

#### STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS

# Maine PE News

September 2017

Volume 17, Issue 1

## **Thoughts While Driving: LD 1165**

By Mandy Holway Olver

I expect that most of you know that five of the seven members of the Board of Licensure for Professional Engineers are volunteer representatives of Maine's engineering professions. The sixth is the Chief Engineer for MaineDOT, serving ex officio. And the seventh member is not affiliated with the profession, and is present to represent the interests of the public. Board members spend additional hours serving on committees outside of regular meetings to tend to specific tasks in support of Board functions and report back to the Board at the regular meetings. One of the committees reviews the Statute and the Rules of the Board and periodically recommends changes. Sometimes the proposed changes address outdated references that interfere with licensing or relicensing of qualified individuals. There are also changes in the administration of NCEES FE and PE exams that create incompatibilities with Maine statute or rule. These types of statute and rule changes have been addressed in the past with little or no comment or attention from PEs or the public.

In the early spring of 2016, the Board began the process to modify our statute and address some minor issues. The specifics of LD 1165 have been documented elsewhere. Along the way, as sometimes happens, items were added to the bill that generated significant disagreement in the engineering community. The two items that drew the most attention were the proposed elimination of the professional development requirement, and the change in timing of when applicants may sit for the PE exam.

There are arguments pro and con about the professional development requirement. I think we can all agree that most engineers need lifelong learning in some form to perform their jobs. The disagreement is whether required classes to fulfill this learning truly benefit the profession. As you can see from the email survey responses from our Maine licensees (see 'PDH Requirements Remain' on page 5), opinions on this matter ran 60/40 against the professional development requirement.

The proposed change in timing would allow qualified applicants who passed the FE to take the PE without waiting until they have four years of experience. They would not be licensed as a PE until they obtained the required experience. This is a national trend, connected to the conversion of the PE exam to computer-based testing, and the Board foresaw no reduction in safety to the public by allowing someone to test at their convenience. They would still have to complete all of the qualifications for licensure as they do right now because they would still need four years of experience before they could apply for a license.

Due to opposition testimony, the legislation was defeated at the committee level. The question remains whether and how the Board should address these items in future legislation. There will be additional communication from the Board requesting input from licensees on these matters. Given the split of opinions, some of them strongly expressed, it will difficult to please everyone. Your continued input would be appreciated as we strive to resolve these matters.

#### **Board Members:**

- Mandy Holway Olver, PE, Chair
- Clifton W. Greim, PE, Vice Chair
- Joyce Noel Taylor, PE
- Knud E. Hermansen, PE, PLS, Esq., PhD
- Russell G. Martin, PE, Complaint Officer
- Susan M. Lessard, Public Member
- Brent M. Bridges, PE

#### Inside this issue:

LD 1165	1
FE results PE results	2
Complaint Flow Chart	3
New Board Member NCEES News	4
PDH Requirements Remain	5
Engineering Expo	6
Licensure Mobility	7

## Maine PE News Page 2

## FE Exam Results Jun 2016 to Dec 2016

These are the individuals who successfully passed the FE exam between June and December, 2016. Because the FE exam is a computer-based examination, testing occurs year-round.

Gordon Armstrong	k
Angela Bleeker	(
Bradley Boden	١
Kyle Bohunsky	ŀ
Zachary Bowen	F
James Butts	١
Marrissa Caskin	E
Joseph Cheff	C
Haifei Chen	C

Kelly Chickering Camden DesPres Matthew Donovan Heather Doolittle Patrick Doyle Mitchell Finitz Edward Gonnella Quinn Hathcock Carlos Henriquez Samuel Kane Matthew Lafond Eric Laplante Christopher Lloyd Luke Lorrimer Gordon Potter Alexandre Proulx Kristopher Reed Brendyn Sarnacki Christopher Sawyer Ahmed Shkara Lucas Soo Matthew Southard Philip Swanson Aulent Timko David Vitali Lindsey Wilson

## Congratulations to those who passed the October 2016 SE Exam

**Timothy Poulin** 

## Congratulations to those who passed the October 2016 PE Exam

Jordan Allen Matthew Asay Emily Bates Robert Brink Jorge Canelo Robert Canning Brendan Casey

Pierre Castonguay

Samuel Csonka

Jonathan Demay Matthew DiVittore Adam Duguay Patrick Gere Michael Giza Austin Gregory Steve Guerrette Joshua Hasbrouck James Hebert Mackenzie Kersbergen Patrick Manning Ryan Marques William Mcgugan Jeffery Mercer Syed Kazim Naqvi Hung Ming Ngai Brandon Nute Christopher Pickles Jeffrey Sweet Benjamin Van Deventer Kelsi Wry



Approved seal format

## The Complaint Process modeled in a Flow Chart



#### Maine PE News Page 4

## **New Database for Licensees**

Earlier this year, the PE Board converted its database to a new format and joined all of the other Maine licensing boards in using the ALMS system.

