# PROFESSIONAL ENGINEER & LAND SURVEYOR SECTION MEETING

#### MINUTES

The Professional Engineer and Land Surveyor Section of the Virginia Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects (APELSCIDLA Board) met on August 9, 2018, at the Department of Professional and Occupational Regulation, 9960 Mayland Drive, Richmond, Virginia, with the following members present:

Doyle B. Allen (LS)
Vickie Anglin (LS)
James Kelly (PE)
Carrie Langelotti (PE)
Christopher M. Stone (PE)

Board member, Michael Zmuda (LS), was not present for the meeting with regrets.

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

Kathleen (Kate) R. Nosbisch, Executive Director

Bonnie Davis, Administrative Assistant

Agency staff present for all or part of the meeting was: Jay W. DeBoer, Director

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

Members of the Public present for all or part of the meeting were:

George Dahl, VSPE STEM and Educational Outreach Lead for Tidewater/Hampton Roads Chapter

Becky Golden, PE, Interim President and Chief Finance Officer, Virginia Society of Professional Engineers

Kevin Shreiner, President, Virginia Association of Surveyors
James Pruett, Member, Virginia Association of Surveyors
David Gardy, Member, Virginia Association of Surveyors and DPOR Liaison
Patricia (Trish) Morrison, Division Director, Virginia Department of Labor and Industry
Kathleen Eddington, Assistant Division Director, Virginia Department of Labor and Industry
Travis Fox, LS, Fox Land Surveying, PC

Mr. Kelly, Chair, called the meeting to order at 9:30 a.m.

Call to Order

Mr. Kelly advised the Section members of the emergency evacuation procedures.

Emergency Evacuation Procedures

Mr. Stone moved to approve the amended agenda. Mr. Allen seconded the motion which was unanimously approved by members: Allen, Anglin, Kelly, Langelotti,

Approval of Agenda

and Stone.

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Mr. Shreiner stated John Palatiello, Executive Director of Virginia Association of Surveyors (VAS) filed a complaint with a company offering surveying and mapping services without a license which is considered land surveying. The company had agreed to remove land surveying from their website. He stated that VAS urges DPOR to further review the requirements for surveying to protect the public's health, safety, and welfare. The guidance document and law should be strengthened. Unlicensed professionals should provide a disclosure statement advising the consumer that the service is not provided by a licensed professional.

Public Comment Period

Mr. Pruett stated he supports the Virginia Association of Surveyors position and Mr. Shreiner.

Mr. Bardy stated in the fields of engineering and surveying, there has been a huge transition in the use of technology. He encouraged the PE-LS Section to be aware of the fact that technology is taking over land surveying operations. You have to quickly understand what is being done and who is doing it because quality control is of the utmost importance. Guard the public against errors in work. Be aware of what is in the marketplace by reviewing trade publications, documentations, etc.

Mr. Allen provided an overview of the Land Surveyor Apprenticeship Committee meeting on July 31, 2018. At this time, The Apprenticeship Program has 600 hours of Related Technical Instruction (RTI). For the program to be signed off as an approved apprenticeship program by DOLI, it needs to have 720 RTI hours. DOLI agreed that 150 hours of sponsor documented On the Job Training (OJT) regarding specific topics could be used with to meet the 720 RTI hours. Ms. Eddington noted that the University of Maine is an approved 100% online program. Ms. Morrison stated Richmond Public Library offers free coursework called Universal Class. The Section agreed by consensus to provide a document for sponsors to document 150 RTI hours for DOLI to review. The draft form will be presented to the full Board on September 13, 2018.

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Ms. Morrison and Ms. Eddington left the meeting at 10:25 a.m.

Departure of DOLI

Mr. Fox stated Virginia Beach has changed their review of subdivision plats. He stated for a long period, a remainder parcel did not need to be shown on a plat. He stated that Virginia Beach is requiring him to delineate and replace/set all property corners. The Section noted that localities can require more than the regulations.

Public Comment Period (continued)

Ms. Golden stated Governor Ralph S. Northam signed on recognition of August 1, 2018 as Professional Engineers Day in the Commonwealth of Virginia. She presented the Section with a signed certificate. Mr. Kelly read the Certificate of Recognition, and the Section thanked Ms. Golden.

The Section recessed from 10:42 a.m. to 10:56 a.m.

Recess

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Ms. Nosbisch stated this is the approved language from the June 13, 2018 Board meeting. Mr. Zmuda met with Virginia Department of Transportation (VDOT) members; VDOT is in the process of talking to the industry for input on the EIC language.

Entrusted Engineer in Charge (EIC)

Ms. Nosbisch noted the As Built language was reviewed at the APELSCIDLA Board meeting on June 13, 2018. Mr. Zmuda met with representatives from VDOT and this final language will be presented at the Board meeting on September 13, 2018.

Sign/Seal Record Drawings (As Builts)

The Section reviewed the NCEES Model Rules and the Civil Breadth and Construction Depth exam specifications. The Section agreed by consensus to allow construction related experience with the exception of scheduling and cost. There will be a future workshop for Professional Engineers board members and Advisory Committee members to ensure applications are being reviewed in a consistent manner.

Construction Related Experience

At the Board meeting on June 13, 2018, a response template to solicitations for unlicensed work was discussed. Counsel stated a response template should not be sent out as a Board, but can be sent as an individual. There was discussion on why the Board cannot send the template. The item will be placed on the agenda and discussed at the Board meeting on September 13, 2018.

Response
Template for
Preferred
Engineering
Services
Subcontractor/
Partner emails

This matter was discussed at the full Board meeting on June 13, 2018 and passed to the Professional Engineers and Land Surveyors Section for further discussion. The Section's recommendation is the guidance document be referenced in the next newsletter; discussed during future presentations; emphasized on the DPOR website; and given to the appropriate professional associations to remind licensees that they should not be signing and sealing work unless it was performed under their direct control and personal supervision.

Company Use of Drones to Collect Data Sets/Points and Selling Information to Land Surveyors

Mr. Allen would like to see the closed complaint from Virginia Association of Surveyors that was referenced in public comment and pertains to this same issue.

Ms. Anglin stated regulations are behind the curve and there is a gap when it comes to black box technologies and LIDAR. The Section agreed by consensus anyone aware of 3D laser or drone activity used for professional work should file a complaint and it should be handled by a warning letter if it won't be addressed by cease and desist order. Ms. Nosbisch indicated that once individuals have been made aware they are in violation of the Board's regulations, a number of them have taken corrective action and it resolves the matter.

3D Laser Scanning Technology

Mr. Allen continued his overview of the Land Surveyor Apprenticeship Committee meeting on July 31, 2018 in regards to the review of the Tidewater Community College's (TCC) Land Surveyor Certificate Program. He stated that the 2007 program was originally approved under regulation 18VAC10-20-

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300.A.5. After discussion, the Section agreed by consensus that because the regulations have changed and been renumbered; the program is now approved under 18VAC10-20-300.A.6. It was noted that the program is equated to an apprenticeship program. This item will be placed on the Board agenda for review at the September 13, 2018 meeting.

(continued)

A discussion took place regarding the National Society of Professional Surveyors (NSPS) website and Certified Survey Technician (CST) information. The PE/LS Sections agreed by consensus that the NSPS CST Level IV, with no other education presented, be awarded eight years of approved surveying experience and access to the Fundamentals Surveyor exam; falling under regulation 18VAC10-20-300.A.7. This item will be placed on the Board agenda for review at the September 13, 2018 meeting.

The Section recessed from 12:07 p.m. to 12:16 p.m. Mr. DeBoer left the meeting.

Recess

### MOTIONS TO BE PRESENTED AT THE 2018 ANNUAL MEETING

**NCEES Update** 

Per *Bylaws* 6.01 Annual Business Meetings, the NCEES board of directors has prepared a consent agenda for the August 2018 annual meeting.

At its May board meeting, the board of directors considered each motion that will come before the Council. The board position and whether the motion was placed on the consent agenda are listed after the motion. In the review of the motion, the board has the following options:

- Endorse the motion and place it on the consent agenda
- Endorse the motion and not place it on the consent agenda
- Not endorse the motion and not place it on the consent agenda
- Take no position and not place it on the consent agenda

# **Advisory Committee on Council Activities (9 motions)**

#### ACCA Motion 1

Move that a Special Committee on Bylaws be charged with incorporating the following amendments into *Bylaws* 7.01:

# **Bylaws**

Section 7.01 Standing Committees. Members, associate members, past presidents, and emeritus members shall be eligible to serve on any committee or task force. Committee members may continue to serve until the conclusion of the term of office to which they were appointed even if their terms with Member Boards have ended.

#### Rationale

*Bylaws* 3.07, Past Presidents, states that past presidents are eligible to serve on committees of the Council. However, *Bylaws* 7.01, Standing Committees, does not specifically mention past presidents. This motion is simply to clarify the current process.

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# Board of directors' position

Endorses, consent agenda

The Section does support the motion.

# ACCA Motion 2

Move that Administrative Policy 6 be amended as follows:

# Manual of Policy and Position Statements

# AP 6 Views, Opinions, Interpretations, and Positions

The official position of the Council regarding any matter must be approved by the Council and or authorized by the board of directors.

#### Rationale

Current practice of the Council does not require both approval by the Council and authorization by the board of directors. Some actions do not require Council approval because the board of directors has already been authorized by the Council to make certain decisions. This motion is to clarify the policy accordingly.

## Board of directors' position

Endorses, consent agenda
The Section does support the motion.

# ACCA Motion 3

Move that Professional Policy 5B be amended as follows:

# Manual of Policy and Position Statements PP 5 NCEES Model Law Designations

B. 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:

Completes 4 years of acceptable surveying experience after confirmation
of a bachelor of science degree in a surveying/geomatics program
accredited by ANSAC/ABET, EAC/ABET, or ETAC/ABET, which may
include up to 1 year of experience for a graduate with a
surveying/geomatics degree

#### Rationale

EPS reviewed the definition and determined that the words "with a" were added in error when a policy revision was implemented in 2015. ACCA is proposing this change to clarify the definition.

# Board of directors' position

Endorses, consent agenda

The Section does support the motion.

## ACCA Motion 4

Move that Professional Policy 8 be amended as follows:

# Manual of Policy and Position Statements

PP 8 International Relations

NCEES will be actively involved in all-matters relating to the foreign qualifications of professional engineers and surveyors. The long-range objectives will be

A. To expand the understanding of the licensure and regulation of professional

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engineers and professional surveyors on an international basis through participation in relevant international meetings and establishing NCEES in a leadership role at such meetings (at relevant international meetings)

B. To promote and establish a program for maintaining relationships with foreign licensure authorities

#### Rationale

NCEES does not have the authority to be involved in all matters related to foreign qualifications. Eliminating the word "all" gives the Council more flexibility.

# Board of directors' position

Endorses, consent agenda The Section does support the motion.

## ACCA Motion 5

Move that Financial Policy 6A be amended as follows:

# Manual of Policy and Position Statements FP 6 Guests of Annual Business Meeting

- A. The president is authorized to issue invitations to society presidents, to International Affiliate Organizations, and to Participating Organizations to attend the annual business meeting as guests of the Council. All or part of the registration and activity fee may be waived.
- B. Each past president of the Council will be invited to attend the annual business meeting. Registration fees will be waived for each past president and his or her guest. Travel expenses will be funded for each past president.
- C. The Council may pay the travel expenses of each award recipient and his or her guest to attend the annual business meeting.

## Rationale

This language is being added to match current Council practice. There is no financial impact since any waivers of registration fees are already included in the existing budget.

# Board of directors' position

Endorses, consent agenda *The Section does support the motion.* 

#### ACCA Motion 6

Move that Financial Policy 3B be amended as follows:

# Manual of Policy and Position Statements

# FP 3 Travel Expenses

B. The Council shall pay the travel expenses of a minimum of three delegates from each full-member board to the annual business meeting as specified by the member board. Expenses shall be paid according to the current expense payment policies of NCEES. The annual business meeting registration fee for the delegates shall be waived. The cost of optional functions not included in the registration fee shall not be paid by NCEES. Member boards must meet the *Bylaws* requirements for voting to receive the benefits of a funded delegate. The Council shall also pay the travel expenses and registration fee of first-time attendees, within 24 months of initial appointment for member board members and within 24 months of date of hire for member board administrators, to the annual business meeting.

The Council shall pay the travel expenses of the designated member board administrator (MBA) from each member board to the annual business meeting. When an MBA represents more than one board, the funding shall be for the designated MBA only and not for the assistant MBA or for member board staff. Expenses shall be paid according to current expense payment policies of NCEES. The annual business meeting registration fee for designated MBAs shall be waived. The cost of optional functions not included in the registration fee shall not be paid by NCEES. Member boards must meet the Bylaws requirements for voting to receive the benefits of a funded MBA.

#### Rationale

With the elimination of the biennial MBA Forum, ACCA feels that there is an increased need for MBAs to be present at all meetings of the Council. Term limits for member board members vary across the Council, which means that MBAs play an important role in providing continuity within the organization.

# Financial impact

The cost is estimated to be \$114,550 annually.

# Board of directors' position

Endorses, non-consent agenda Section members agreed by consensus.

## ACCA Motion 7

Move that Financial Policy 3C be amended as follows:

# Manual of Policy and Position Statements

# FP 3 Travel Expenses

C. The Council shall pay the travel expenses and registration fee of a minimum of three delegates from each

full-member board to that board's respective zone interim meeting as specified by the member board. The delegates must be members of the member board or associate members. The Council shall also pay the travel expenses and registration fee for past presidents of NCEES to attend their respective zone interim meeting. Expenses shall be paid according to the current expense payment policies of NCEES. The cost of optional functions not included in the registration fee shall not be paid by NCEES.

The Council shall pay the travel expenses and registration fee of the designated member board administrator (MBA) from each member board to that board's respective zone interim meeting. When an MBA represents more than one board, the funding shall be for the designated MBA only and not for the assistant MBA or for member board staff. Expenses shall be paid according to current expense payment policies of NCEES. The cost of optional functions not included in the registration fee shall not be paid by NCEES.

#### Rationale

With the elimination of the biennial MBA Forum, ACCA feels that there is an increased need for MBAs to be present at all meetings of the Council. Term limits for member board members vary across the Council, which means that MBAs play an important role in providing continuity within the organization.

# Financial impact

The cost is estimated to be \$78,600 annually.

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# Board of directors' position

Endorses, non-consent agenda Section members agreed by consensus.

## ACCA Motion 8

Move that a Special Committee on Bylaws be charged with incorporating the following amendments into *Bylaws* 7.02:

## **Bylaws**

Section 7.02 Advisory Committee on Council Activities. The Advisory Committee on Council Activities (ACCA) shall consist of a chair and members from each zone. At least one member shall be a professional engineer, one member a professional surveyor, and one member a member board administrator. The committee shall provide advice and briefing to the President and the Board of Directors on new policy issues, problems, and plans that warrant preliminary assessment of policy choices and procedures not as yet assigned to a standing committee or involving several existing committees. Consultants appointed to this committee shall have served on the Board of Directors.

The committee will act as principal advisor to the President and the Board of Directors on such specific non-recurring problems or plans as the President may explicitly assign to the committee. The committee shall review the *Manual of Policy and Position Statements*, in consideration of past and current action of the Council, and present any proposed revisions to the Board of Directors for review and forwarding to the Council for ratification at the Annual Business Meeting as needed.

#### Rationale

ACCA is proposing changes in the first paragraph because the current language does not require that any professional engineers or member board administrators be on ACCA. The proposed language will correct this missing language by requiring at least one professional engineer, one professional surveyor, and one member board administrator to be on the committee. It is proposing changes to the second paragraph to match current practice, which is that motions are presented as needed and then voted upon, but not ratified.

