

STATE BOARD FOR ENGINEERING, LAND SURVEYING AND GEOLOGY OFFICE OF THE PROFESSIONS

89 Washington Avenue, Albany, NY 12234

June 13, 2024 - 9:30 A.M.

OPEN SESSION MINUTES

Primary Board Members Present:

- M. Noviello, P.E., L.S. (Chair)
- J. Martin, P.E. (Vice Chair)
- D. D'Angelo, P.E., arrived at 9:33 A.M.
- P. VanHaverbeke, L.S.
- L. Woods, P.E.
- A. Friedman, P.T.
- W. Kelly, P.G.
- J. Patota, P.G., left at 1:05 P.M.
- T. Mitchell, P.E., left at 11:29 A.M., returned at 11:34 A.M.
- R. Nogle, P.E.
- R. Watt, P.G.
- J. Janora, P.G.
- G. Marcus, P.E.
- S. Porter, L.S.
- F. Flanagan, L.S.
- S. Alampalli, P.E., arrived at 9:38 A.M.
- R. Frandina, P.E., L.S.
- D. Franzi, P.G.
- B. Holbritter, L.S., left at 11:08 A.M., returned at 11:11 A.M.

Extended Board Members Present:

• None

Primary Board Members Absent:

• M. Rygel, P.G.

Department Personnel:

- E. Greppo, P.E. Executive Secretary (ES)
- K. Fitzgerald Associate in Professional Education
- J. O'Brien Education Program Assistant II, attended 9:35 A.M. to 9:55 A.M.

Visitors:

- Mark Kriss NYSSPE
- Emily Whalen NYSAPLS, left at 12:02 P.M.

- John Nadeau NYSCPG
- Campbell Wallace NYSCPG
- Kate Knight Catalyst Government Relations, representing Rochester Institute of Technology, arrived at 10:11 A.M., left at 1:00 P.M.

1. Call to Order - Open Session

Chair Noviello called the Open Session to order at 9:31 A.M.

2. Introductions

Board members, department staff, and guests provided brief introductions.

3. Meeting Minutes

The Open Session meeting minutes from the March 7, 2024 Board meeting were reviewed.

<u>Motion</u> – Mitchell/Kelly: Approve March 7, 2024 meeting minutes. **PASSED UNANIMOUSLY.**

4. Chair and Vice Chair Reports

Chair Noviello reminded, for LS Chair and general Board awareness, that surveyors must verify boundaries as part of revising, updating, or altering existing surveys, a visual inspection alone is not sufficient. Section 29.3(a)(9) of the Rules of the Board of Regents was referenced as it pertains to this requirement.

Chair Noviello mentioned that at the NYSSPE Summer meeting, which he attended, the topic of a reputed agreement between DEC and NYSED related to onsite project inspections was discussed. The ES will review and involve the PE Committee as necessary if follow-up is required.

Observations were mentioned of planning boards reputedly accepting geologic reports and/or testimony from non-PGs. ES will review and will engage PG committee, as appropriate.

*ES Note: Requests for professional misconduct or practice investigations should be made directly to NYSED OPD

Vice Chair Martin deferred commentary to committee reports.

5. Executive Secretary Report

A certificate of appreciation was awarded to Board Member Friedman for her 5-year tenure as the Board's Public Member. Her previous service to NYSED, including within the Board Office, was also acknowledged. Several Board Members also shared their gratitude. This is Member Friedman's final board meeting before her term expires in September 2024.

Extended Member Joe Pasaturo, PE has returned to active status on the Board. His current extended term runs until 9/30/2026.

On March 20, 2024, a new B.E. in Chemical Engineering was registered and approved by the Department. The program will be offered at Lebanese American University.

On April 12, 2024, format and curricular changes for the B.S. in Surveying and Geomatics Engineering Technology were approved by the Department. This program is offered at Alfred State College (SUNY College of Technology).

The Northeast NCEES Zone Meeting was held May 2-4, 2024, in Washington, D.C. The ES, along with Members Holbritter and Nogle attended. At the meeting, among other things, the zone membership approved a motion to create a committee to study engineering technology for inclusion in model law as a pathway to licensure.

