

Board of Professional Engineering
Secretary of State, Office of Professional Regulation
89 Main Street, 3rd Floor, Montpelier, VT
Approved Minutes
Thursday, May 7, 2015

1. The meeting was called to order at 8:33 a.m.

Members present: William Atkinson, P.E., Chair; Brad Aldrich, P.E., Vice-Chair; Katherine Hill, P.E. Secretary; Raymond Forsell, P.E.; and Claus Bartenstein, P.E.
Absent: Bonnie Giuliani.

OPR Personnel present: Gabriel Gilman, General Counsel; Carla Preston, Case Manager; and Kara Shangraw, Licensing Board Specialist.

Others present: Richard Hamlin; Jeffrey Mountain; Jeffrey Merkle; Melissa Carl; Nathan Maslolino; Joe Duncan; and Shawn Kelley.

2. The Chair called for the March 5th and April 2nd meetings. Ms. Hill made a motion, seconded by Mr. Bartenstein, to approve the minutes of March 5, 2015 and April 2, 2015 as submitted. Motion passed unanimously.

3. **Hearings/Stipulations:**

4. **Complaints/Follow ups:**

Ms. Preston gave her Case Managers report. There are currently six pending cases.

5. Ms. Hill made a motion, seconded by Mr. Forsell, to approve the following applicants for licensure on the basis of endorsement from another state and/or their National Council of Examiners for Engineering and Surveying's Record indicating "Model Law Engineer." Motion passed unanimously.

Beaumont, Shannon, R (Civil)
Donahue, David, P (**Structural I not Civil**)
Fitzgerald, Derek, G (**Structural I not Civil**)
Iskra, Thomas, G (Civil)
O'Hearn, Colin, M (Civil)
Scarpato, David, J (Civil)
Sheppard, Suzanne, T (Civil)
Tuttman, Michael, J (Civil)
Yannoni, Christopher, C (Civil)
Fazio, Salvatore, F (Electrical)
Jones, Clint, R (Electrical)
Martin, William, M (Electrical)
Shumaker, Joel, C (Electrical)
Tourigny Jr., Bruce, D (Electrical)
Wilde, Randy, D (Electrical)
Ferguson, David, J (Fire Protection)

Calvert, John, A (**Structural I not Civil**)
Douglas, James, C (Civil)
Griffin, Shawn, E (**Structural I not Civil**)
Kitchner, Scott, E (Civil)
Orlando, Christopher (**Structural I not Civil**)
Sheffer II, Daniel, B (Civil)
Solli, Kevin, M (Civil)
Twidwell, Ross, A (**Structural I not Civil**)
Blouin, Bruce, W (Electrical)
Finnegan, Christopher, J (Electrical)
Kimball, Allison, D (Electrical)
Psulkowski, Douglas, R (Electrical)
Stacy, Robert, K (Electrical)
White, Charles, H (Electrical)
Wolff, Robert, A (Electrical)
Brinker, Michael, R (Mechanical)

5. Endorsement Applicants – Continued:

Earhart, Timothy (Mechanical)	Harrison, Robert, G (Mechanical)
Herzig Jr., Daniel, J (Mechanical)	O'Donnell, Gregory, P (Mechanical)
Parker, John, S (Mechanical)	Petrella Jr, Joseph, R (Mechanical)
Youmans, Lenardo, B (Mechanical)	Cruz, Michael, A (Structural I)
Lacroix, Simon (Structrual I)	O'Neill, David, B (Structural I)
Bicja, Josif (Structural I not Structural II)	

Turner, John, P (Electrical Addl. Info) - His application was still found incomplete. Mr. Turner will be notified.

6. Review the following application(s) to sit for the Principals and Practice exam:

Golek, Joshua, W (Civil) – His application was incomplete. Mr. Golek will be notified.

7. Ms. Hill made a motion, seconded by Mr. Forsell, to approve the following application(s) to sit for the Fundamental of Engineering exam. Motion passed unanimously.

Chevrier, Serge

8. NCEES Correspondence:

The Board discussed their attendance at the Northeast zone meeting in Hershey, Pennsylvania May 1-3, 2015. Some Boards have encountered problems with their states court system for expert witness testimony in the practice of Engineering. There have been reported problems in other states with the Structural engineers that have taken their State specific structural exam gaining comity in other states. The Board's draft rules already provide a means for accommodating other state specific structural exams.