# Board of directors' position

Does not endorse, non-consent agenda *The Section does not support the motion.* 

### Board of directors' rationale

The NCEES board of directors feels that the specificity being recommended as to who should be appointed to the committee significantly limits the president-elect's ability to appoint individuals with the expertise and experience required to address the charges that will be assigned. The board believes that the president-elect should be afforded the flexibility to appoint members who are best qualified to perform the duties with appropriate representation from the engineering and surveying professions based on the issues to be studied.



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Move that a Special Committee on Bylaws be charged with incorporating the following amendments into

Bylaws 5.01:

# **Bylaws**

Section 5.01 President. The President shall, when present, preside at all meetings and shall present to the Council at the Annual Business Meeting a report of the activities during the term of office. The President shall appoint all members, chairs, vice chairs, and consultants of standing committees, special committees, and task forces unless specific action of the Council or of the Board of Directors names the personnel of the committee or task force. The President shall also appoint all members of a Tellers Committee for the election of the President-Elect and Treasurer. The President shall appoint all official representatives of the Council to other organizations as authorized by the Board of Directors. The President shall be chair of the Board of Directors, shall be an ex-officio member of all committees, and shall perform all other duties ordinarily pertaining to the office of President.

If both the President and the President-Elect are absent, the Vice President from the zone that will be nominating the next President-Elect will be the acting President. The Vice President shall have all the powers of the President while presiding in this capacity.

Section 5.01 President. The President shall be the chair of the Board of Directors and shall preside over all meetings of the Board as well as the Annual Business Meeting of the Council. The President shall be an ex-officio member of all committees and task forces of the Council. The President shall perform all other duties ordinarily pertaining to the office of President. The President shall prepare and present to the Council at the Annual Business Meeting a report of the President's activities during the term of office.

The President shall appoint all members, chairs, vice-chairs, and consultants of the standing committees as defined in Article 7 of the *Bylaws*. The President shall also appoint all members, chairs, vice-chairs, and consultants of special committees and task forces unless specific action of the Council or of the Board of Directors names the personnel of the committee or task force. The President shall also appoint one member of the Board of Directors to serve as board liaison to each standing committee, special committee, and task force. The President shall appoint all official representatives of the Council to any other organizations. If needed during the annual meeting, the President shall appoint a Tellers Committee for the election of the President-Elect and/or Treasurer.

If the President is absent, the President-Elect will serve as the acting President in accordance with *Bylaws* 5.02. If both the President and the President-Elect are absent, the Vice President from the zone that will be nominating the next President-Elect will serve as the acting President. The acting President shall have all powers of the President while presiding in this capacity.

#### Rationale

ACCA feels that the proposed amendment will reduce ambiguities and better organize the responsibilities of the president. This proposed language places all of the presiding and reporting responsibilities in the first paragraph and all of the

appointing responsibilities in the second paragraph. The responsibility to appoint board liaisons to committees and task forces has been clarified. The third paragraph is a proposed revision of the current second paragraph and addresses the matter of absence of the president as well as the absence of the president-elect in relationship to the need for a temporary acting president. The requirement of having authorization of the board of directors prior to appointing official representatives of the Council to any other organizations is being deleted. As has been the practice in the past, the president has the discretion to make such appointments.

# Board of directors' position

Endorses, consent agenda

The Section does support the motion, unless it is a small committee.

# Committee on Awards (1 motion)

### Awards Motion 1

Move that a Special Committee on Bylaws be charged with incorporating the following amendments into

Bylaws 7.03:

## Bylaws

**Section 7.03 Committee on Awards.** The Committee on Awards shall have one member from each zone plus the chair. When available, these members should be past members of the Board of Directors who have received the Distinguished Service Award of NCEES. It shall, by October 1 of each year, canvass the Member Boards for nominations for the awards to be given at the Annual Business Meeting, including the Distinguished Service Award. It shall be guided by the established policies and procedures for the awards. Nominations shall be submitted by Member Boards by January 31 of the next year.

The committee shall complete its recommendations and submit its report to the Board of Directors by April 1. The Board of Directors shall review the report and approve individuals to receive awards.

## Rationale

The committee is proposing these changes to make the *Bylaws* consistent with current practice.

# Board of directors' position

Endorses, consent agenda

The Section does support the motion.

# Committee on Education (2 motions)

#### Education Motion 1

Move that Position Statement 35 be amended as follows:

PS 35 Future Education Requirements for Engineering Licensure One of the goals of NCEES is to advance licensure standards for all professional engineers. Those standards describe the technical and professional competency needed to safeguard the health, safety, and welfare of the public. The Council recognizes that future demands for increasing technical and professional skills have resulted in the need for additional education beyond the bachelor's degree for those entering the engineering profession. For the purpose of this Position Statement, a

bachelor's degree is in engineering from a program accredited by EAC/ABET or a bachelor's degree in engineering that meets the NCEES Engineering Education Standard as determined by NCEES.

NCEES has identified several future pathways by which a candidate for licensure as a professional engineer might obtain the body of knowledge needed to meet these educational requirements, including the following:

- A. A bachelor's degree in engineering from a program accredited by EAC/ABET and a master's or earned doctoral degree in the same technical area of engineering in the same technical area from an institution a program that offers an EAC/ABET-accredited programs, or the equivalent bachelor's degree
- B. A bachelor's degree and a master's degree in engineering from a program accredited by EAC/ABET
- C. A bachelor's degree from a program accredited by EAC/ABET that has a minimum of 150 semester credit hours, of which at least 115 semester credit hours are in mathematics, science, or engineering combined and at least 75 of these semester credit hours are in engineering
- D. A bachelor's degree in engineering from a program accredited by EAC/ABET and at least 30 additional semester credit hours of upper-level undergraduate or graduate-level coursework in engineering on topics relevant to the practice of engineering (e.g., engineering-related science, mathematics, or professional practice topics such as business, communications, contract law, management, ethics, public policy, and quality control) from approved course providers (e.g., institutions that have EAC/ABET-accredited programs, or institutions or organizations accredited by an NCEES-approved accrediting body)
- E. A bachelor's degree in engineering from a program accredited by EAC/ABET, and 80 assessed learning days (ALDs) in areas germane to professional practice and that support and enhance the applicant's capability in their technical area of practice
  - ALDs can be earned through credit or noncredit courses. The applicant shall be required to demonstrate successful completion and that the coursework was of sufficient content and rigor.
  - Coursework may include university courses, industrial in-house specialty courses, short courses and certification courses offered by professional and technical societies, and other courses meeting standards to be developed by NCEES.
  - At least 40 ALDs shall be from technical engineering coursework.
     Nontechnical ALDs include professional practice topics such as business, communications, contract law, management, ethics, public policy, and quality control.
  - For non-university-provided coursework, a course that earns ALD credit must have a syllabus, learning objectives, and outcomes assessment.
  - For non-university-provided coursework, one ALD unit shall be defined as eight hours of contact time.
  - 6. For university-provided coursework, a three-semester credit hour

course shall equal six ALDs.

7. Any single course must consist of at least one ALD.

NCEES will continue to explore alternative educational pathways for candidates for licensure as professional engineers to develop the body of knowledge needed for entry into the profession. These alternatives will be developed through collaboration with technical engineering societies and other stakeholders engaged with the engineering profession.

#### Rationale

This clarifies the intent of "or the equivalent" and removes repetition of the newly defined phrase from each subparagraph. Other edits in paragraph A clarify the intent without changing the content of the relationship between the EAC/ABET-accredited bachelor's and the related master's or earned doctoral degrees.

# Board of directors' position

Endorses, consent agenda

The Section does support the motion.

## Education Motion 2

Move that the UPLG Committee be charged with incorporating the following language into *Model Rules* 240.30 C6:

# Model Rules 240.30 Continuing Professional Competency

# C. Requirements

Every licensee is required to obtain the equivalent of 15 PDHs per annual renewal period, 30 PDHs per biennial renewal period, or 45 PDHs per triennial renewal period. These PDHs may be obtained anytime during the applicable renewal period. A minimum of 1 PDH of each 15 PDHs shall be earned by successfully completing a course or activity that has content areas that focus on (a) professional engineering or surveying ethics, or (b) improving a licensee's methods of business practice or operations or otherwise advancing professionally related skills and practices as applicable to the practice of engineering or surveying. If a licensee exceeds the annual requirement in any renewal period, a maximum of 15 PDHs may be carried forward into the subsequent renewal period. PDHs may be earned as follows:

6. Active participation in professional or technical societies <u>or in</u> <u>accrediting organizations</u>

#### Rationale

The language of the *Model Rules* appears to exclude qualifying participation in accrediting organizations, and the committee believes this is not the intent of this rule.

# Board of directors' position

Endorses, consent agenda The Section does support the motion.

# Committee on Examination Policy and Procedure (1 motion)

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# EPP Motion 1

Move that a Special Committee on Bylaws be charged with incorporating the following changes into

Bylaws 7.08:

## Bylaws

Section 7.08 Committee on Examination Policy and Procedures. The Committee on Examination Policy and Procedures (EPP) shall consist of a chair and, two members selected from each zone, and the chairs of the Committees on Examinations for Professional Engineers and Examinations for Professional Surveyors (or their representatives) as consultants. In addition, the President may appoint as consultants the chairs of the Committees on Examinations for Professional Engineers and Examinations for Professional Surveyors and their subcommittees other consultants as deemed necessary, including a member board administrator.

This committee shall be responsible for reviewing the effectiveness of the examinations and recommending policies, specifications, and procedures consistent with the trends in the engineering and surveying professions.

#### Rationale

The president consistently invites the chairs of the EPE and EPS committees as consultants. Adding "their representatives" gives the option for the chair to have a respective committee member represent the committee if the chair is unable to attend.

The EPP Committee also feels that having an MBA member as a consultant is beneficial, especially when policy changes are proposed. MBAs provide an administrative perspective on how policy changes may affect their boards.

## Board of directors' position

Endorses, consent agenda The Section does support the motion.

# Committee on Examinations for Professional Engineers (1 motion)

## EPE Motion 1

Move that a Special Committee on Bylaws be charged with incorporating the following amendments into

Bylaws 7.06:

# Bylaws

Section 7.06 Committee on Examinations for Professional Engineers. The Committee on Examinations for Professional Engineers (EPE) shall consist of a chair and three members from each zone. It shall supervise the preparation of examination specifications and be responsible for the content and scoring of all examinations in the fundamentals and principles and practice of engineering. The committee, in the interest of uniformity and efficiency, may prepare examination development procedures and shall review examination scores and make recommendations of minimum passing grades for examinations. At least 50 percent of the committee members should be carryover members to provide continuity of the program.

The committee shall have the authority to recommend, in conjunction with the chair and in connection with its work, the appointment of consultants. The

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committee shall also have the authority to recommend the roles and responsibilities of its members.

#### Rationale

EPE is proposing this change to clarify that the committee is responsible for making sure that the roles and responsibilities of its members are identified and communicated to its members.

# Board of directors' position

Does not endorse, non-consent agenda The Section members agreed by consensus.

#### Board of directors' rationale

The NCEES board of directors believes the proposed changes to Section 7.06 creates ambiguity as to who has the authority to appoint consultants to support the work of the committee. The board believes it appropriate for the committee members to provide recommendations as to the roles and responsibilities of its members but that the chair should have the full and total responsibility for making appointments or assigning duties to the committee members.

# Committee on Examinations for Professional Surveyors (1 motion)

#### **EPS Motion 1**

Move that a Special Committee on Bylaws be charged with incorporating the following amendments into *Bylaws* 7.07:

# Bylaws

Section 7.07 Committee on Examinations for Professional Surveyors. The Committee on Examinations for Professional Surveyors (EPS) shall consist of a chair and three members from each zone.—It <u>All members shall be professional surveyors. EPS</u> shall supervise the preparation of examination specifications and be responsible for the content and scoring of all examinations in the fundamentals and principles and practice of surveying.

The committee, in the interest of uniformity and efficiency, may shall prepare examination development procedures and shall review examination scores and make recommendations of minimum passing grades for examinations.

At least 50 percent of the committee members should be carryover members to provide continuity of the program.

This committee shall have the authority to recommend, in connection with its work, the appointment of consultants.

## Rationale

EPS is proposing the amendment in the first paragraph to eliminate the possibility of having EPS Committee members who lack the specialized knowledge required for development of the surveying exams. It is also changing "may" to "shall" as a housekeeping change for consistency.

# Board of directors' position

Does not endorse, non-consent agenda *The Section does support the motion.* 

#### Board of directors' rationale

The NCEES board of directors feels that the specificity being recommended as to

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who should be appointed to the committee significantly limits the president-elect's ability to appoint individuals with the expertise and experience required to address the charges that will be assigned. The board believes that the president-elect should be afforded the flexibility to appoint members who are best qualified to perform the duties with appropriate representation from the engineering and surveying professions based on the issues to be studied.

# Committee on Finances (3 motions)

#### Finance Motion 1

Move that the adoption of the 2018–19 operating budget as shown in Appendix A 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 Section does support the motion.

# Finance Motion 2

Move that the adoption of the 2018–19 capital 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 Section does support the motion.

## Finance Motion 3

Move that Financial Policy 8 be amended as follows:

## FP 8 Membership Fees

All membership fees will be reviewed and approved by the Council. The current approved schedule is included here for reference.

| Member Boards                        | Current Fee      | Date Effective          |
|--------------------------------------|------------------|-------------------------|
| 1 through <u>150-200</u> registrants |                  | \$750 annually          |
| 151-201 through 500 registrants      | \$2,600 annually | 01/01/ <del>09</del> 18 |
| 501 or more registrants              | \$6,500 annually | 01/01/07                |

#### Rationale

The committee reviewed this charge with discussion about member boards that have low licensee populations but have moved into the next membership fee category due to small increases in number of their licensees. This increase in fees may create financial hardships for the smaller boards and, in some cases, could prevent them from being able to participate in the Council. To ensure that all full member boards have the opportunity to participate and vote in the Council, the Finance Committee is proposing to increase the numbers for the first two categories. The committee also recommends that this fee structure be retroactive to January 1, 2018, with fees reimbursed to member boards that are impacted by the change.

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## Board of directors' position

Endorses, consent agenda

The Section does support the motion.

# Committee on Law Enforcement (1 motion)

#### Law Enforcement Motion 1

Move that a Special Committee on Bylaws be charged with incorporating the following amendments into *Bylaws* 7.10:

## **Bylaws**

Section 7.10 Committee on Law Enforcement. The Committee on Law Enforcement shall consist of a chair and members from each zone. At least one member shall be a surveyor. The committee shall receive comments and suggestions from Member Boards regarding state board regulatory functions and submit recommendations for action to the Board of Directors. The committee will consider and recommend methods for Member Boards to achieve more effective and uniform enforcement of licensing acts and for greater interstate coordination of enforcement actions, including better utilization of available technologies. The committee is responsible for periodically updating the *Investigation and Enforcement Guidelines* to assist Member Boards in investigative techniques, formal hearing procedures, and informal settlements.

#### Rationale

The committee is proposing these changes to eliminate unnecessary words that could potentially cause misunderstanding.

## Board of directors' position

Endorses, consent agenda *The Section does support the motion.* 

# Committee on Member Board Administrators (1 motion)

Move that a Special Committee on Bylaws be charged with incorporating the following amendments into

Bylaws 7.11:

Section 7.11 Committee on Member Board Administrators. The Committee on Member Board Administrators shall consist of a chair, who shall be a member board administrator; and at least two members board administrators from each zone. Two members shall be; and two current members or emeritus members of Member Boards. The committee shall arrange for the conference of administrators at the Annual Meeting and Interim Meetings of the NCEES zones. Throughout the year, the committee shall strive to provide close cooperation between administrators and to facilitate and assist any efforts by the Member Boards in addressing licensure processes and practices.

#### Rationale

The MBA Committee is proposing this change to clarify the purpose of MBAs within the committee, maintain zone diversity, and recognize the desire/need to consider the perspective of the MBA role as viewed by board members.