The NCEES Annual meeting will be held August 14-17 in Chicago:

- Participants will include the ES, Chair Noviello, Vice-Chair Martin & members Nogle,
 Marcus, Alampalli and VanHaverbeke. A NYSED law enforcement representative is also
 expected to attend the law enforcement program portion of the meeting. Attendance for all
 participants is fully funded by NCEES.
- All informational materials for the 2024 annual meeting motions full committee report are expected to be available from NCEES by July 1. ES will circulate to the board membership once available. A joint PE/LS committee meeting for will be scheduled for July to review annual meeting motions.
- A mutual recognition agreement is expected to be signed by NCEES and the UK Engineering Council at the annual meeting. The Board may be asked to study the agreement and provide technical comments at a later date.

The biannual 'New Board Member' Office of Professional Discipline training will be offered in a live virtual format on 6/20/2024. Any Board Members may reach out to the ES if they would like to attend as a refresher.

ES provided a reminder that the so-called 'all experience pathway' for licensure ended as of 4/6/2024. The full fee and Form 1 must have been on file by midnight 4/6/2024 for an applicant to preserve this former licensure pathway.

The Employee Stock Ownership Plan (ESOP) law change goes into effect on July 22nd. The statute will adjust the allowances of ESOPs in design professional corporations. An advisory notice and guidance materials/form updates will be published by the Department by that date. The Board Office will also directly notify stakeholder associations (such as ACEC) at that time.

The Board Office will explore ways to enhance outreach to applicants on matters of licensure and professional practice, as it pertains to NYSED's authority.

6. Professional Engineering (PE) Committee Report

Chair Martin stated that there are 96 P.E. exam and endorsement applications in queue. New Board members have been trained in application reviews and are encouraged to reach out with any questions that may arise. There are currently over 33,000 registered Professional Engineers in New York.

The ES shared that two P.E. lunchtime seminars are expected to be held this fall and hosted by NYSSPE. An Ethics Presentation Seminar will be held on September 25th and a PE Application

Preparation Seminar will be held on October 2nd. Information on both will soon be shared with the Board for their feedback and comments.

7. Land Surveying (LS) Committee Report

Chair Holbritter shared that the committee met on 4/2, 4/10, 4/23 & 5/13. Meeting topics included setting the exam pass point and working on several exam challenges.

There were some subject areas that were noted as poorly performing; this information has been shared with NYSAPLS to inform their examination preparation course.

Several application review training sessions were held for new LS Board members.

ES communicated that the LS committee is meeting on June 24th to select items for the Fall 2024 NYS-specific exam. The ES is in early conversations with NYSAPLS related to NYSED practice guidelines and NYSAPLS MTS.

8. Professional Geology (PG) Committee Report

Chair Patota noted that the committee has been meeting regularly (3/28, 4/18, 4/25, 5/9, 5/23) on various topics related to the regulated practice of geology in NYS and for onboarding the newer PG membership. She mentioned that the regulated practice is diverse nationally. Even though the principles are the generally similar, geographic differences matter insofar as public protection.

Outreach to agencies (e.g. DOT) may be coordinated as well as a presentation at Engineer Week, with a focus on the differing authority between Professional Engineers and Professional Geologists.

The Board will present on practice ethics during Geology Days (November 11 – November 13, 2024), specific to the regulated practice and the standard of care of professional geology in NYS.

Members Franzi and Kelly reported on their attendance at The Geological Society of America's 2024 Northeastern Section Meeting in Manchester, NH, from March 17-19, 2024. Many of the 1,000+ attendees were students, faculty, and consultants. A booth was maintained with information on PG licensure in NYS, a video slide show, as well as handouts from NYSED, NYSCPG and ASBOG. Over 70 students left their contact information at the booth and have been provided licensure information from the Board office since the meeting.

ES shared that he and Member Kelly presented a license application process online seminar on May 15, 2024 hosted by NYSCPG. Approximately 190 people attended the 2-hr seminar and Q&A session. The International Council on Regulation (ICOR) Consortium is developing guidelines on practice overlap. ICOR is made up of NCEES, NCARB, CLARB & CIDQ. ES will reach out to ICOR representation to inquire about professional geology practice overlap. ABSOG is not currently an ICOR member.