9. Reports/Guests/ Legislative Updates:

10. Other Business Introduced by the Board:

The Board had an extensive discussion on the masters or equivalent initiative and how it relates to a motion made by the Board. Based on the discussion Mr. Bartenstein made a motion, seconded by Mr. Forsell. That motion was amended during the discussion. Based on the discussion, Ms. Hill made a motion, seconded by Mr. Forsell. The motion was:

The Vermont Board of Professional Engineering, after hearing testimony and researching the topic, does not support amending Chapter 20 of Title 26 of the Vermont Statutes Annotated to increase the minimum level of education required for licensure as a Professional Engineer to a master's degree or equivalent. Motion passed 4-1.

11. Public Comment:

Shawn Kelley with the ASCE commented on the "Raise the Bar" initiative. He also commented and gave his support for the proposed rules in adding the continuing education requirement.

11. Public Comment – Continued:

Richard Hamlin made comments on the proposed changes to the rules pertaining to the continuing education with some clarification to the draft language.

12. Miscellaneous Correspondence:

The Board reviewed and noted the April 29, 2015 letter from Peter Cross with Cross Consulting Engineers regarding the masters or equivalent education proposal.

The signing of the wall certificates for the engineer interns that passed their examination have been tabled to the next meeting.

13. There being no further business, the Board meeting adjourned at 12:58 p.m.

Respectfully submitted,

Kara Shangraw
Licensing Board Specialist

This is the summary of recent action by the State of Vermont Professional Engineering Board on a request by State Representative Robert Krebs, P.E., L.L.S. that the Board review and make recommendations relative to a proposal to require a minimum of a Master's degree for Civil, Environmental, and Structural Engineers as the minimum education standard for licensure.

On September 4, 2014, Rep. Krebs presented to the Board draft language for a statute change that would require additional education for Civil, Environmental and Structural Engineers seeking licensure in Vermont starting with graduates after January 1, 2020. Krebs indicated that he would not introduce a Bill in the Vermont Legislature if the board did not support it. The draft language reads as follows:

Amend the current statute for the minimum education to read:

1182b.1 (F) to read: Individuals seeking licensure, environmental or structural disciplines, who obtain their bachelor's degree after January 1, 2020 shall complete a master's degree curriculum in engineering accredited by ABET or an acceptable amount of additional coursework as defined by board rule, to meet the educational requirements for licensure.

1182b.3 (F) individuals seeking licensure in civil, environmental or structural disciplines, who obtain their bachelor's degree after January 1, 2020 shall complete a master's degree curriculum in engineering accredited by ABET or an acceptable amount of additional coursework as defined by board rule, to meet the educational requirements for licensure.

On May 7th, after conducting a public hearing, considering follow-up testimony, and reviewing written testimony from both licensees and other interested parties, the Vermont Board of Professional Engineering voted by a 4-to-1 margin to approve the following motion:

The Vermont Board of Professional Engineering, after receiving testimony and researching the topic, does not support amending Chapter 20 of Title 26 of the Vermont Statutes Annotated to increase the minimum level of education required for licensure as a Professional Engineer to a master's degree or equivalent.

While Representative Krebs' proposal provoked the focused inquiry initiated by the Board and memorialized specifically in this document, the issue is not new. Representative Krebs first requested that the Vermont Board consider action on the issue approximately two years ago.

The following is a summary of Board actions to garner public comment, research, and deliberate on the above proposal:

Public comment received during regularly scheduled Board meetings

During the process of reviewing this, the Board received presentations from the following groups and individuals during our regularly scheduled meetings:

- Vermont State Representative Robert Krebs P.E. L.L.S. Past president of NCEES and Brad Aldrich P.E. Board member, and past president of NSPE presented on the raise the bar initiative at one meeting. The board was asked to consider "raising the bar to a master's degree or equivalent" for all disciplines

- The Licensing That Works committee presented to the board via teleconference at one meeting
- Representative Robert Krebs P.E. L.L.S presented to the Board at a total of four meetings, resulting in the draft language presented above
- Representatives of the Vermont chapter of ASCE's/Raise the bar committee presented in support of the proposal
- Representatives of the Vermont chapter of NSPE presented in support of the proposal
- Representatives of the Vermont chapter of ASHRAE presented its board position statement in opposition of the proposal

Public comment received at Board-sponsored public hearing on the proposal

Local engineering societies and engineers were notified in advance of a Public Hearing held on February 5, 2015 to gather information and opinion on the proposed statute change. Licensees were notified directly and indirectly of the Hearing by the Board through e-mail, word of mouth and public notification in conformance with Vermont's Open Meetings Law.