# Board of directors' position

Does not endorse, non-consent agenda *The Section does not support the motion.* 

#### Board of directors' rationale

The NCEES board of directors feels that the specificity being recommended as to who should be appointed to the committee significantly limits the president-elect's ability to appoint individuals with the expertise and experience required to address the charges that will be assigned. The board believes that the president-elect should be afforded the flexibility to appoint members who are best qualified to perform the duties with appropriate representation from the engineering and surveying professions based on the issues to be studied.

# Committee on Uniform Procedures and Legislative Guidelines (21 motions)

# **UPLG Motion 1**

Move that Model Rules 240.30 B, C, I, J, K, and L be amended as follows.

# Model Rules 240.30 Continuing Professional Competency

The purpose of the continuing professional competency requirement is to demonstrate a continuing level of competency of professional engineers and/or professional surveyors.

#### B. Definitions

Terms used in this section are defined as follows:

- Professional Development Hour (PDH)—One contact hour (nominal) of instruction or presentation. The PDH is the common denominator for other units of credit.
- 2. Ethics/Business-Related Course or Activity—A qualifying course or activity with content areas related to (1) the awareness of ethical concerns and conflicts; (2) an enhanced familiarity with the codes of conduct; (3) an understanding of standards of practice or care; (4) project management and risk-assessment management; or (5) other similar topics aimed at maintaining, improving, or expanding the skills set and knowledge relevant to the licensee's field and methods of practice.
- 3. Continuing Education Unit (CEU)—Unit of credit customarily used for continuing education courses. One continuing education unit equals 10 hours of class contact hours in an approved continuing education course.
- College Semester/Quarter Hour—Credit for course in ABET-approved accredited programs or other related college course approved in accordance with subsection E of this section.
- Course/Activity—Any qualifying course or activity with a clear purpose and objective that will maintain, improve, or expand the skills and knowledge relevant to the licensee's field of practice. Regular duties are not considered qualified activities.
- 6. Dual Licensee—An individual who is licensed as both a professional engineer and a professional surveyor

## C. Requirements Qualifying Activities

Every licensee is required to obtain the equivalent of 15 PDHs per annual renewal period, 30 PDHs per biennial renewal period, or 45 PDHs per triennial renewal period. These PDHs may be obtained anytime during the applicable renewal period. A minimum of 1 PDH of each 15 PDHs shall be earned by

successfully completing a course or activity that has content areas that focus on (a) professional engineering or surveying ethics, or (b) improving a licensee's methods of business practice or operations or otherwise advancing professionally related skills and practices as applicable to the practice of engineering or surveying. If a licensee exceeds the annual requirement in any renewal period, a maximum of 15 PDHs may be carried forward into the subsequent renewal period. PDHs may be earned as follows:

- 1. Successful completion of college courses
- Successful completion of short courses, tutorials, webinars, and distanceeducation courses offered for self-study, independent study, or group study and through synchronous or asynchronous delivery methods such as live, correspondence, archival, or the Internet
- Presenting or attending qualifying seminars, in-house courses, workshops, or professional or technical presentations made at meetings, conventions, conferences, or educational institutions
- 4. Teaching or instructing in 1 through 3 above
- Authoring published papers, articles, books, or accepted licensing examination items
- 6. Active participation in professional or technical societies
- Patents
- 8. Active participation in educational outreach activities pertaining to professional licensure or the surveying/engineering professions that involve K-12 or higher education students

#### I. Requirements for Renewal

To renew a license, an applicant must either meet the requirements of *[insert jurisdiction name]* or meet the requirements of the Model Continuing Professional Competency (CPC) Renewal Standard, as defined in paragraph 240.30 L for the number of consecutive reporting periods corresponding to the CPC requirements of *[insert jurisdiction name]* (i.e., biennial or other). A reporting period for the Model CPC Renewal Standard is defined as January 1—December 31 of 1 calendar year.

To renew a license, an applicant must meet either of the following:

- 1. The requirements of the NCEES CPC Standard
- 2. The requirements of [insert jurisdiction name]

#### J. Dual Licensees

The number of PDHs required <u>per year</u> shall-<u>remain 15</u>, at <u>be as stated in the NCEES CPC Standard</u>. At least one-third of <del>which</del> the PDHs shall be obtained in each profession.

## K. Forms-Certification

All renewal applications will require the certification of CPC credits as specified by the board. The licensee must supply sufficient detail on a CPC form to permit audit verification and retain any backup documentation. The licensee must certify and sign the CPC form and submit the form, if required, with the renewal application and fee, if required, or upon notification of audit.

#### L. Model CPC Renewal Standard

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

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activities on the Model CPC standard reporting form.

#### Rationale

The 2016–17 Education Committee made a successful motion to charge UPLG with incorporating changes to *Model Rules* 240.30. The Education Committee stated in its 2017 report that it was proposing the changes because the *Model Rules* contains confusing language about a variety of renewal periods (annual, biennial, triennial). The committee also pointed out that the language is not clearly consistent with Position Statement (PS) 10, Continuing Professional Competency (CPC). In addition, the Education Committee proposed removing references to CPC reporting forms because it felt that the use of forms is obsolete now that the NCEES CPC online tracking system has been implemented.

During its review, the UPLG Committee agreed with all revisions except those to Section L, Model CPC Renewal Standard. The Committee on Education revisions included changing the title of Section L to "NCEES CPC Standard" and rewording the section to state the requirements of an NCEES CPC Standard. Instead, UPLG recommends creating a standalone publication, NCEES CPC Standard, with similar structure and purpose to those of the NCEES Engineering Education Standard and NCEES Surveying Education Standard. Both standards are currently published on the public nees.org website. Conversely, the current CPC standard is found within the NCEES CPC Guidelines, which is located on members-only Board Resources section of the MyNCEES website. The current Education Committee agreed with making this change and developed a standalone NCEES CPC Standard that it will include as part of its report. It will also update any related language in the CPC Guidelines as needed to reference the NCEES CPC Standard.

The only other change UPLG made to the 2016–17 Education Committee language is to change "approved" to "accredited" in B4 to make it consistent with language elsewhere in the model documents.

# Board of directors' position

Endorses, consent agenda The Section does support the motion.

# UPLG Motion 2

Move that Model Rules 230.20 A8 and B5 be amended as follows.

# Model Rules 230.20 Experience

A. As a Professional Engineer

In evaluating experience that indicates to the board that the applicant may be competent to practice engineering, the following will be considered:

- 8. Teaching experience must be in engineering or engineering-related courses at an advanced a junior-, senior-, or graduate-level in a college or university offering an engineering program of 4 years or more that is approved by the board.
- B. As a Professional Surveyor
  - In evaluating experience that indicates to the board that the applicant may be competent to practice surveying, the following will be considered:
  - 5. Teaching experience must be in surveying or surveying-related courses at

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an advanced a junior-, senior-, or graduate-level in surveying or surveying-related courses approved by the board.

#### Rationale

The 2016–17 Education Committee made a successful motion to charge UPLG with incorporating changes to this section of the *Model Rules*. Its rationale stated that the changes are "particularly applicable to professors who seek licensure. Member boards evaluate their teaching experience for sufficiency, but they often ask what is meant by 'advanced level.' The committee decided that junior-, senior-, and graduate-level courses qualify as advanced level. It proposes identical language for both engineers and surveyors."

During its review, the UPLG Committee agreed with the revisions but suggested edits to the original Education Committee language to make it more concise. This year's Education Committee agreed with the revised proposed changes shown above.

# Board of directors' position

Endorses, consent agenda

The Section does support the motion.

## **UPLG Motion 3**

Move that the *Model Law* and *Model Rules* prefaces be amended as follows.

# Purpose of the NCEES Model Law and Model Rules

The vision of the National Council of Examiners for Engineering and Surveying (NCEES) is to provide leadership in professional licensure of engineers and surveyors through excellence in uniform laws, licensing standards, and professional ethics in order to safeguard the health, safety, and welfare of the public and to shape the future of professional licensure. The mission of NCEES is to advance licensure for engineers and surveyors in order to safeguard the health, safety, and welfare of the public.

NCEES serves as an organization through which its members—the engineering and surveying licensure boards in all U.S. states and territories—can counsel and act together to better discharge their duties as individual, autonomous regulatory agencies. One of the primary ways NCEES fulfills its vision and supports its mission is by providing the *Model Law* and *Model Rules* for adoption by its member boards.

The NCEES *Model Law* sets forth broad ideas about the regulation of engineering and surveying licensure. It is an enabling document that defines the board's powers and duties. It is designed to assist legislative counsels, legislators, and NCEES members in preparing new or amendatory legislation. Each line in the sections is numbered to facilitate use of this document as a working model. The *Model Rules* complements the *Model Law* by providing model rules and regulations for the ways member boards can carry out the general concepts introduced and set forth in the law. While it is designed to explain broad provisions stated in the *Model Law* by offering the details from an administrative perspective, the *Model Rules*, just like a board's regulations or rulemaking process, functions only within the authority granted by the *Model Law*. The *Model Rules* is designed to assist NCEES member board members, board counsel, and board administrators in preparing and updating board rules.

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The bracketed and italicized language throughout the *Model Law* and *Model Rules* indicates areas where language may need to be customized for a jurisdiction.

By vote, the majority of NCEES member boards have agreed that the language in the *Model Law* and *Model Rules* represents the gold standard for engineering and surveying licensure requirements in the United States. Revisions to the *Model Law* and *Model Rules* are decided at the NCEES annual business meeting, and any motion to amend the *Model Law* or the *Model Rules* presented at an annual business meeting by an entity other than the Committee on Uniform Procedures and Legislative Guidelines (UPLG) shall be referred to the UPLG Committee for review and revision of the language for inclusion before it is presented for Council vote at the next scheduled annual meeting.

The intent of NCEES in preparing these uniform model documents is to present its member boards with a high-level benchmark—and yet a sound and realistic guide—that will provide greater uniformity of qualifications for licensure, raise these qualifications to a higher level of accomplishment, and simplify the interstate licensure of engineers and surveyors.

#### Rationale

This change is to clarify how the bracketed and italicized language throughout the *Model Law* and *Model Rules* is meant to be used by member boards.

# Board of directors' position

Endorses, consent agenda

The Section does support the motion.

# **UPLG Motion 4**

Move that *Model Law* 110.20 A, 150.30 A, 160.20 A–B, 160.30, and 160.70 A and *Model Rules* 230.10 A–B, 230.20 A–B, 230.40 F, 240.10 C, and 240.15 A–B be amended as follows.

#### Model Law 110.20 Definitions

# A. Engineer

- 5. Practice of Engineering
  - Represents himself or herself to be a professional licensed 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 licensed engineer or licensed under this Act

# 150.30 Grounds for Disciplinary Action—Unlicensed Individuals

- A. In addition to any other provisions of law, the board shall have the power to fine and recover costs from any unlicensed individual who is found guilty of:
  - Engaging in the practice or offer to practice of engineering or surveying in this jurisdiction without being licensed in accordance with the provisions of this Act
  - Using or employing the words "engineer," "engineering," "surveyor,"
     "surveying," or any modification or derivative thereof in his or her name or
     form of business activity except as licensed in this Act
  - 3. Presenting or attempting to use the certificate of licensure or seal of a

- professional engineer or professional surveyor licensee
- 4. Engaging in any fraud or deceit in obtaining or attempting to obtain a certificate of licensure or intern certification
- 5. Impersonating any professional engineer or professional surveyor licensee
- 6. Using or attempting to use an expired, suspended, revoked, inactive, retired, or nonexistent certificate of licensure

# 160.20 Managing Agent and Resident Professional

A firm shall designate a managing agent and a resident professional. The managing agent and the resident professional may or may not be the same individual.

- A. Managing Agent—The following criteria shall apply to the firm's designation of a managing agent: A firm shall designate a professional engineer or professional surveyor-licensee to be a managing agent for the firm. The managing agent is responsible for the engineering or surveying work and projects in this jurisdiction and/or for projects within this jurisdiction offered or provided by the firm. A licensee may not be designated as a managing agent for more than one firm. A licensee who renders occasional, part-time, or consulting engineering or surveying services to, or for, a firm may not be designated as a managing agent, unless the licensee is an officer or owner of the firm. The managing agent's responsibilities include:
  - 1. Renewal of the firm's certificate of authorization and notification to the board of any change in managing agent;
  - Overall administrative supervision of the firm's licensed and subordinate personnel providing the engineering or surveying work in this jurisdiction; and
  - Institution and adherence of policies of the firm that are in accordance with the Rules of Professional Conduct.
- B. Resident Professional—The following criteria shall apply to the firm's designation of a resident professional:
  - A firm shall also designate a resident professional engineer or a resident professional surveyor, as applicable, to be in responsible charge of the practice of engineering or practice of surveying, as applicable, in each branch office in which engineering or surveying services are offered or provided. A resident professional engineer or a resident professional surveyor shall meet the following criteria:
  - 1. Spend a majority of normal business hours at a particular branch office;
  - 2. Be a resident professional engineer or a resident professional surveyor at only one particular branch office at one time; and
  - 3. Be duly licensed as a professional engineer or a professional surveyor by the licensing board of the jurisdiction in which the branch office is located.

# 160.30 Liability Not Affected

No firm shall be relieved of responsibility for the conduct or acts of its managing agents, employees, officers, directors, owners, or managers by reason of its compliance with the provisions of this section. No individual practicing engineering or surveying under the provisions of this Act shall be relieved of responsibility for engineering or surveying services performed by reason of employment or other relationship with a firm holding a certificate of authorization.

160.70 Grounds for Disciplinary Action—Firms Holding a Certificate

#### of Authorization

- A. The board shall have the power to suspend, revoke, place on probation, fine, recover costs, and/or reprimand, or to refuse to issue, restore, or renew a certificate of authorization to any firm holding a certificate of authorization that is found guilty of:
  - 5. Discipline (including voluntary surrender of a professional engineer's or professional surveyor's an engineering or surveying license in order to avoid disciplinary action) by another jurisdiction, foreign country, or the United States government, if at least one of the grounds for discipline is the same or substantially equivalent to those contained in this Act

# 230.10 Education Requirements Approved by the Board

## A. Engineering Program

The term "an engineering program of 4 years or more" used in Section 130.10 B.1.a of the NCEES *Model Law* is interpreted by this board to mean the following:

 A degree from a bachelor's or master's engineering program accredited by the Engineering Accreditation Commission of ABET (EAC/ABET) at the time of the awarding of the degree. The board may accept the degree if accreditation is received within [insert the prescribed period of time].

# B. Surveying Program

The following shall be considered as minimum evidence to the board that the applicant is qualified in terms of education for certification as a surveyor intern:

 Graduation from a surveying program of 4 years or more accredited by EAC/ABET, the Engineering Technology Accreditation Commission of ABET (ETAC/ABET), or the Applied and Natural Science Accreditation Commission of ABET (ANSAC/ABET) at the time of awarding the degree or from a program that meets the requirements of the NCEES Surveying Education Standard as described in Section 130.10 C.1.a in NCEES Model Law. The board may accept the degree if accreditation is received within [insert the prescribed period of time].

## 230.20 Experience

#### A. As a Professional Engineer

 Experience must be progressive on engineering projects and must demonstrate an increasing quality and greater responsibility. Experience must be obtained in accordance with *Model Law* 130.10.

## B. As a Professional Surveyor

 Experience must be progressive on surveying projects and must demonstrate an increasing quality and greater responsibility. Experience must be obtained in accordance with *Model Law* 130.10.

#### 230.40 Examinations

F. Language of the Examination

The language of the examination will-shall be English.

## 240.10 Licensure

C. Retirement of Licensure Option

When a professional engineer or professional surveyor licensee in good standing desires to retire his or her license, he or she may do so upon application to the board. Upon meeting the requirements established by the

board, a permanent identification card may be issued and the retired licensee shall receive all rights and benefits as established by the board. Upon retirement of said license, the retiree shall not practice the profession.

