professional testing center in Taipei, which would provide for the administration of the FE via CBT.

At its May 2014 meeting, the board of directors agreed to authorize staff to enter into negotiations with CIE to allow NCEES exams to be offered in Taiwan, subject to Council approval at the 2014 annual meeting.

The Sections supported the motion.

There was no other business.

Mr. Boynton and Mr. Johnson, departed the meeting at 3:00 p.m.

Ms. Langelotti and Mr. Stone recessed to review files.

Land Surveyor Section members considered new application review sheets. Discussion was held and the Section agreed by consensus to adopt the revised review sheets as amended.

PE Section members reviewed correspondence from Mr. Terry Welander regarding possible added credential requirements for some engineering positions. Mr. Welander ascertains a PE license would supersede any additional requirements. Ms. Langelotti and Mr. Stone concurred with the response previously provided to Mr. Welander by staff, that many

Other Business

Departure

Recess for PE Section

Members

Land Surveyor
Application Review
Sheets

PE Section Members Return Professional Engineer, Land Surveyor & Architect Sections Meeting Minutes August 13, 2014 Page 60 of 60

engineering positions might require additional training, experience or certification beyond licensure.

Conflict of Interest forms were completed by all members present.

Conflict of Interest

Forms

There being no further business, the meeting was adjourned at 3:45 p.m.

Adjourn

12 W.7

1.	Name:	Christine Snetter	
2.	Title:	Board Member	
3.	Agency:	Architects Section/APELSCIDLA Board	
4.	Meeting/IFF Date:	Section Meeting August 13, 2014	
5.	I have a personal in	terest in the following transaction:	
	Nature of Personal Interest Affected by Transaction:		
	I declare that I am a member of the following business, profession, occupation or group, the members of which are affected by the transaction:		
		.18	
	I am able to pa public interest.	rticipate in this transaction fairly, objectively, and in the	
	or		
	☐ I did not partici	ipate in the transaction.	
6.	I do not have a personal interest in any transactions taken at this meeting.		
	Signature	The 8/13/14	

1.	Name:	Christopher Stone	
2.	Title:	Board Member	
3.	Agency:	Professional Engineers Section/APELSCIDLA Board	
4.	Meeting/IFF Date:	Section Meeting August 13, 2014	
5.	I have a personal interest in the following transaction:		
	Nature of Personal Interest Affected by Transaction:		
	I declare that I am a member of the following business, profession, occupation or group, the members of which are affected by the transaction:		
	I am able to pa public interest.	rticipate in this transaction fairly, objectively, and in the	
	or		
	☐ I did not partic	pate in the transaction.	
6.	I do not have a meeting.	personal interest in any transactions taken at this	
	Signature/	Date	

1.	Name:	Wiley V. "Bif" Johnson, III		
2.	Title:	Board Member		
3.	Agency:	Professional Engineers Section/APELSCIDLA Board		
4.	Meeting/IFF Date:	Section Meeting August 13, 2014		
5.	I have a personal in	terest in the following transaction:		
	Nature of Personal Interest Affected by Transaction:			
	I declare that I am a member of the following business, profession, occupation or group, the members of which are affected by the transaction:			
	I am able to pa public interest.	rticipate in this transaction fairly, objectively, and in the		
	☐ I did not partici	pate in the transaction.		
6.	I do not have a meeting	personal interest in any transactions taken at this		
	Signature	Date		

١.	Name:	Nancy E. McIntyre		
2.	Title:	Board Member		
3.	Agency:	Land Surveyors Section/APELSCIDLA Board		
1.	Meeting/IFF Date:	Section Meeting August 13, 2014		
5.	I have a personal in	terest in the following transaction:		
	Nature of Personal Interest Affected by Transaction:			
	I declare that I am a member of the following business, profession, occupation or group, the members of which are affected by the transaction LAND Surveyors & FROF ENGRES			
		1		
	I am able to pa public interest.	rticipate in this transaction fairly, objectively, and in the		
	or			
	I did not partic	ipate in the transaction.		
6.	I do not have a meeting.	personal interest in any transactions taken at this		
-	Signature)	\(\frac{\gamma/3}{13\li4}\) Date		

1.	Name:	Robert A. Boynton	
2.	Title:	Board Member	
3.	Agency:	Architects Section/APELSCIDLA Board	
1.	Meeting/IFF Date:	Section Meeting August 13, 2014	
5.		terest in the following transaction:	
	Nature of Personal Interest Affected by Transaction:		
	I declare that I am a member of the following business, profession, occupation or group, the members of which are affected by the transaction:		
	public interest.	rticipate in this transaction fairly, objectively, and in the	
	or		
	l did not partici	ipate in the transaction.	
ô.	do not have a meeting.	personal interest in any transactions taken at this	
	Nabu Mora	Date 8/13/2014	

Name:	Patrick Leary	
Title:	Board Member	
Agency:	Land Surveyors Section/APELSCIDLA Board	
Meeting/IFF Date:	Section Meeting August 13, 2014	
I have a personal interest in the following transaction:		
,		
Nature of Personal Interest Affected by Transaction:		
I declare that I am a member of the following business, profession, occupation or group, the members of which are affected by the transaction:		
I am able to participate in this transaction fairly, objectively, and in the public interest.		
☐ I did not participate in the transaction.		
do not have a personal interest in any transactions taken at this meeting. Signature Date		
	Title: Agency: Meeting/IFF Date: I have a personal into Nature of Personal I I declare that I am a occupation or group I am able to pa public interest. or I did not particit do not have a meeting.	

1.	Name:	Charles F. Dunlap	
2.	Title:	Board Member	
3.	Agency:	Land Surveyors Section/APELSCIDLA Board	
4.	Meeting/IFF Date:	Section Meeting August 13, 2014	
5.	I have a personal in	terest in the following transaction:	
Nature of Personal Interest Affected by Transaction:			
*	I declare that I am a member of the following business, profession, occupation or group, the members of which are affected by the transaction:		
	I am able to pa public interest.	rticipate in this transaction fairly, objectively, and in the	
	or		
	☐ I did not partic	ipate in the transaction.	
6.	I do not have a meeting.	personal interest in any transactions taken at this	

1.	Name:	Carolyn B. Langelotti		
2.	Title:	Board Member		
3.	Agency:	Professional Engineers Section/APELSCIDLA Board		
4.	Meeting/IFF Date:	Section Meeting August 13, 2014		
5.	I have a personal interest in the following transaction:			
		26		
	Nature of Personal Interest Affected by Transaction:			
	I declare that I am a member of the following business, profession, occupation or group, the members of which are affected by the transaction:			
	l am able to pa	articipate in this transaction fairly, objectively, and in the		
	or			
	☐ I did not partic	ipate in the transaction.		
6.	I do not have a meeting.	a personal interest in any transactions taken at this		
	Signature	\$/13/14 Date		

1.	Name:	Clint Good	
2.	Title:	Board Member	
3.	Agency:	Architects Section/APELSCIDLA Board	
4.	Meeting/IFF Date:	Section Meeting August 13, 2014	
5.	I have a personal interest in the following transaction:		
	9		
	Nature of Personal Interest Affected by Transaction:		
	y y		
	I declare that I am a member of the following business, profession, occupation or group, the members of which are affected by the transaction:		
		н	
	I am able to pa	articipate in this transaction fairly, objectively, and in the	
	or		
	☐ I did not partic	ipate in the transaction.	
6.	do not have a	personal interest in any transactions taken at this	
	8	0/13/14	
	Signature	Date	