Thirty-five individuals signed in as attendees at a full-day Public Hearing, hosted by the Board in Montpelier, to discuss and provide input and reaction to the proposal. Commentary started at approximately 9:00 AM and continued with minor breaks until about 4:30 PM. All interested parties were given the opportunity to speak without any time limits or subject constraints. The speakers were given the option to take and accept questions from the audience if they chose. Board members also had the opportunity to ask questions of each speaker.

Testimony was also received from twenty-four individuals (with others adding commentary from the floor) throughout the day. Of those that spoke this was the summary:

- Twelve spoke out against the proposal (seven were Civil or Environmental Engineers, five were from other disciplines)
- Eight spoke out in support of the proposal (seven were Civil or Environmental Engineers, one was a retired mechanical engineer)
- A staff representative of ABET provided information on ABET's accreditation process and offered no opinion on the proposal
- One offered information on the history of the structural engineering bachelor's degree but offered no specific opinion on the proposal

At the March 5, 2015 Board Meeting, two individuals from ASCE National presented information to the board on how ASCE interacts with the ABET EAC Subcommittee on accreditation of Civil Engineering at the request of the Board Chair.

Written comments

The following written comments were received as part of our review process:

From Representative Robert Krebs P.E. L.L.S.

- Information and a request for Board action on his proposed statute change

From Vermont Chapters of Professional Societies

- Four Letters in support of the initiative from the Vermont Chapter of ASCE Board
- Two Letters in support of the initiative from the Vermont Chapter on NSPE Board
- One Joint letter in support of the initiative from the Vermont Chapter of ASCE and NSPE
- One letter in support of the initiative from ACEC of Vermont
- One Letter from the Structural Engineers' Association of Vermont president stating that 22 of 27 members who responded to a survey on the proposed statute change opposed the proposal
- One Letter in opposition of the initiative from the Vermont ASHRAE Chapter Board

From National Professional Societies

- One Joint Letter in opposition from twelve national societies: ASME, ASHRAE, American Institute of Chemical Engineers, American Society of Agricultural and Biological Engineers, American Society of Engineering Education, American Society of Plumbing Engineers, International Society of Automation, Society of Mining, Metallurgy, and Exploration, Society of Naval Architects and Marine Engineers, Engineering Deans Council, Institute of Industrial Engineers

From individuals in support of the initiative we received

- Ten letters from individuals
 - One individual sent two letters; eight individuals were in public/private engineering practice; one was a professor; and all but one—a mechanical engineer—were from civil or structural disciplines

From individuals in opposition of the initiative we received

- Twenty-six letters from individuals
 - Fourteen letters were from individuals; two letters represented were signed by twelve individuals; twenty-two individuals were in public/private Civil/Structural Engineering practice; four were mechanical

From individuals providing information rather than opinions we received

- One letter was received from a structural engineering professor

From Board Member Brad Aldrich, P.E.

- A detailed summary of articles, documentation and narrative deemed germane to the proposed Statute change

Board Discussion

At the May 7th meeting, Board members deliberated on the proposal. In summary, the general issues discussed were:

- Public Health, Safety, and Welfare and whether there is any evidence of a current problem that it is affected by the current minimum standard
- Review of current and historical enforcement actions in Vermont and Surrounding states
- Current Bachelors programs vs. Historical Bachelors programs
- Credit hour comparisons vs. Coursework comparisons
- Current exams and how they fit into entry into the profession
- The Structural Engineers choice on changing the examination
- The importance of Accreditation ABET's transition from credit hour assessment to outcome based assessment
- The Professional Engineering standards vs. other professions
- Board implementation issues if it were decided that the Master's or equivalent should move forward
- Potential legislative issues if it were to come before the legislature. (Cost, barring entry into the profession, lack of engineers, designer licensing)

Board Action

On May 7, 2015, by a vote of 4-1 (the Board's public-member seat was vacant), the Board approved the following motion:

The Vermont Board of Professional Engineering, after receiving testimony and researching the topic, does not support amending Chapter 20 of Title 26 of the Vermont Statutes Annotated to increase the minimum level of education required for licensure as a Professional Engineer to a master's degree or equivalent.