#### 240.15 Rules of Professional Conduct

- A. Licensee's Obligation to the Public
  - Licensees shall notify their employer or client and such other authority as
    may be appropriate when their professional judgment is overruled under
    circumstances in which when the health, safety, or welfare of the public is
    endangered.
  - 8. Licensees who have knowledge or reason to believe that any person or firm has violated any rules or laws applying to the practice of engineering or surveying shall report it to the board, may report it to appropriate legal authorities, and shall cooperate with the board and those authorities as may be-requested.
- B. Licensee's Obligation to Employer and Clients
  - Licensees may accept assignments and assume responsibility for coordination of an entire project, provided that if each technical segment is signed and sealed by the licensee responsible for preparation of that technical segment.

#### Rationale

UPLG is presenting these as housekeeping changes to simplify and clarify the language. The committee does not consider any of the changes to be substantive.

# Board of directors' position

Endorses, consent agenda The Section does support the motion.

# **UPLG Motion 5**

Move that Model Law 110.20 A6 and B5 be amended as follows.

#### Model Law 110.20 Definitions

- A. Engineer
  - 3. Professional Engineer, Retired—The term "Professional Engineer, Retired," as used in this Act, shall mean an individual who has been duly licensed as a professional engineer by the board and who chooses to relinquish or not to renew a license and who applies to and is approved by the board to be granted the use of the title "Professional Engineer, Retired."
  - 6. Inactive Status—Licensees who are not engaged in engineering practice that requires licensure in this jurisdiction may be granted inactive status. No licensee granted inactive status may practice or offer to practice engineering in this jurisdiction unless otherwise exempted in this Act. Licensees granted inactive status are exempt from continuing education requirements.
- B. Professional Surveyor (Professional Land Surveyor, Professional Surveyor and Mapper, Geomatics Professional, or equivalent term)
  - 2. Professional Surveyor, Retired—The term "Professional Surveyor, Retired," as used in this Act, shall mean an individual who has been duly licensed as a professional surveyor by the board and who chooses to relinquish or not to renew a license and who applies to and is approved by the board to be granted the use of the title "Professional Surveyor,"

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Retired."

5. Inactive Status—Licensees who are not engaged in surveying practice that requires licensure in this jurisdiction may be granted inactive status. No licensee granted inactive status may practice or offer to practice surveying in this jurisdiction unless otherwise exempted in this Act. Licensees granted inactive status are exempt from the continuing education requirements.

#### Rationale

The language is being removed because it is redundant with *Model Rules* 240.30, Continuing Professional Competency. Paragraph G4 of that section states, "Licensees who list their occupation as 'Retired' or 'Inactive' on the boardapproved renewal form and who further certify that they are no longer receiving any remuneration from providing professional engineering or surveying services shall be exempt from the PDHs required." Striking the language also makes it consistent with the *Model Law* "Retired" definitions, which do not include a similar sentence. Those definitions are shown above for reference.

## Board of directors' position

Endorses, consent agenda The Section does support the motion.

# **UPLG Motion 6**

Move that Model Law 120.20 be amended as follows.

# Model Law 120.20 Board Qualifications

Each professional engineer member of the board shall be a citizen of the United States and a resident of this jurisdiction. He or she shall have been engaged in the lawful practice of engineering as a professional engineer for at least 12 years, shall have been in responsible charge of engineering projects for at least 5 years, and shall be a licensed professional engineer in this jurisdiction.

Each professional surveyor member of the board shall be a citizen of the United States and a resident of this jurisdiction. He or she shall have been engaged in the lawful practice of surveying as a professional surveyor for at least 12 years, shall have been in responsible charge of surveying projects for at least 5 years, and shall be a licensed professional surveyor in this jurisdiction.

Each public member of the board shall be a citizen of the United States and a resident of this jurisdiction and shall not be or have been either a professional engineer or professional surveyor a licensee. The majority of the board members shall be professional engineers and/or professional surveyors.

#### Rationale

Changing "either a professional engineer or professional surveyor" to "a licensee" is to simplify the language.

The last sentence is being deleted because the number of board members is already established in *Model* 

Law 120.10.

# Board of directors' position

Endorses, consent agenda *The Section does support the motion.* 

# UPLG Motion 7

Move that Model Law 130.10 A and C be amended as follows.

# Model Law 130.10 General Requirements for Licensure

Education, experience, and examinations are required for licensure as a professional engineer or professional surveyor as set forth by the jurisdiction.

## A. Eligibility for Licensure

To be eligible for licensure as a professional engineer or professional surveyor, an individual must meet all of the following requirements:

- 1. Be of good character and reputation
- 2. Satisfy the education criteria set forth-below by the board
- 3. Satisfy the experience criteria set forth-below by the board
- 4. Pass the applicable examinations set forth-below by the board
- 5. Submit five references acceptable to the board

### C. Surveying

- 3. 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.
  - e. The applicant submits five references as to the applicant's character and quality of work, all of which shall be from professional surveyors or professional engineers licensees currently practicing within the scope of their license in an area of surveying.

#### Rationale

The changes are to clarify the board's authority and to simplify language.

## Board of directors' position

Endorses, consent agenda The Section does support the motion.

#### UPLG Motion 8

Move that Model Law 130.20 A be amended as follows.

## Model Law 130.20 Application and Fees

A. Application for licensure as a professional engineer and/or professional surveyor or certification as an engineer intern or surveyor intern shall be on a form prescribed and furnished by the board; shall contain a declaration made under penalty of perjury, showing the applicant's education and a detailed summary of technical and engineering experience or surveying experience; and shall include the names and complete mailing addresses contact information of the references, none of whom should be members of the board.

The board may accept the verified information contained in a valid Council Record issued by NCEES for applicants in lieu of the same information that is required on the form prescribed and furnished by the board.

#### Rationale

The changes are to update language and to remove details about references since *Model Rules* 230.30 provides them.

# Board of directors' position

Endorses, consent agenda

The Section does support the motion.

# **UPLG Motion 9**

Move that *Model Law* 110.20 K, *Model Law* 140.10 A–D, and *Model Rules* 240.20 A–B be amended as follows.

#### Model Law 110.20 Definitions

K. Seal—The term "Seal," as used in this Act, shall mean a symbol, image, or list of information in accordance with the Rules.

# Model Law 140.10 Certificates of Licensure, Seals

- A. The seal of this board is *[insert description of seal]* and shall be affixed to each certificate of licensure, certificate of authorization, and enrollment document.
- AB. The board shall issue to any applicant for licensure as a professional engineer or professional surveyor who, in the opinion of the board, has met the requirements of this Act, a certificate of licensure giving the licensee proper authority to practice his or her profession in this jurisdiction. The certificate of licensure for a professional engineer shall carry the designation "Professional Engineer" and for a professional surveyor, "Professional Surveyor." It shall give the full name of the licensee with licensure number and shall be signed by the appropriate authority under the seal of the board.
- BC. The certificate of licensure shall be prima facie evidence that the individual named thereon is entitled to all rights and privileges and is bound by all responsibilities of a professional engineer or a professional surveyor while the said certificate of licensure remains active and unrestricted.
- CD. Upon licensure, each licensee may obtain a seal-as described in Section 110.20 K of this Act. Documents must be sealed, signed, and dated in accordance with the Rules. A licensee's seal shall contain the following:
  - 1. Jurisdiction of licensure
  - 2. Licensee's name
  - 3. License number
  - 4. The words "professional engineer" [and discipline] or "professional surveyor"
- DE. The board shall issue to any applicant for certification as an engineer intern or surveyor intern who, in the opinion of the board, has met the requirements of this Act, an enrollment document as engineer intern or surveyor intern, which indicates that his or her name has been recorded as such in the board office. The engineer intern or surveyor intern enrollment document does not authorize the holder to practice as a professional engineer or a professional surveyor.

## Model Rules 240.20 Seals

A. Seal of the Board

The seal of this board is [insert description of seal] and shall be affixed to each certificate of licensure, certificate of authorization, and enrollment document.

B. Seal of Licensee

A licensee's seal 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"

#### Rationale

The changes are to move language from the *Model Rules* to the *Model Law*, where it is more appropriate because it is authoritative language.

# Board of directors' position

Endorses, consent agenda

The Section does support the motion.

## **UPLG Motion 10**

Move that *Model Law* 140.20 B–C and *Model Rules* 240.40 D–I be amended as follows.

# Model Law 140.20 Expirations, Renewals, and Reinstatement to Active Practice

- A. Certificates of licensure shall expire on the date designated by the board and shall become invalid after that date unless renewed. It shall be the duty of the board to notify every individual licensed under this Act of the expiration date of the certificate of licensure and the amount of the fee required for its renewal.
- B. Renewal may be effected during the renewal period by meeting the requirements established by the board, including the requirements for continuing professional competency as a condition for renewal. The annual for insert other amount of time] renewal fee is established by the board. Renewal fees must be received by the board prior to the expiration date.
- <u>C. Renewal-Reinstatement</u> of an expired certificate may be effected under rules promulgated by the board regarding requirements for re-examination and penalty fees.
- CD. If a licensee is granted inactive status, the licensee may return to active status by notifying the board in advance of this intention, by paying appropriate fees, and by meeting all requirements of the board, including demonstration of continuing professional competency as a condition of reinstatement. In the event an inactive licensee does not maintain a current license in any jurisdiction for the 3 previous years prior to requesting reinstatement, that individual will be required to take and pass the NCEES Principles and Practice of Engineering (PE) examination or the NCEES Principles and Practice of Surveying (PS) examination and jurisdiction-specific examinations prior to reinstatement.

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

- A. A renewal notice will be sent annually or as required by this jurisdiction by the board [insert number of days] prior to the license expiration date 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.
- B. The annual [or insert other amount of time] renewal fee is established by the board.
- C. Renewal fees must be received by the board prior to the expiration date. D.—Fees received within 1 month or more after the renewal date will be assessed an additional fee established by the board.
- ED. Renewal fees not paid within a period established by the board after the expiration date voids the license or certificate and will require a new

- application for licensure or certification in order to continue to practice engineering or surveying.
- FE. A licensee or firm who supplies the board before the expiration date of his/her/its license/certificate with an affidavit that he/she/it is no longer practicing and will not practice engineering or surveying in this jurisdiction may retain his/her/its license/certificate for later use upon payment of delinquent fees.
- GF. The responsibility for the timely renewal of a licensee's license rests solely with the individual licensee. The responsibility for the timely renewal of a firm's certificate rests solely with the firm's managing agent.
- HG. The applicant for renewal or reinstatement may be required to demonstrate to the board that he or she has maintained the required minimum level of professional competence in a manner acceptable to the board.
- I. In the event an inactive licensee does not maintain a current license in any jurisdiction for the 3 previous years prior to requesting reinstatement, that individual will be required to take the NCEES Principles and Practice of Engineering (PE) examination or the NCEES Principles and Practice of Surveying (PS) examination and jurisdiction-specific examinations prior to reinstatement.

#### Rationale

The language in *Model Rules* 240.40 I is being moved from *Model Rules* 240.40 to put the authoritative parts of the language in *Model Law* 140.20 as shown. *Model Rules* 240.20 C and D are being combined to put the renewal expectation and consequence in one paragraph.

# Board of directors' position

Endorses, consent agenda

The Section does support the motion.

# **UPLG Motion 11**

Move that *Model Law* 150.20 be amended, *Model Rules* 250.30 be amended, and *Model Law* 120.65

be adopted as follows.

# Model Law 150.20 Disciplinary Action Procedures—Licensees and Interns

- A. Any person or entity, including the board or board staff, may file a complaint alleging a violation of any provision of this Act or any of the rules or regulations of the board against any licensee or against any intern.
- B. A complaint shall be in writing and state specifically the facts on which the complaint is based.
- C. All complaints shall be reviewed by the board or an investigative committee designated by the board. After review, the board or the investigative committee shall determine or recommend, as appropriate, if charges are warranted.
- D. All charges, unless dismissed by the board as unfounded, trivial, or unless settled informally, shall be heard by the board. The time and place for the hearing shall be fixed by the board, and a copy of the charges, together with a notice of the time and place of hearing, shall be personally served on or mailed to the last known address of such accused individual at least 30 days before the date fixed for the hearing. The summons and notice of charges shall be

prepared in accordance with *Model Rules* 250.30. At any hearing, the accused individual shall have the right to appear in person or by counsel, or both, to cross- examine witnesses in their defense and to produce evidence and witnesses in their defense. If the accused individual fails or refuses to appear at the hearing, the board may proceed to hear and determine the validity of the charges in the accused individual's absence. The hearing shall be conducted in accordance with *Model Rules* 250.30.

E. If after such hearing a majority of the board votes in favor of sustaining the charges, the board shall reprimand, fine in an amount not to exceed [insert amount] dollars for each count, recover costs, refuse to issue, restore or renew, place on probation for a period of time, and subject to such conditions as the board may specify, suspend, revoke, or any combination thereof, the accused individual's license or intern certification.

# F. Order of the board

The board shall issue an order within [insert number] days of the date of the hearing. It shall include and shall state separately:

Findings of fact that are based exclusively on the evidence and on matters
officially noticed, stated by a concise and explicit statement of the
underlying facts supporting the findings.

#### 2. Conclusions of law

The prosecutor and/or respondent shall be delivered a copy of the findings of fact and conclusions of law by person or by mail with return receipt requested. The attorney of record for the respondent shall also be mailed a copy.

#### G. Discipline

Upon an order by the board in which the respondent is found guilty of the charges preferred, the board may take appropriate disciplinary action against the respondent.

## H. Stay order

At its discretion, the board may stay, permanently or temporarily, the execution of its order conditioned on any provision the board believes appropriate under the circumstances for the case.

- FI. A licensee or intern aggrieved by any action of the board in levying a fine; recovering costs; reprimanding; placing on probation; denying; suspending; refusing to issue, restore, or renew; or revoking a license or intern certification may appeal the board's decision to the proper court under normal civil procedures.
- GJ. Any financial sanction assessed pursuant to Section 150.10 of this Act shall be assessed in a proceeding as provided in this section. Unless the amount of the penalty is paid within [insert number] days after the order becomes final, the order shall constitute a judgment and shall be filed and execution issued thereon in the same manner as any other judgment of a court of record.
- HK.An action to enforce an order under this section may be combined with an action for an injunction.
- 4L. The board may, upon petition of a licensee or intern, reissue a license or intern certification that has been revoked by the board, provided that a majority of the board votes in favor of such reissuance.

# Model Rules 250.30 Disciplinary Action Procedures

# A. Complaints

Any person or entity, including the board or board staff, may file a complaint against licensees, interns, firms, unlicensed individuals, and firms that do not hold a certificate of authorization alleging violations of the licensure act or these Rules.

All complaints shall be made in writing in a format prescribed by the board and shall be filed with the board.

## B. Probable Cause

When a complaint is received by the board, it is referred to an investigative committee designated by the board. Any board member on the investigative committee cannot vote at the disciplinary hearing. [Note: Some boards use one member on a rotating basis. Some boards do not use a committee but use an investigator who then confers with the board and the attorney for the board.] The investigative committee makes a determination if probable cause exists for taking further action or for issuing a summons and notice of charges.

## CA. Summons and Notice of Charges

- In the event the investigative committee determines that a probable cause exists, the legal counsel of the board is requested to prepare a summons and notice of charges.
- 2. The summons and notice of charges shall be personally served or mailed to the last known address of the respondent at least 30 days before the date fixed for hearing.
- 3. The summons and notice of charges shall show the time, place, and nature of the hearing, a statement of legal authority and jurisdiction under which the hearing is to be held, a reference to the particular section of the licensure act and rules involved, and a short and plain statement of the matters asserted. The notice of the summons and notice of charges shall indicate that at any hearing the respondent shall have the right to appear in person or by counsel or both to cross-examine witnesses in his or her or its defense and to produce evidence and witnesses of his or her or its own defense. If the respondent fails or refuses to appear, the board may proceed to hear and determine the validity of the charges. The notice shall be in substantial compliance with the requirements of the laws of this jurisdiction.