9. Access & Outreach to the Professions Committee Report

Chair Woods referenced the outreach presentation mentioned in the geology committee report.

The committee continues to revise and refresh a STEM presentation that is intended to assist in high school outreach. Once finished, it will be distributed to the Board for review and comments.

Joint online seminars with NYSSPE will be held this fall as noted in the PE committee report.

10. Education Committee Report

Chair Mitchell stated that discussion regarding several ongoing and new education program proposals will be covered in Executive Session. A committee meeting will be held before the next Board meeting to discuss the Education Review process, procedures, and onboard new committee members. ES added that a joint LS and Education committee meeting was held on March 28, 2024.

11. Legislation Committee Report

Chair Martin commented that the current NYS legislative session has ended. The committee is tracking various bills in varying stages of the legislative process. These bills in-part include legislation involving engineering technology licensure requirements, permitting certain not-for-profit corporations engaged in engineering for certain conservation efforts to do business or provide professional engineering, land surveying, and the so-called professional geology 'ladder bill,' which proposes, among other things, to sunset the existing all-experience pathway.

12. Project Delivery Methods Committee Report

Chair D'Angelo reported that the committee will continue monitoring Qualifications Based Selection (QBS), progressive design build (MTA, NYC), and other design-build matters.

13. Continuing Business

The NCEES Annual Meeting was discussed within the Executive Secretary's Report.

14. New Business

ES provided time for association representatives to provide comments. E. Whalen noted that NYSAPLS Young Professionals Committee representative would like to meet with the LS Committee to gather information to be used as a peer resource. ES will reach out and attempt to integrate into a future committee meeting.

Guest M. Kriss shared that S9849/A10543 (relates to authorizing the use of certain alternative project delivery methods) passed both houses. ES will follow-up with project delivery methods Chair D'Angelo to review.

Guest C. Wallace provided context that professional geology would not have been included in bills introduced before geology became a regulated profession (such as a bill involving implementation of a statute of repose). In such cases, amendments may be requested to include geology.

A9936/S9455 - Geology "Ladder Bill" Technical Review Comment Solicitation

The Board was solicited for technical review comments on two-house bill A9936/S9455.

ES shared that A9936/S9455 is currently in both Senate and Assembly Higher Education Committees. Bill proposes to sunset the 12-year all-experience pathway. The "Intern Geologist"

title (gained after passing the fundamentals exam) would also be adjusted to "Geologist in Training," which is more aligned with national terminology.

The Board discussed the bill and provided comments for internal NYSED review.

The following context was provided during the discussion of comments:

- All other jurisdictions in the US regulating Geology as a licensed profession (approximately 32) require a bachelor's degree or higher in Geological Sciences.
- The 12-year experience pathway was reputedly adopted from the PE regulations in page at the time PG licensure bill was developed.
- When geology became a regulated profession, there was a concern for access to the profession for existing practitioners.
- Clarification of the bill language was requested related to the following:
 - o "...each full year of study in geology deemed satisfactory to the department may, at the discretion of the board, be accepted in lieu of up to two years of the required twelve years of experience."

S1049/A5051 - Engineering Technology (ET) Bill Technical Review Comment Solicitation

The Board was solicited for technical review comments on two-house bill S1049/A5051.

ES shared that the bill proposes, among other things, to make equal the licensure requirements for engineering and engineering technology bachelor program graduates from ABET accredited institutions. Currently engineering and engineering technology program graduates must demonstrate to the Board four (4) and six (6) years, respectively, of qualifying engineering experience.

ES shared that the bill is currently in both Senate and Assembly Higher Education Committees. There was a 'lobby day' in Albany on May 7th where several schools were in Albany to meet with the legislature and NYSED to express their support of the bill.

The Board discussed the bill and provided comments for internal NYSED review. While various opinions were posed, the Board voiced many concerns regarding the intentions of the bill that will require further discussion.