#### DB. Evidentiary Matters

In contested cases, irrelevant, immaterial, or unduly repetitious evidence shall be excluded. The rules of evidence as applied in civil cases in the court of common pleas shall be followed. The board shall give effect to the rules of privilege recognized by law. Objection to evidentiary offers may be made and shall be noted in the record. Subject to these requirements, any part of the evidence may be received in written form when a hearing will be expedited and the interest of the parties involved will not be prejudiced substantially. Documentary evidence may be received in the form of copies or excerpts if the original is not readily available. Any party may conduct cross-examination. Notice may be taken of judicially cognizable facts. In addition, notice may be taken of generally recognized technical or scientific facts within the board's

specialized knowledge. Parties shall be notified either before or during the hearing or by reference in preliminary reports or otherwise of the material noticed, including any staff memoranda or data, and they shall be afforded an opportunity to contest the material so noticed. The board's experience, technical competence, and specialized knowledge may be utilized in the evaluation of evidence.

# $\underline{EC}$ . Conduct of Hearing

The conduct of the hearing and evidence submitted shall be as required by the laws of this jurisdiction.

- At its discretion, the board may appoint an individual [preferably an attorney or someone familiar with the laws and procedures] to act as a hearing examiner. The hearing examiner shall preside at the hearing and shall rule on all questions of evidence and procedure.
- In the event a hearing examiner is not appointed, the chairperson of the board may-shall preside over the hearing and shall rule on all questions of evidence and procedure with the advice of the attorney for the board.
- 3. Normally, the The proceeding shall follow those used by a civil court in which an opening statement is made by the prosecutor and the respondent. Then evidence is presented by both sides with rebuttals. Witnesses may be examined by the prosecutor and respondent or their attorneys and by members of the board. Redirect, recross, and reexaminations are permitted. Closing statements by both the prosecutor and respondent or their attorneys are permitted.

## FD. Record of Hearing

The record of the hearing of the case shall include

- 1. All motions, intermediate ruling, and depositions
- 2. Evidence received or considered
- 3. Statement of matters officially noted
- 4. Questions and offers of proof, objections, and rulings thereon
- 5. Proposed findings and exceptions
- 6. Any decision, opinion, or report by the officer presiding at the hearing Oral proceedings or any part thereof shall be transcribed on request of any party.

#### G. Order of the Board

The board shall issue an order within [insert number] days of the date of the hearing. It shall include and shall state separately:

1. Findings of fact that are based exclusively on the evidence and on matters officially noticed, stated by a concise and explicit statement of the underlying facts supporting the findings.

#### 2. Conclusions of Law

The prosecutor and/or respondent shall be delivered a copy of the findings of fact and conclusions of law by person or by mail with return receipt requested. The attorney of record for the respondent shall also be mailed a copy.

#### H. Discipline

Upon an order by the board in which the respondent is found guilty of the charges preferred, the board may take appropriate disciplinary action against the respondent.

#### I. Stay Order

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At its discretion, the board may stay, permanently or temporarily, the execution of its order conditioned on any provision the board believes appropriate under the circumstances for the case.

## Model Law 120.65 Bias or Conflict

Any board member who serves on the investigative committee cannot vote at the disciplinary hearing. [Note: Some boards use one member on a rotating basis. Some boards do not use a committee but use an investigator who then confers with the board and the attorney for the board.] The investigative committee makes a determination if probable cause exists for taking further action or for issuing a summons and notice of charges.

#### Rationale

UPLG felt that these sections of the *Model Law* and *Model Rules* needed to be reorganize to eliminate redundancy and to move authoritative language from the *Model Rules* to the more proper location in the *Model Law*. The new section—*Model Law* 120.65, Bias or Conflict—will follow *Model Law* 120.60, Board Powers, and further clarify the role of board members.

# Board of directors' position

Endorses, consent agenda

The Section does support the motion.

## **UPLG Motion 12**

Move that Model Law 150.50 be amended as follows.

#### Model Law 150.50 Criminal Offenses

Any individual who shall commit a violation included in Section 150.30 of this Act shall be guilty of a *[insert highest degree of]* misdemeanor for the first offense and a *[insert lowest degree of]* felony for the second or any subsequent offenses. It shall be the duty of the attorney general or other appropriated designated enforcement authority of this jurisdiction to enforce the provisions of this section and to prosecute any individual violating same.

#### Rationale

The change is to eliminate redundant language. "Enforcement authority" would already include the attorney general.

# Board of directors' position

Endorses, consent agenda

The Section does support the motion.

# UPLG Motion 13

Move that Model Law 170.10 be amended as follows.

#### Model Law 170.10 Public Works

Any jurisdiction, county, or local government agencies or authorities, or officials or employees thereof, shall not engage in the practice of engineering or surveying involving either public or private property without the project being under the responsible charge of a professional engineer for engineering projects or a professional surveyor for surveying projects, as provided for the practice of the respective professions by this Act.

#### Rationale

The changes are to eliminate language that is not needed.

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## Board of directors' position

Endorses, consent agenda The Section does support the motion.

#### UPLG Motion 14

Move that Model Rules 210.30 be amended as follows.

# Model Rules 210.30 Clarifications to Offering to Practice Engineering and Surveying

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

- A. Advertising in publications Advertisements published in print or electronic media, provided there is no holding out of if professional services are not offered in jurisdictions where the engineer or surveyor is not licensed
- B. Responding Responses to letters of inquiry inquiries regarding requests for proposals, provided if there is written disclosure that the engineer/surveyor and firm are not currently licensed in this the jurisdiction and the response is limited to inquiries regarding scope of project and to demonstrate interest
- C. Responding Responses to letters of inquiry inquiries from prospective clients, provided if there is written disclosure that the engineer/surveyor and firm are not <u>currently</u> licensed in this the jurisdiction and the response is limited to inquiries regarding scope of project and to demonstrate interest
- D. Using the title/designation professional engineer, licensed engineer, P.E., professional surveyor, licensed surveyor, P.S., or the like other indicia of licensure in correspondence or on business cards from an office in the jurisdiction where licensure is held

Regardless of the above, pProposals may not be submitted, contracts signed, or work commenced until the engineer/surveyor and firm become licensed or authorized in the jurisdiction where the work is to be performed.

#### Rationale

The changes are to simplify and clarify the language.

## Board of directors' position

Endorses, consent agenda *The Section does support the motion.* 

#### **UPLG Motion 15**

Move that Model Rules 220.30 be amended as follows.

#### Model Rules 220.30 Fees

- D. Renewal Fees
  - 1. Renewal fees are payable before the last day of the month of [insert month] each year [or 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 [insert time period], a new application may be required to be filed to continue to practice engineering or surveying in this jurisdiction.

#### Rationale

The language is being deleted because it duplicates language in *Model Rules* 240.40 E.

# Board of directors' position

Endorses, consent agenda The Section does support the motion.

## **UPLG Motion 16**

Move that Model Rules 230.30 be amended as follows.

#### Model Rules 230.30 References

References are those-individuals who should have personal knowledge of an applicant and who are able to issue judgments concerning assess an applicant's experience, ability, character, or reputation.

- A. For licensure as a professional engineer or professional surveyor, an applicant must submit 5 references, 3 of whom shall be <u>professional licensed</u> engineers, <u>professional licensed</u> surveyors, or other individuals deemed acceptable to the board, who have personal knowledge of the applicant's engineering or surveying experience. In addition, for each employment period, individuals familiar with the applicant's experience for that period must be identified. Engineering applicants must have <u>professional licensed</u> engineer references, and surveying applicants must have <u>professional licensed</u> surveyor references.
- B. Relatives may not be used as references.
- C. No current board member shall be used as a reference.
- D. Each applicant should inform the individuals being used as references that they will be sent a reference form to complete and return.
- E. It is the responsibility of the applicant to ensure that the individuals giving the reference return a completed reference form to the board within a reasonable time. All reference materials must be complete before any board action may be taken on an application.
- F. Replies received from references regarding the qualifications of an applicant shall be placed in files that References are considered confidential, nonpublic records. The source and character of the information References are considered to be confidential, nonpublic records that will not be divulged except in special cases when as required by law.

## Rationale

In the first sentence, UPLG believes that "assess" is a better description of what references do. The other changes are to simplify and clarify language.

# Board of directors' position

Endorses, consent agenda The Section does support the motion.

# UPLG Motion 17

Move that Model Rules 230.40 A-D 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:

- NCEES Fundamentals of Engineering (FE) examination—The examination
  consists of subject matters in the fundamentals of engineering. Passing this
  examination qualifies the examinee for certification as an engineer intern,
  provided the examinee has met all other requirements for certification
  required by these Rules.
- NCEES Principles and Practice of Engineering (PE) examination—The
  examination consists of subject matters in applied engineering. Passing this
  examination qualifies the examinee for licensure as a professional
  engineer, provided the examinee has met the other requirements for
  licensure required by these Rules.
- 3. NCEES Structural Engineering (SE) examination—The 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.

# B. Eligibility of Applicant for Engineering Examinations

- 1. NCEES Fundamentals of Engineering (FE) Examination
  - a. Those <u>Individuals</u> who are <u>college seniors</u> in at least a 4-year the final year of a program leading to a bachelor's degree in an engineering program may register with NCEES directly to take the FE examination or, if required, apply to the board for admission to the FE examination.
  - b. To be certified as an engineer intern, an application for certification may be submitted to the board upon passing the FE examination and meeting the education requirements.
- 2. NCEES Principles and Practice of Engineering (PE) Examination
  - a. Applicants for licensure as a professional engineer will be permitted to sit for the PE examination upon satisfactorily fulfilling all application requirements of the jurisdiction.
  - b. No applicant may sit for the PE examination until the board has established that the applicant is eligible for the examination.
  - c. Engineering doctorate degree applicants with an undergraduate degree from a program accredited by the Engineering Accreditation Commission of ABET (EAC/ABET) and with a doctorate degree in engineering from an institution that offers EAC/ABET-accredited 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.

## C. Classification of Surveying Examinations

This jurisdiction will provide the following examinations, prepared and furnished by NCEES, meeting the requirements of this jurisdiction for licensure as a professional surveyor:

- NCEES Fundamentals of Surveying (FS) examination—The examination
  consists of subject matters in the fundamentals of surveying. Passing this
  examination qualifies the examinee for certification as a surveyor intern,
  provided the examinee has met all other requirements for certification
  required by this Act.
- 2. NCEES Principles and Practice of Surveying (PS) examination—The examination consists of subject matters in applied surveying, divided in separate parts as determined by the board. Passing these parts qualifies the examinee for licensure as a professional surveyor, provided the examinee has met the other requirements for licensure required by this Act.

Jurisdictions have the right to administer separate modules on jurisdiction laws and procedures for the practice of surveying.

- D. Eligibility of Applicant for Surveying Examinations
  - 1. NCEES Fundamentals of Surveying (FS) Examination
    - a. Those <u>Individuals</u> who are <u>college seniors</u> in at least a 4-year the final <u>year of a program</u> leading to a bachelor's degree in a surveying <u>or surveying-related program</u> may register with NCEES directly to take the FS examination or, if required, apply to the board for admission to the FS examination.
    - b. To be certified as a surveyor intern, an application for certification may be submitted to the board upon passing the FS examination and meeting the education and experience requirement.
  - 2. NCEES Principles and Practice of Surveying (PS) Examination
    - An applicant for licensure as a professional surveyor will not be permitted to sit for the PS examination until the FS examination has been passed.
    - b. No applicant may sit for the PS examination until the board has established that the applicant is eligible for the examination.

#### Rationale

The changes are to remove redundant language and to clarify language.

### Board of directors' position

Endorses, consent agenda

The Section does support the motion.

#### **UPLG Motion 18**

Move that Model Rules 230.60 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. 2. 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 education and experience.

## **B.** Completing Applications

### A. Applications Process

- All applications made to this board must be completed on the forms
  prescribed and furnished by the board. Applications for licensure properly
  executed and issued with verification by NCEES may be accepted in lieu
  of the same information that is required on the form prescribed and
  furnished by this board.
- 2. <u>In order to To</u> allow sufficient time for processing and for securing penciland-paper examinations, all applications that may require pencil-and-paper examinations must be filed with this board at least *[insert number]* days before the date set for the appropriate pencil-and-paper examinations.
- Withholding information or providing statements that are untrue or misrepresent the facts may be cause for denial of an application or revocation of license or certification.
- 4. It is the responsibility of the applicant to supply correct addresses of contact information for all references and to be sure that the references are supplied as requested. If a reference fails to respond, this could delay the processing of an application either until a reply is obtained or another reference is given.
- 5. In relating experience, the applicant must account for all employment or work experience for the period of time that has elapsed since the beginning of the employment record. If not employed or employed in other kinds of work, this should be indicated in the experience record.
- CB. Applications from Applicants with Degrees from Foreign Schools
  - All foreign language documentation submitted with the completed application must be accompanied by certified translations. The translation report shall be sent directly from the translator translation service to the board for review.
  - 2. All applicants must be able to communicate in the language of commerce.
  - 3. Those applicants Applicants who, for political or other valid reasons, are unable to obtain their college transcript shall be processed on a case-by-case basis by the board.
  - The board may require an independent evaluation of the foreign undergraduate education of an applicant who was educated outside the United States.

## ⊕C. Reconsideration of Applications

Reconsideration may be requested of an application that has been denied when the request is based on additional information and/or evidence that could affect the original decision. A reconsideration request or request for a hearing must be made within [insert number] days after the applicant has been notified that the decision was made to reject the original application.

ED. Disposition of Applications
Applications may be approved, deferred for further information (more

experience, questionable references, or other reasons), or denied.

- Approved applications—When an application is approved by the board showing that the applicant has met all the requirements for licensure or certification required by the licensure act, the applicant shall be granted licensure or certification with notification by the board.
- 2. Deferred applications—Applications deferred for any reason are retained until such date as a proper remedy is presented or until [insert deadline for responding to board's inquiry].
- 3. Denied applications—When an application is denied by the board, it is kept on file for at least 1 year before being destroyed.

## FE. Licensure by Comity

- The board is authorized to review and evaluate the applications of all comity applicants to determine if they meet or exceed the criteria to be licensed as a professional engineer, professional structural engineer, or professional surveyor as defined in Section 130.10 of the *Model Law*.
- 2. The board administrator is authorized to review and evaluate the applications of all comity applicants to determine if they meet or exceed the criteria of a Model Law Engineer, Model Law Structural Engineer, or Model Law Surveyor as set forth in the NCEES Manual of Policy and Position Statements. If the applicant meets or exceeds these requirements, the board administrator may issue a contingent license authorizing that individual to offer or provide engineering or surveying services in this jurisdiction. A list of all engineers issued contingent licenses will be placed on the agenda of the next meeting of the board for formal approval by the board. A list of all surveyors who have been issued contingent licenses and who have passed the appropriate jurisdiction-specific examination will be placed on the agenda of the next meeting for formal approval by the board.

#### Rationale

The stricken language in the first sentence of paragraph A is already described later in the section and is described in *Model Law* 130.20 A. The language in A1 and A2 is also deleted because it is not relevant whether the applicants believe they are qualified. The title of paragraph B (the new paragraph A) is being changed to make it broader since the language discusses more than how to complete applications. The changes in the original B2 and B4 are housekeeping changes to clean up the language. The stricken language in the original B5 is not needed because it says "employment record" later in the sentence; work experience is already tied to an amount of time. In the original paragraph C, "Applications from" is deleted because the section is actually talking about applicants. The changes in paragraph 1 of that section are to make it clear that a transcript has to be an official translation report. The changes in paragraph 3 of that section are to clarify the language.

## Board of directors' position

Endorses, consent agenda The Section does support the motion.

## UPLG Motion 19

Move that Model Rules 240.30 be amended as follows.

Model Rules 240.30 Continuing Professional Competency

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The purpose of the continuing professional competency requirement is to demonstrate a continuing level of competency of professional engineers and/or professional surveyors licensees.

## C. Requirements

Every licensee is required to obtain the equivalent of 15 PDHs per annual renewal period, 30 PDHs per biennial renewal period, or 45 PDHs per triennial renewal period. These PDHs may be obtained anytime during the applicable renewal period. A minimum of 1 PDH of each 15 PDHs shall be earned by successfully completing a course or activity that has content areas that focus on (a) professional engineering or surveying ethics, or (b) improving a licensee's methods of business practice or operations or otherwise advancing professionally related skills and practices as applicable to the practice of engineering or surveying. If a licensee exceeds the annual requirement in any renewal period, a maximum of 15 PDHs may be carried forward into the subsequent renewal period. PDHs may be earned as follows:

- 1. Successful completion of college courses
- Successful completion of short courses, tutorials, webinars, and distanceeducation courses offered for self-study, independent study, or group study and through synchronous or asynchronous delivery methods such as live, correspondence, archival, or the Internet
- Presenting or attending qualifying seminars, in-house courses, workshops, or professional or technical presentations made at meetings, conventions, conferences, or educational institutions
- 4. Teaching or instructing in 1 through 3 above
- Authoring published papers, articles, books, or accepted licensing examination items
- 6. Active participation in professional or technical societies
- 7. Patents
- 8. Active participation in educational outreach activities pertaining to professional licensure or the surveying/engineering professions that involve K-12 or higher education students

#### G. Exemptions

A licensee may be exempt from the continuing professional competency requirements for one of the following reasons:

- New licensees by way of examination or comity shall be exempt for their first renewal period.
- A licensee serving on temporary active duty in the armed forces of the United States for a period of time exceeding 120 consecutive days in a year shall be exempt from obtaining the PDHs required during that renewal period.
- Licensees experiencing physical disability, illness, or other extenuating circumstances may apply for an exemption or an extension of time to obtain the credits, subject to the review and approval of the board.
   Supporting documentation must be furnished to the board.
- 4. Licensees who list their occupation as "Retired" or "Inactive" on the boardapproved renewal form and who further certify that they are no longer receiving any remuneration from providing professional engineering or surveying services shall be exempt from the PDHs required. In the event

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such an individual elects to return to active practice of professional engineering or surveying, PDHs must be earned before returning to active practice for each year exempted, not to exceed the annual requirement for 2 years.

### H. Reinstatement

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

#### Rationale

The changes in the introductory paragraph are to simplify language. The language in paragraph C is deleted because "ethics" is not specific to engineering and surveying disciplines—the topic is broader than that. In G, the language is deleted because it duplicates what is stated in H.

## Board of directors' position

Endorses, consent agenda

The Section does support the motion.

#### UPLG Motion 20

Move that *Model Law* 130.30 B3, *Model Rules* 230.40 A3, and *Model Rules* 230.60 F1–2 be amended as follows and that new appendices for the *Model Law* and *Model Rules* be adopted as follows for member boards that license structural engineers to use as a guide.

#### Model Law 130.30 Examinations

- B. Examinations may be taken only after the applicant has met the other minimum requirements as given in Sections 130.10 and 130.20 of this Act and has been approved by the board for admission to the examinations. The board may offer the following examinations:
  - 1. NCEES Fundamentals of Engineering (FE) examination
  - 2. NCEES Principles and Practice of Engineering (PE) examination
  - 3. NCEES Structural Engineering (SE) examination
  - 43. NCEES Fundamentals of Surveying (FS) examination
  - 54. NCEES Principles and Practice of Surveying (PS) examination

## 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:

- NCEES Fundamentals of Engineering (FE) examination—The examination
  consists of subject matters in the fundamentals of engineering. Passing this
  examination qualifies the examinee for certification as an engineer intern,
  provided the examinee has met all other requirements for certification
  required by these Rules.
- NCEES Principles and Practice of Engineering (PE) examination—The
  examination consists of subject matters in applied engineering. Passing this
  examination qualifies the examinee for licensure as a professional
  engineer, provided the examinee has met the other requirements for
  licensure required by these Rules.
- 3. NCEES Structural Engineering (SE) examination The 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.

## Model Rules 230.60 Applications

- F. Licensure by Comity
  - The board is authorized to review and evaluate the applications of all comity applicants to determine if they meet or exceed the criteria to be licensed as a professional engineer, professional structural engineer, or professional surveyor as defined in Section 130.10 of the Model Law.
  - 2. The board administrator is authorized to review and evaluate the applications of all comity applicants to determine if they meet or exceed the criteria of a Model Law Engineer, Model Law Structural Engineer, or Model Law Surveyor as set forth in the NCEES Manual of Policy and Position Statements. If the applicant meets or exceeds these requirements, the board administrator may issue a contingent license authorizing that individual to offer or provide engineering or surveying services in this jurisdiction. A list of all engineers issued contingent licenses will be placed on the agenda of the next meeting of the board for formal approval by the board. A list of all surveyors who have been issued contingent licenses and who have passed the appropriate jurisdiction-specific examination will be placed on the agenda of the next meeting for formal approval by the board.

Model Law appendix xx: Model language for member boards that license structural engineers

#### Introduction to appendix

Model Law 130.10 provides model language for general licensure requirements for professional engineers and professional surveyors. The language highlighted in gray below is being provided in this appendix to the Model Law so that boards that also license structural engineers will have model language for structural engineering. Adopting similar language can help with licensure mobility among the jurisdictions that license structural engineers. The language highlighted in gray below is provided for those boards. The language that is not highlighted in gray is currently in Model Law 130.10 B for professional engineers and is provided as a reference for where to insert the structural engineering-related language in the Model Law. [Note for 2018 annual meeting delegates: As noted in the rationale at the end of this motion, the highlighted language is not new language. It already exists in the Model Law and Model Rules. UPLG is proposing to put it in this new appendix.]

## Model language to use for structural engineering licensure 130.10 General Requirements for Licensure

Education, experience, and examinations are required for licensure as a professional engineer or professional surveyor.

#### B. Engineering

- 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.
  - a. Graduating from an engineering program of 4 years or more accredited by the Engineering Accreditation Commission of ABET (EAC/ABET), graduating from an engineering master's program accredited by EAC/ABET, or meeting the requirements of the NCEES Engineering Education Standard
  - b. Passing the NCEES Fundamentals of Engineering (FE) examination
- 2. Licensure as a Professional Engineer
  - a. 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.
    - (1) Education Requirements

      An individual seeking licensure as a professional engineer shall possess one or more of the following education qualifications:
      - (a) A degree in engineering from an EAC/ABET-accredited bachelor's program
      - (b) A degree in engineering from an EAC/ABET-accredited master's program
      - (c) A bachelor's, master's, or doctoral degree in engineering from a non-EAC/ABET-accredited program. This individual's education must be shown to meet the NCEES Engineering Education Standard.
    - (2) 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 as described below.
      - (a) The FE examination may be taken by a college senior or graduate of an engineering program of 4 years or more accredited by EAC/ABET, of a program that meets the requirements of the NCEES Education Standard, or of an engineering master's program accredited by EAC/ABET.
      - (b) The PE examination may be taken by an engineer intern.
    - (3) Experience Requirements
      - An individual seeking licensure as a professional engineer shall present evidence of a specific record of 4 years of progressive engineering experience after a qualifying degree is conferred as described in a(1) above. This experience should be of a grade and character that indicate to the board that the applicant may be competent to practice engineering. The following educational criteria may apply as a substitute to the length of experience set forth above:
      - (a) An individual with a master's degree in engineering acceptable to the board: 3 years of experience after the qualifying

- bachelor's degree is conferred as described in a(1)(a) or a(1)(c) above
- (b) An individual with an earned doctoral degree in engineering acceptable to the board and who has passed the FE exam: 2 years of experience
- (c) 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

A graduate degree that is used to satisfy education requirements cannot be applied for experience credit toward licensure. To be eligible for experience credit, graduate degrees shall be relevant to the applicant's area of professional practice.

Experience credit for a graduate degree cannot be earned concurrently with work experience credit.

- 3. Licensure as a Professional Structural Engineer
  - a. Initial Licensure as a Professional Structural 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 structural engineer.
    - (1) Education Requirements
      - (a) An individual seeking licensure as a professional structural engineer shall possess one or more of the following education qualifications:
        - (i) A degree in engineering from an EAC/ABET-accredited bachelor's program
        - (ii) A degree in engineering from an EAC/ABET-accredited master's program
        - (iii) A bachelor's, master's, or doctoral degree in engineering from a non-EAC/ABET-accredited program. This individual's education must be shown to meet the NCEES Engineering Education Standard.
      - (b) The degree, or degrees, must include a minimum of 18 semester (27 quarter) hours of structural analysis and design courses and at least 9 of the semester (14 quarter) hours must be structural design classes.
    - (2) Examination Requirements

An individual seeking licensure as a professional structural engineer shall take and pass the NCEES Fundamentals of Engineering (FE) examination and the NCEES Structural Engineering (SE) examination as described below.

- (a) The FE examination may be taken by a college senior or graduate of an engineering program of 4 years or more accredited by EAC/ABET, of a program that meets the requirements of the NCEES Education Standard, or of an engineering master's program accredited by EAC/ABET.
- (b) The SE examination may be taken by an engineer intern.

## (3) Experience Requirements

An individual seeking licensure as a professional structural engineer shall present evidence of completing one of the following:

- (a) 4 years of acceptable structural engineering experience after confirmation of a bachelor of science degree in an engineering program accredited by EAC/ABET
- (b) 3 years of acceptable structural engineering experience after confirmation of a bachelor of science degree in engineering from an EAC/ABET-accredited engineering program and 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)
- (c) 3 years of acceptable structural engineering experience after confirmation of a master's degree in engineering from an EAC/ABET-accredited engineering program that includes at least 6 semester (9 quarter) hours of structural engineering (in addition to the 18 hours noted above)
- (d) 2 years of acceptable structural engineering experience and an earned doctoral degree in engineering focused on structural engineering from an institution that offers EAC/ABETaccredited programs

A graduate degree that is used to satisfy education requirements cannot be applied for experience credit toward licensure. To be eligible for experience credit, graduate degrees shall be relevant to the applicant's area of professional practice. Experience credit for a graduate degree cannot be earned concurrently with work experience credit.

 Licensure by Comity for a Professional Engineer or Professional Structural Engineer

The following shall be considered as minimum evidence satisfactory to the board that the applicant is qualified for 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 that provides proof of minimal competency and is comparable to the applicable licensure act in effect in this jurisdiction at the time such certificate was issued 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; 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.

- (3) In addition to b(1) or b(2) above, an applicant for comity as a professional structural engineer must have passed one of the following:
  - a. 16 hours of NCEES structural examinations, 8 hours of which were from the SEII taken prior to January 1, 2011,
  - b. 16-hour state-written examinations taken prior to 2004,
  - NCEES SEII plus 8-hour state-written structural examination taken prior to January 1, 2011, or
  - NCEES 16-hour Structural Engineering (SE) examination taken after January 1, 2011.

## Model Rules appendix xx: Model language for member boards that license structural engineers

## Introduction to appendix

Model Rules 230.40 provides model language for classification of engineering exams and eligibility of applicants for engineering exams, and Model Rules 230.60 A provides language for types of applications. The language highlighted in gray below is being provided in this appendix to the Model Rules so that boards that also license structural engineers will have model language for structural engineering. Adopting similar language can help with licensure mobility among the boards that license structural engineers. The language highlighted in gray below is provided for those boards. The language that is not highlighted in gray is currently in Model Rules 230.40 and 230.60 A for professional engineers and is provided as a reference for where to insert the structural engineering-related language in the Model Rules. [Note for 2018 annual meeting delegates: As noted in the rationale at the end of this motion, the highlighted language is not new language. It already exists in the Model Law and Model Rules. UPLG is proposing to put it in this new appendix.]

## Model language to use for structural engineering licensure 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 or professional structural engineer:
  - NCEES Fundamentals of Engineering (FE) examination—The examination
    consists of subject matters in the fundamentals of engineering. Passing this
    examination qualifies the examinee for certification as an engineer intern,
    provided the examinee has met all other requirements for certification
    required by these Rules.
  - NCEES Principles and Practice of Engineering (PE) examination—The
    examination consists of subject matters in applied engineering. Passing this
    examination qualifies the examinee for licensure as a professional
    engineer, provided the examinee has met the other requirements for
    licensure required by these Rules.
  - 3. NCEES Structural Engineering (SE) examination—The 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. Passing this examination qualifies the examinee for licensure as a professional structural engineer, provided the examinee has met the other requirements for licensure required by these Rules.

- B. Eligibility of Applicant for Engineering Examinations
  - 1. NCEES Fundamentals of Engineering (FE) Examination
    - a. 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 FE examination or, if required, apply to the board for admission to the FE examination.
    - b. To be certified as an engineer intern, an application for certification may be submitted to the board upon passing the FE examination and meeting the education requirements.
  - 2. NCEES Principles and Practice of Engineering (PE) Examination
    - a. Applicants for licensure as a professional engineer will be permitted to sit for the PE examination upon satisfactorily fulfilling all application requirements of the jurisdiction.
    - b. No applicant may sit for the PE examination until the board has established that the applicant is eligible for the examination.
    - c. Engineering doctorate degree applicants with an undergraduate degree from a program accredited by the Engineering Accreditation Commission of ABET (EAC/ABET) and with a doctorate degree in engineering from an institution that offers EAC/ABET-accredited 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.
  - 3. NCEES Structural Engineering (SE) Examination
    - a. Applicants for licensure as a professional structural engineer will be permitted to sit for the SE examination upon satisfactorily fulfilling all application requirements of the jurisdiction.
    - b. No applicant may sit for the SE examination until the board has established that the applicant is eligible for the examination.
    - c. Engineering doctorate degree applicants with an undergraduate degree from a program accredited by the Engineering Accreditation Commission of ABET (EAC/ABET) and with a doctorate degree in engineering from an institution that offers EAC/ABET-accredited undergraduate programs in the doctorate degree field of engineering and with experience that meets the qualifications defined by the board may sit for the SE examination without having taken or passed the FE examination.

### A. Types of Applications

Licensure as a professional engineer, professional structural 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, professional structural 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, professional structural 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
  education and experience.

#### F. Licensure by Comity

- The board is authorized to review and evaluate the applications of all comity applicants to determine if they meet or exceed the criteria to be licensed as a professional engineer, professional structural engineer, or professional surveyor as defined in Section 130.10 of the *Model Law*.
- 2. The board administrator is authorized to review and evaluate the applications of all comity applicants to determine if they meet or exceed the criteria of a Model Law Engineer, Model Law Structural Engineer, or Model Law Surveyor as set forth in the NCEES *Manual of Policy and Position Statements*. If the applicant meets or exceeds these requirements, the board administrator may issue a contingent license authorizing that individual to offer or provide engineering or surveying services in this jurisdiction. A list of all engineers issued contingent licenses will be placed on the agenda of the next meeting of the board for formal approval by the board. A list of all surveyors who have been issued contingent licenses and who have passed the appropriate jurisdiction-specific examination will be placed on the agenda of the next meeting for formal approval by the board.

#### Rationale

UPLG reviewed the *Model Law* and *Model Rules* and compared how structural engineering is described in these two documents as compared to how it is described in the *Manual of Policy and Position Statements*. The committee noted inconsistencies. Sometimes, the 16-hour Structural Engineering exam is described as a third professional exam; sometimes, it is listed as another PE exam. The language in Examination Development Policy 1 and *Model Rules* 230.60 could be interpreted as being a PE exam. The policy manual also has a Model Law Structural Engineer designation—which licensees can apply for through the NCEES Records program to help them gain comity licensure as a structural engineer in other jurisdictions.

UPLG discussed that the vast majority of jurisdictions do not need model language for structural engineering. However, structural engineering is treated separately enough (especially by being a 16-hour exam vs. an 8-hour exam) that UPLG believes there should be model language for jurisdictions that do license structural engineers. Therefore, UPLG is making this motion to remove the existing

language in the main body of the *Model Law* and *Model Rules* and to add appendices that provide a model for those jurisdictions that license structural engineering separately. Making these changes will also make references to structural engineering consistent with the NCEES *Manual of Policy and Procedures*. See Charge 4 beginning on page **Error! Bookmark not defined.** for a more in-depth discussion related to these proposed amendments.