Board Member comments made during the discussion include:

- Engineering (more theoretically rigorous) and engineering technology (more applied) degrees are not substantially equivalent. Each degree pathway prepares the individual for licensure, but in different ways.
- Both NCEES and ABET educational standards are different for engineering and engineering technology programs.
- Many ET program degrees do not singularly qualify students for taking many engineering masters programs. Students often must supplement their BS program to qualify. This further defends the case for non-equivalence.
- ET graduates appeared less-prepared 'out-of-the-gate' than engineering graduates and with comparably divergent strengths. The extra two-years of experience required of ET graduates generally provides the additional judgement and competencies necessary to demonstrate the experience required in Section 68.2 of the Commissioner's Regulations.

- Regardless of the qualifying years required, the Board must judge each applicant against Section 68.2 of the Commissioner's Regulations. The experience requirement is not simply a clock.
- A Board member with five (5) years of experience in ABET technical reviews of both engineering and ET program did not find a significant difference in the programs and viewed both programs as preparing the individual for licensure. The member was not aware of any complaints from employers concerning the quality and competence of either program graduate.
- A concern was raised by a geologist Board member that the proposed change could have a cascading effect on other design professions and associated degrees perceived as 'substantially equivalent.'
- The effect of this proposed statutory change could be accomplished with a regulatory modification.
- A Board Member teaching Civil Engineering Technology coursework did not agree that the degrees are equivalent.
- With 40 years' experience working with ET employees, the preparedness and enjoyment are not the same. Engineering techs are not typically in analytical positions. Examples of areas where ET graduates typically work include land development and HVAC design. Less time is spent on projects; more time is spent on sales or project management. Over time, equivalence may be the same, but the current 2 years of additional work experience for ET graduates may be too little.
- Engineering and ET degrees are not qualitatively equivalent based on professional experience.
- There is a lighter lift when comparing Engineering and ET programs. ET is light on math and the physics is applied.
- Within the NCEES Education Standards, ETAC is not equivalent to EAC. For example, the math requirements are more in depth.
- There is already a pathway/access to licensure for ET in NYS.
- Not every state licenses those with ET degrees.
- Making a change to lower the experience requirement does not help the public, as there is less design and critical thinking involved with an ET degree.
- The program requirements may look equivalent to the uninitiated, but ET has less intense coursework. There is already a path in NY. NY, FL, and TX are 'portal states'. NY has a responsibility to uphold the line.
- The Board holds the line at determining approvable experience, whether the applicant needs 4 or 6 years. The first two or even ten years may not be qualifying experience (e.g., inspector experience).
- Not all Engineering or ET BS graduates use calculus. Some use algebra. There are different ways in which people are engineers.
- There is a difference in knowing 'what' to do versus 'why.' Independent judgement is based on experience, theory, and an understanding on what is going on.
- Engineers must only practice only within area(s) of competence, regardless of education and experience.
- Some people may choose the path of least resistance toward licensure.
- The two additional years of required experience provide ET graduations additional experience working under a P.E.
- ET programs contain more 'tech' courses. There are fundamental program differences.
- The health, safety, and welfare of the public should make New York one of the more restrictive states when it comes to licensure standards.
- Is it good enough to know how things work? PEs need to know why things work. When going through the Engineering BS program, students could move to ET if having a hard time. A BS in Engineering prepares an engineer at a faster level for true innovative engineering.

The following additional context was provided during the discussion of comments:

Guest M. Kriss commented that a formal position has not been reached at NYSSPE. The association may defer to NYSED to guide their position.

Guest K. Knight noted the following:

- R.I.T. offers both engineering and ET programs.
- ET is an option, in part, for students who did not have access to calculus in high school and may not otherwise qualify for a traditional engineering program.
- There are 10 post-secondary institutions in NYS with ET programs that are working in concert in support of the bill.
- If legislation is passed, the Board will still review applications to against the regulatory criteria and approving qualifying experience.
- ET curricula are generally known as applied and practical, whereas engineering curricula are more theoretical. *Post-meeting note from Vice-Chair Martin: It should be noted that engineering curricula are theoretical, applied and practical.
- Both engineering and ET programs are ABET-accredited and prepare the graduate for licensure, but in different ways.

15. Resolution for Executive Session and Adjournment

<u>Motion</u> – Nogle/Martin: Move to break for ten (10) minutes at 1:07 P.M. and reconvene thereafter for Executive Session.

PASSED UNAMINMOUSLY.

Respectfully Submitted,

Eric Greppo, PE Executive Secretary