## Board of directors' position

Endorses, non-consent agenda Section members agreed by consensus.

### UPLG Motion 21

Move that Model Rules 230.20 A10 and B11 be adopted as follows:

### Model Rules 230.20 Experience

A. As a Professional Engineer

In evaluating experience that indicates to the board that the applicant may be competent to practice engineering, the following will be considered:

- Experience must be progressive on engineering projects and must demonstrate an increasing quality and responsibility. Experience must be obtained in accordance with *Model Law* 130.10.
- Only work of an engineering nature that follows graduation from a program that meets the criteria set forth in *Model Law* 130.10 is acceptable.
- 3. A graduate degree that is used to satisfy education requirements cannot be applied for experience credit toward licensure. To be eligible for experience credit, graduate degrees shall be relevant to the applicant's area of professional practice. Experience credit for a graduate degree cannot be earned concurrently with work experience credit.
- 4. Experience must be obtained in compliance with the licensure act.
- Experience gained in the armed services must be of a character equivalent to that which would have been gained in the civilian sector doing similar work.
- 6. Experience should be gained under the supervision of a licensed professional engineer; if it is not, an explanation must be made showing why the experience should be considered acceptable. Experience gained under the technical supervision of an unlicensed individual may be considered if the appropriate credentials of the unlicensed supervisor are submitted to the board.
- Sales experience must demonstrate that engineering principles were required and used in gaining the experience.
- 8. Teaching experience must be in engineering or engineering-related courses at an advanced level in a college or university offering an engineering program of 4 years or more that is approved by the board.
- Experience may be gained in engineering research and design projects by members of an engineering faculty where the program is approved by the board.
- 10. Experience may be gained in engineering research by industry or government employees.
- 1011. Experience must have been gained by the time of the application.

- 4412. Experience in construction must demonstrate the application of engineering principles.
- 4213. Experience must include demonstration of a knowledge of engineering mathematics, physical and applied science, properties of materials, and the fundamental principles of engineering design.
- 4314. Experience must include demonstration of the application of engineering principles in the practical solution of engineering problems.
- 1415. The board may deem professional experience acquired by applicants outside the United States to be equivalent to the minimum board requirements established by regulations for professional experience in that jurisdiction.

#### B. As a Professional Surveyor

In evaluating experience that indicates to the board that the applicant may be competent to practice surveying, the following will be considered:

- Experience must be progressive on surveying projects and must demonstrate an increasing quality and responsibility. Experience must be obtained in accordance with *Model Law* 130.10.
- 2. Experience must be obtained in compliance with the licensure act.
- Experience gained in the armed services must be of a character equivalent to that which would have been gained in the civilian sector doing similar work.
- 4. Experience should be gained under the supervision of a licensed professional surveyor or, if not, an explanation must be made showing why the experience should be considered acceptable. Experience gained under the technical supervision of an unlicensed individual may be considered if the appropriate credentials of the unlicensed supervisor are submitted to the board.
- Teaching experience must be in surveying or surveying-related courses at an advanced level in surveying or surveying-related courses approved by the board.
- 6. Experience related to property conveyance and/or boundary line determination must be demonstrated.
- 7. Experience in the technical field aspects of the profession must be demonstrated.
- 8. Experience must have been gained by the time of the application.
- 9. Experience must include demonstration of the application of surveying principles in the practical execution of surveying tasks.
- 10. Experience may be gained in surveying research projects by members of a surveying faculty where the program is approved by the board.
- 11. Experience may be gained in surveying research by industry or government employees.
- 112. The board may deem professional experience acquired by applicants outside the United States to be equivalent to the minimum board requirements established by regulations for professional experience in that jurisdiction.

#### Rationale

Model Rules 230.20 provides a list of factors that indicate to a board that the applicant may be competent to practice engineering or surveying. Currently,

paragraphs A9 and B10 state that experience may be gained in engineering or surveying research and design projects by members of engineering or surveying (respectively) faculty when the program is approved by the board. This means that university research is already allowed as experience credit for licensure. UPLG's charge was to evaluate whether other research environments should be allowed as experience for licensure as a P.E. or P.S. The committee discussed that research is already done in industrial and governmental institutions and agreed that this type of experience should be added as a separate category in *Model Rules* 230.20. Boards would still need to evaluate such experience as they currently do for responsible charge work in other fields. A candidate for licensure would still need to show relevance and responsible charge over the research. Merely running tests or testing equipment as part of a research program developed by others should not qualify. Establishing the test program and directing the implementation of that program should qualify.

## Board of directors' position

Endorses, consent agenda The Section does support the motion.

## Special Committee on Bylaws (3 motions) 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 be a licensed engineer or surveyor, shall have been a member of NCEES at least three years, and shall have attended at least two NCEES Annual Business Meetings. Additionally, members 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.

To be eligible for the office of Vice President, a person shall be a licensed professional engineer or surveyor and shall be from the zone that elects him or her. To be eligible for the office of Treasurer, a person shall be a licensed professional engineer, licensed professional surveyor, or public member.

#### Rationale

Motion 1 is proposed in response to the approved 2017 ACCA motion to propose an amendment stating that the positions of president-elect and zone vice president shall be held by a licensed engineer or surveyor and that any member of the Council may be elected to the position of treasurer. The language presented matches the language proposed by ACCA.

## Board of directors' position

Endorses, consent agenda

The Section does support the motion.

## Bylaws Motion 2

Move that Bylaws 4.04 be amended as follows:

Section 4.04 Elections and Terms of Office. The President-Elect shall be elected by the Council at each Annual Business Meeting in the manner prescribed in the Bulaws. The Treasurer shall be elected at each Annual Business Meeting held in an odd-numbered year in the manner prescribed in the Bulaws. Vice Presidents from the Southern and Northeast Zones shall be elected at their Zone Interim Meeting in odd-numbered vears. Vice Presidents from the Central and Western Zones shall be elected at their Zone Interim Meeting in even-numbered years. The Chief Executive Officer is appointed as provided in the Bulaws. The President-Elect shall normally serve the Council for a period of three years. The first year shall be as President-Elect. The second year, without further election. the President-Elect shall become President, holding that office until a successor has been installed. The third year, without further election, the President shall become Immediate Past President, holding that office until a successor has been installed. Any member elected to the office of President-Elect shall be eligible to serve as President-Elect, President, and Immediate Past President, with full authority of the offices and board privileges. Past Presidents shall be ineligible for reelection as President-Elect of the Council. Vice Presidents shall hold office for two years or until their successors have been installed.

The Treasurer shall be elected at the Annual Business Meeting every three years in the manner prescribed in the *Bylaws*. The Treasurer's term of office shall be two years, and that person may serve a maximum of two eonsecutive terms. Treasurers shall not be eligible for re-election to the same office until at least one full term has elapsed. For the office of Treasurer, a partial term served for the period between consecutive Annual Meetings shall not be considered a term for term-limit purposes. Vice Presidents shall be elected at their respective Zone Interim Meeting every two years in the manner prescribed in the *Bylaws*. Vice Presidents from the Northeast and Southern Zones shall be elected in odd-numbered years. Vice Presidents from the Central and Western Zones shall be elected in even-numbered years. Vice Presidents shall not be eligible for reelection to the same office until at least one full term has elapsed. For the office of Vice President, a partial term served shall not be considered a term for term-limit purposes.

Past Presidents shall be ineligible for re-election as President-Elect of the Council. Vice Presidents shall not be eligible for re-election to the same office until at least one full two-year term has elapsed.

New members of the Board shall assume their duties at the conclusion of the Annual Business Meeting. Board members may continue to serve until the conclusion of the term of office to which they were elected even if their terms with Member Boards have ended.

Any member elected to the office of President-Elect shall be eligible to serve as President-Elect, President, and Immediate Past President, with full authority of the offices and board privileges, until the expiration of the

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term as Immediate Past President, even though no longer a member of a Member Board.

#### Rationale

Motion 2 is proposed in response to the approved 2017 board of directors motion to propose an amendment that modifies the term of treasurer to a three-year term and to state that terms as treasurer cannot be consecutive. When incorporating the language from the board of directors, the Bylaws Committee reorganized *Bylaws* 4.04 so that the position and terms of office for each elected position are in the same paragraph. The CEO position was not kept because *Bylaws* 4.02 and 4.03 already describe how the CEO is appointed and state that the CEO serves as secretary to the board of directors. The committee also deleted redundant language related to the descriptions for president-elect and immediate past president.

## Board of directors' position

Endorses, consent agenda The Section does support the motion.

#### Bylaws Motion 3

Move that Bylaws 4.06 be amended as follows:

**Section 4.06 Vacancies.** If a vacancy occurs in the office of President, the President-Elect shall succeed to the office of President for the completion of the two-year-that term and subsequently serve the full one-year term that he or she was originally elected to serve as President.

A vacancy in the office of President-Elect shall be remain unfilled by the Board of Directors until the next NCEES Annual Business Meeting. At that time, the Council will elect a President from the zone of the vacant President-Elect position. In the event of a A vacancy in the office of Immediate Past President, the office shall be filled by the most recent available Past President.

In the event of a A vacancy in the office of a Vice President, the shall be filled by that zone's Assistant Vice President of the zone will automatically succeed to the office of Vice President. In the event of a

<u>A</u> vacancy in the office of Treasurer, <u>shall be filled</u> by the Board of Directors <u>shall select an within 30 days</u>; <u>the selected individual to shall fill the position until an election for a new full-term Treasurer</u> is held at the <u>next Annual Business Meeting in the next odd-numbered year</u>.

Appointments by the Board of Directors shall be made in accordance with the required qualifications and limitations for duly elected members of the Board of Directors.

A quorum of the Board of Directors for filling of vacancies shall consist of six members except in the event of two vacancies, when five shall constitute a quorum. For the filling of vacancies, the members of the Board of Directors may be represented by proxies, duly signed and verified.

#### Rationale

Motion 3 is proposed in response to the approved 2017 board of directors motion to propose an amendment to state that in the event of a vacancy of the treasurer's office, the position would be filled at the next annual business meeting. When incorporating this change, the Bylaws Committee noted that the *Bylaws* does not address how vacancies in the president-elect position should be handled and that

the language for vacancies in the offices of president and vice president also need to be clarified. The reasoning for the changes is as follows:

- President: The committee feels that the language needs to be clarified
  to state that if the president-elect succeeds to the office of president due
  to a vacancy, that person would then serve a full one-year term as
  president following completion of the partial term.
- **President-elect:** The president-elect position is a three-year commitment (one year as president-elect, one as president, and one year as immediate past president). The committee therefore believes that the position should remain unfilled for the remainder of the term. The duties of the president-elect could be absorbed by other members of the board of directors during the vacancy. The proposed language would allow for the Council to then choose a new president from the same zone at the next annual meeting. In such a circumstance, the Council would be voting for both a president and president-elect during the same annual business meeting. This also means that the new president would serve two years on the board of directors (as president and immediate past president) and that the new president-elect would be elected in the original order of zone rotation as described in *Bylaws* 11.01.
- Vice President: The proposed changes are to clean up the language and make it less wordy.
- Treasurer: The committee feels that the office of treasurer does need to be filled as quickly as possible because of the day-to-day functions that the treasurer carries out related to the budget. Therefore, the committee is proposing language to state that the board of directors shall fill that position within 30 days of a vacancy in the office of treasurer and then an election will be held at the next annual business meeting.

## Board of directors' position

Endorses, consent agenda The Section does support the motion.

## Technology Task Force (3 motions)

## Technology Task Force Motion 1

Move that the UPLG Committee be charged with incorporating the following definition of "Document" into *Model Law* 110.20:

#### Model Law 110.20 Definitions

S. Documents—The term "Document," where capitalized and used in this Act, shall include engineering specifications, reports, drawings, plans, design information, calculations, plats, visual representations, and building information model (BIM) products, and other deliverables requested by a client or any public agency.

#### Rationale

The proposed definition was developed by using data from *Model Rules* 240.20 C1 and C5. Adding the definition will help clarify the meaning of "Documents" throughout the *Model Law* and *Model Rules* while maintaining differentiation from

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other uses of the term document and while being inclusive of BIM model and products.

## Board of directors' position

Endorses, consent agenda

The Section does not support the motion.

## Technology Task Force Motion 2

Move that the UPLG Committee be charged with incorporating the following changes into *Model Rules* 240.15 A2 and B2 and *Model Rules* 240.20 C:

#### Model Rules 240.15 Rules of Professional Conduct

- A. Licensee's Obligation to the Public
  - Licensees shall sign and seal only those plans, surveys, and other dDocuments that conform to accepted engineering and surveying standards and that safeguard the health, safety, and welfare of the public.
- B. Licensee's Obligation to Employer and Clients
  - Licensees shall not affix their signatures or seals to any plans or dDocuments dealing with subject matter in which they lack competence, nor to any such plan or dDocument not prepared under their responsible charge.

#### Model Rules 240.20 Seals

- C. Seal on Documents
  - 1. The seal and signature of the licensee and the date of signing shall be placed on all final engineering specifications, reports, drawings, plans, design information, and calculations or surveys, reports, plats, drawings, plans, and calculations whenever presented to a client or any public agency Documents to certify that the work thereon was done by the licensee or under the responsible charge of the licensee. Working drawings or preliminary documents are not required to have a seal and signature if the working drawing or preliminary document contains a statement in large bold letters to the effect "PRELIMINARY, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION."
  - 2. The seal and signature shall be placed on all original copy, tracings, or other reproducible <u>sheets of dDocuments</u> so that the seal and signature will be reproduced when copies are made.
  - 3. When the dDocument contains more than one sheet, the first or title page shall be sealed and signed by the licensee who was in responsible charge. Two or more licensees may affix their signatures and seals provided that a note under the seal designates the specific subject matter for which each is responsible. In addition, each sheet shall be sealed and signed by the licensee or licensees responsible for that sheet. When a firm performs the work, each sheet shall be sealed and signed by the licensee or licensees who were in responsible charge of that sheet.
  - 4. The seal and signature shall be placed on work only when it was under the licensee's responsible charge. The licensee shall sign and seal only work within the licensee's areas of competence.
  - 5. Plans, plats, specifications, drawings, reports, and other dDocuments will be deemed to have been prepared under the responsible charge of a licensee only when all the following conditions have been met and

#### documented:

- a. The client requesting preparation of such plans, plats, specifications, drawings, reports, or other dDocuments makes the request directly to the licensee, or a member or employee of the licensee's firm;
- b. The licensee supervises the preparation of the <del>plans, plats, specifications, drawings, reports, or other dD</del>ocuments and has input into their preparation prior to their completion;
- c. The licensee reviews the final plans, plats, specifications, drawings, reports, or other dDocuments; and
- d. The licensee has the authority to, and does, make any necessary and appropriate changes to the final plans, plats, specifications, drawings, reports, or other documents.

The licensee is responsible for meeting all of the preceding requirements whether the work is being performed remotely or locally.

- 6. Any revision to a <u>dD</u>ocument containing the seal and signature of a licensee shall be described and dated. If the revisions are not done by the original licensee, the revisions must also be signed and sealed by the licensee in responsible charge of those revisions.
- 7. In circumstances where a licensee in responsible charge of the work is unavailable to complete the work, or the work is a site adaptation of a standard design plan, or the work is a design plan signed and sealed by an out-of-jurisdiction licensee, a successor licensee may take responsible charge by performing all professional services to include developing a complete design file with work or design criteria, calculations, code research, and any necessary and appropriate changes to the work. The non-professional services, such as drafting, need not be redone by the successor licensee but must clearly and accurately reflect the successor licensee's work. The burden is on the successor licensee to show such compliance. The successor licensee shall have control of and responsibility for the work product and the signed and sealed originals of all dDocuments.
- 8. When a licensee is required to seal and sign engineering/surveying dDocuments, one of the following methods must be used:
  - a. Physical placement of a seal and a handwritten signature in permanent ink containing the name of the licensee
  - b. Digital placement of a seal and a handwritten signature in permanent ink containing the name of the licensee
  - Digital placement of a seal and a digital signature containing the name of the licensee

<u>Drawings</u>, reports, and <u>dD</u>ocuments that are signed using a digital signature must have an electronic authentication process attached to or logically associated with the electronic document. The digital signature must be

- a. Unique to the individual using it
- b. Capable of verification
- c. Under the sole control of the individual using it
- d. Linked to a document in such a manner that the digital signature is invalidated if any data in the dDocument is changed.

A digital signature that uses a process approved by the board will be presumed to meet the criteria set forth in subsections 8 a—d above. Any hard copy printed from the transmitted electronic file shall bear the facsimile of the signature and seal and be a confirmation that the electronic file was not altered after the initial digital signing of the file. Any alterations to the file shall cause the facsimile of the signature to be voided.

#### Rationale

The proposed language change will reinforce the requirement that each design professional retain responsible charge for the portion of project (static "Documents") for which he or she is responsible, including products (elements of and products) from BIM model and signing/sealing any such Documents.

#### Board of directors' position

Endorses, consent agenda

The Section does not support the motion.

## Technology Task Force Motion 3

Move that the UPLG Committee be charged with reviewing the following guidelines, determining whether they should be incorporated into the *Model Rules* or be published as a standalone document, and presenting a motion accordingly:

## SUGGESTED GUIDELINES FOR BUILDING INFORMATION MODELING USE ON PROJECTS

## Purpose

The National Council of Examiners for Engineering and Surveying (NCEES) is providing these guidelines to assist the licensee in the proper signing and sealing of Documents derived from building information modeling (BIM). This document is intended to offer guidance to design professionals who are using BIM. This guide may apply to any project delivery method employing multidimensional modeling software to virtually design and construct projects by a collaborative project team from conception through commissioning and/or owner acceptance.

#### **Definitions**

- Building information model or modeling (BIM): Model-based technology linked with a database of project information, using multidimensional, real-time dynamic modeling software, to plan construction. The model encompasses at least geometry, spatial relationships, geographic information, and quantities and properties of components.
- Execution plan: A document prepared and mutually agreed to by the project team that clearly defines an overall vision for BIM use and implementation details, including but not limited to roles, responsibilities, actions, and interactions of the team and any external parties (such as building code officials, other permitting authorities, software systems to be followed, technology infrastructure needs, process maps, deliverables to be provided, Documents to be produced, intellectual property control, model use, archiving, BIM model ownership, and turnover process to owner at project completion). The execution plan should clearly define the scope and responsible charge of all design professionals and model managers to the extent possible.
- Model manager: Responsible for ensuring that BIM is successfully

implemented on a project in accordance with its execution plan, with the following key responsibilities:

- Management of all BIM-related software systems
- Preparation of BIM-related standards, templates, and deliverable formats in accordance with the execution plan
- Reporting of BIM model status to the project team
- Leadership in providing project-specific training to the project team members and in providing periodic model reviews by the project team
- Assistance in modeling work and resolution of all conflicts/constraints
- Communication of BIM model development and updates to the project team

The model manager may change during project execution, subject to approval of the project team and lead design professional.

- National BIM standard—United States: A consensus-based standard issued by the buildingSMARTalliance® under the sponsorship of the National Institute of Building Sciences so that end users can use BIM to efficiently access and use information necessary to design, construct, and operate a specific project. The latest issue is version 3, published in May 2015.
- Project team: Leadership from each organization participating in the development of a BIM model, including the owner, project manager, design professionals (architects, landscape architects, engineers, surveyors, interior designers; also referred to as "licensees"), model manager, and contractors
- Lead design professional: Licensed design professional, responsible for coordinating and integrating the work of design professionals, model manager, and other members of the project team
- Responsible charge: Direct control and personal supervision of engineering or surveying work
- BIM products: Documents (drawings, lists, specifications, and other data) extracted from the BIM model

#### Guidelines and references

- A. Use of BIM Project Execution Planning Guide
  - The project team should prepare a specific execution plan for any project using a BIM model. The referenced planning guide provides an overview of how to prepare such a plan including content and structure. Section B below contains recommended minimum topics to include in an execution plan, which is typically referenced in project contract sections related to engineering, procurement, and construction delivery.
- B. Minimum topics to include in project-specific execution plan Each project (e.g., building, bridge, road, power plant) is unique in terms of configuration, complexity, and development timeline. Similarly, the extent of BIM's use on a project will be different and interrelated with the project delivery method (such as integrated project delivery, design/build, or design/bid/build). This section addresses topics which are important to the successful use of BIM capabilities and products.

#### 1. Model use

How the BIM model will be used—from project inception to construction to the post-commissioning stage—must be defined up front and accounted for in the project cost estimate. Examples of usage topics include model ownership, turnover to the owner at project conclusion, involvement of the project team in model preparation/development through lifecycle, use for structural detailing, cost/schedule inclusion, and products that will be produced (when and where).

2. Responsibilities of design professionals/licensees and scope definition Each design professional working with a BIM model will have responsible charge for a portion of the project. This includes what aspects of project design that the professional will provide as input (e.g., data, 3D model input, specific discipline design) and BIM products that will be extracted at different milestones during the project life cycle to satisfy project needs (e.g., Documents to obtain permits and regulatory approvals, to have a third party develop fabrication drawings, to procure equipment, for construction, and for as-built archive). It is imperative that each design professional clearly define his or her primary role and scope of responsibility, particularly where the professional's scope boundaries align with those of another discipline (such as building management system inputs).

#### 3. Lead design professional's role

Each project team should appoint a lead design professional to oversee the BIM model development to ensure that communication channels are effective, that schedule milestones are achieved, and that the model manager is efficiently and effectively completing his or her responsibilities. This person should have a working knowledge of the scope of all design professionals, documents to be produced, and project design and goals in total.

#### 4. Model manager's role

Reporting to the lead design professional, the model manager serves an important role in coordinating the development of the BIM model and data import consistent with the execution plan's stated needs. The lead design professional will ultimately have a role of ensuring that all design professionals have participated in the BIM model to the extent of their responsible charge and scope.

5. Owner's role and responsibilities

The owner should designate a representative who should be able to communicate owner's requirements to the project team; serve as a primary liaison for all BIM-related issues; have oversight on BIM requirements in all project phases; and receive, review, and approve BIM deliverables (see "National BIM Guide for Owners").

6. Changes to model overtime/communications

The BIM model is a dynamic tool that constantly develops throughout the design phase of the project and typically matures at the time when issued-for-construction products are produced. The model will also be affected by the evolution of construction, and changes to the BIM model will occur until project commissioning and owner acceptance. The lead design

professional and model manager need to stay involved in the project execution through the construction phase to ensure that construction-driven changes are reviewed and approved by the affected design professional(s) in advance of actual construction.

#### 7. BIM products

The execution plan should define expected products to be extracted out of the BIM model at different points in time during the overall project schedule (phase), and the design professionals responsible for their preparation and issuance. The products of each project will be different; as a result, the execution plan should define initial products with said listing subject to change as the project design continues forward. The execution plan should also provide an overview of how quality reviews are to be completed, as well as BIM model reviews throughout the project lifecycle.

## 8. Archiving

The execution plan should clearly define the host document control system to be used, and best practices associated with storing project records including the BIM model and products, including all Documents, both to demonstrate that milestones have been achieved and to confirm the design professional's scope of work and responsibility have been accomplished.

## C. Sign-and-seal deliverables

At a point in project development agreed to by the owner's team and per the owner's agreement with the project team members, the licensee shall affix a seal/signature to only that part of the products from the BIM model for which he or she is responsible as stated in the *Model Rules*.

A digital archive of the design professional's final product at the completion of each project phase shall be retained in the BIM model archives.

## Summary

These suggested guidelines were developed to aid design professionals and licensing boards with understanding how and when design professionals should sign and seal Documents under their responsible charge during the BIM modeling process.

#### Rationale

These guidelines will aid licensees in BIM use and will also aid licensing boards with understanding how and when licensees should sign and seal BIM-produced Documents prepared under their responsible charge during the modeling process.

## Board of directors' position

Endorses, consent agenda

The Section does not support the motion.

## Board of Directors (1 motion)

#### Board of Directors Motion 1

The board of directors moves that the term of NCEES Treasurer Timothy Rickborn, P.E., be established as a three-year term, effective retroactively with his election during the 2017 NCEES annual meeting, and that Treasurer Rickborn's term conclude at the end of the 2020 NCEES annual meeting.

#### Rationale

During the 2017 NCEES annual meeting, the Special Committee on Bylaws

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presented a motion to amend the *Bylaws* to change the NCEES treasurer term from a two-year term with the possibility of a consecutive term to a two-year term without the possibility of a consecutive term. This motion was defeated. The board of directors subsequently presented a motion at the 2017 annual meeting to charge a Special Committee on Bylaws with incorporating amendments into the *Bylaws* to modify the term of treasurer to a three-year term. The board of directors' motion passed, and this year's Special Committee on Bylaws is proposing a motion at the 2018 annual meeting to make that amendment.

Treasurer Rickborn was elected in 2017 under the existing *Bylaws* requirements that provide for a two-year term with the possibility of two consecutive terms. After seeking legal advice from NCEES' corporate attorney, the board of directors was advised that the South Carolina Corporation Act does not allow an elected officer's term to be reduced based upon an amendment to governance documents of the organization and that Treasurer Rickborn's term of office should be affirmed to match the new term of service as approved by the Council. If Bylaws Committee Motion 2 passes at the 2018 annual meeting, the board of directors will propose this motion for Treasurer Rickborn to serve a three-year term that will expire at the conclusion of the 2020 NCEES annual meeting.

## Board of directors' position

Endorses, non-consent agenda The Section does support the motion.

## Northeast Zone (1 motion)

## Northeast Zone Motion 1

Move that NCEES investigate the possibility of reducing the NCEES exam fee for an individual taking the Fundamentals of Engineering or the Fundamentals of Surveying exam within one calendar year of graduation from a college program.

- 1. The college program must be an ABET-accredited program culminating in the awarding of a bachelor of science degree or its equivalent.
- The college program must require as a prerequisite for graduation that students take the Fundamentals of Engineering exam or the Fundamentals of Surveying exam.

## Board of directors' position

No position, non-consent agenda *The Section agrees by consensus*.

Mr. Kelly reviewed the licensee counts as of July 1, 2018: APELSCIDLA Businesses 4055; Architects 7444; Engineers 28,932; Land Surveyors 1284; Land Surveyors B 77; Land Surveyor Photogrammetrists 118; Interior Designers 491; and Landscape Architects 925.

License & Certified Counts

Ms. Nosbisch opened the floor for nominations for Land Surveyor Section Chair. Mr. Allen moved to nominate Ms. Anglin for the position of Land Surveyor Section Chair. As there were no other nominations from the floor, Ms. Nosbisch closed the nominations. Mr. Stone seconded the motion which was unanimously approved by: Allen, Anglin, Kelly, Langelotti, and Stone.

Election of Section Chairs

Ms. Nosbisch opened the floor for nominations for Professional Engineers Section

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Chair. Ms. Langelotti moved to nominate Mr. Stone for the position of Professional Engineer Section Chair. As there were no other nominations from the floor, Ms. Nosbisch closed the nominations. Mr. Allen seconded the motion which was unanimously approved by: Allen, Anglin, Kelly, Langelotti, and Stone.

The Section members reviewed the Board Member Application Review Sheets, and determined no changes were needed at this time.

Board Workshop Updates

The Section members determined by consensus that the Application Experience forms needed to be updated to request applicants to provide detailed experience.

The renewal statistics were reviewed. When licensees submit their renewal fee, they are certifying their compliance with the continuing education requirements.

Ms. Nosbisch received a survey requesting information on unlicensed individuals using Engineer as titles. The Section answered the three brief questions collectively. Mr. Stone requested the results of the survey be shared with the Section.

Other Business

The Section discussed the Virginia offshore wind turbine structural engineer email. The Section agreed after thorough review that if the individual could sign and seal the project and he would then accept full responsibility. It was also noted that his business is not a Virginia registered business and would need to be registered in Virginia.

Conflict of Interest forms and travel vouchers were completed by all Section members present.

Conflict of Interest Forms

There being no further business, the meeting was adjourned at 2:21 p.m.

Adjourn

Jay W. DeBoer, Secretary

| 1. | Name:  | Vickie Anglin  |  |
|----|--|--|--|
| 2. | Title:   | Board Member   |  |
| 3. | Agency:  | Land Surveyors Section/APELSCIDLA Board                      |  |
| 4. | Meeting/IFF Date:  | PE-LS Meeting, August 9, 2018                                |  |
| 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 participate in this transaction fairly, objectively, and in the public interest.  |  |  |
|    | or   |  |  |
|    | ☐ I did not particip   | pate in the transaction.                                     |  |
| 6. | ☐ I do not have a  | personal interest in any transactions taken at this meeting. |  |
|    | V.M. angle   | in August 9,2018   |  |

| 1. | Name:  | James Kelly  |  |
|----|--|--|--|
| 2. | Title:   | Board Member   |  |
| 3. | Agency:  | Professional Engineers Section/APELSCIDLA Board                |  |
| 4. | Meeting/IFF Date:  | PE-LS Meeting, August 9, 2018                                  |  |
| 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: |  |  |
|    | <ul> <li>I am able to participate in this transaction fairly, objectively, and in the public interest.</li> <li>or</li> </ul>                  |  |  |
|    | ☐ I did not partici  | pate in the transaction.                                       |  |
| 6. | I do not have a  | a personal interest in any transactions taken at this meeting. |  |
|    | for 2. May   | 8/1/18   |  |
|    | Signature  | Date   |  |

| 1. | Name:  | Christopher Stone  |  |
|----|--|--|--|
| 2. | Title:   | Board Member   |  |
| 3. | Agency:  | Professional Engineers Section/APELSCIDLA Board                |  |
| 4. | Meeting/IFF Date:  | PE-LS Meeting, August 9, 2018                                  |  |
| 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: |  |  |
|    | <ul> <li>☐ I am able to participate in this transaction fairly, objectively, and in the public interest.</li> <li>or</li> </ul>                |  |  |
|    | ☐ I did not partici  | pate in the transaction.                                       |  |
| 6. | I do not have a  | a personal interest in any transactions taken at this meeting. |  |

| 1.  | Name:  | Carolyn B. Langelotti   |  |  |
|---|--|---|--|--|
| 2.  | Title:   | Board Member  |  |  |
| 3.  | Agency:  | Professional Engineers Section/APELSCIDLA Board               |  |  |
| 4.  | Meeting/IFF Date:  | PE-LS Meeting, August 9, 2018                                 |  |  |
| 5.  | I have a personal interest in the following transaction:   |   |  |  |
|   |  |   |  |  |
|   | nterest 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, an public interest. |  | rticipate in this transaction fairly, objectively, and in the |  |  |
|   | or   |   |  |  |
|   | ☐ I did not participate in the transaction.  |   |  |  |
| 6.  | I do not have a personal interest in any transactions taken at this meeting.   |   |  |  |
|   | C.B. Lary  | 8/9/18  |  |  |
|   | Signature  | Date /  |  |  |

| 1. | Name:  | Doyle B. Allen  |  |  |
|----|--|---|--|--|
| 2. | Title:   | Board Member  |  |  |
| 3. | Agency:  | Land Surveyors Section/APELSCIDLA Board                                   |  |  |
| 4. | Meeting/IFF Date:  | PE-LS Meeting, August 9, 2018   |  |  |
| 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 participate in this transaction fairly, objectively, and in the public interest.  |   |  |  |
|    | or   |   |  |  |
|    | I did not participate in the transaction.  |   |  |  |
| 6. | I do not have a  | personal interest in any transactions taken at this meeting.  8/9/8  Date |  |  |