For years the Board was an outlier and relied on its own database system. While it made sense from a cost standpoint initially, as data security concerns have increased over the years, the costs associated with conversion and training became more accessible when viewed in

Beginning in January 2018, the NCEES PE Chemical exam will only be offered as a computerbased exam administered yearround at NCEES-approved Pearson VUE test centers.

You must file an application with the Maine PE Board and pay the \$25 application fee in order to be approved to register for any NCEES exam. Once approved by the Board, you will register for the PE Chemical exam by logging in to your MyNCEES account and following the onterms of a potential data loss.

Features available in the system allow for on-demand printing of a license and wallet card, and up-to -the-minute accuracy in verifying licensure status. Online renewal will still be available.

In addition, since all licensing boards use the same system, should it become necessary to make staff changes, the pool of people already qualified to operate the ALMS system is significant, while the pool of people familiar with the old system was small and getting smaller.

The conversion to this new system has happened, so far, with relatively few issues, although the true test of the new system will be when renewals begin on November 1.

In advance of that date, it would be helpful for licensees to log into the ALMS system and verify that their contact information is up to date. You can request your Access Code through the log in or via email to the office. Once you log in, you will create your own password for future access.

If you are unable to log in to the system for any reason, please contact the office, and a staff member will provide your Access Code.

Please remember that licensees are under an obligation to notify the office of any change in contact information within ten business days.

## NCEES CHEMICAL PE EXAM NOW CBT ONLY

screen instructions. A \$375 exam fee is payable directly to NCEES.

The PE Chemical exam has 80 questions, which include multiple -choice questions as well as alternative item types (AITs). The exam appointment time is 9 hours, including a tutorial, the 8hour exam, and a 50-minute break. For information on the format of the exam and the distribution of topics, you can download the exam specifications from ncees.org. The only reference material permitted during the exam is the NCEES PE Chemical Reference Handbook, which is provided during the exam in electronic format. We recommend that you download the free electronic copy from ncees.org and become familiar with the handbook before the exam.

NCEES also sells a PE Chemical practice exam to familiarize you with the exam format and the style of questions, including the new alternative item types (AITs). Practice exam questions are taken from prior exams and are typical of the types of questions on the exam.

Information about exam policies and procedures can be found in the NCEES Examinee Guide, which is available for download free from ncees.org. You can also find videos explaining what to expect from exam day.

Exam results are available 7–10 days after the exam.



## Meet the Newest Board Member, Susan M. Lessard

Susan M. Lessard, of Bucksport, Maine, was appointed in February by Governor Paul LePage to serve as the Public Member of the Board.

Ms. Lessard is the Town Manager of Bucksport, and previously held similar positions in Hampden for fourteen years, Vinalhaven for seven years, and prior to that in Fayette, Livermore Falls, and Searsport.

While at Vinalhaven she re-

ceived the 1998 Maine Engineering Excellence Award and the Maine Town and City Manager's Association Leadership Award for overseeing the development, permitting, and construction of the first in Maine alternative landfill capping plan.

In addition to her municipal work, she has served on numerous boards and committees, including serving on the Board of Environmental Protection from 2007 to 2015, and as Chair of the BEP from 2008 to 2011.

Ms. Lessard studied Architectural Engineering at Vermont Technical College, received a Municipal Clerk's Certification from Salve Regina College, studied at the University of Maine in Orono, and has taken many courses through the Maine Municipal Association.

# PDH REQUIREMENTS REMAIN

After LD 1165 was submitted to the Legislature in the late Fall, there was opposition from some of the national engineering societies to the proposal to end the professional development requirement. The Board sent an email to over 5700 licensees, highlighting that issue, and asking for feedback.

We received a very small response to that initial email, totaling between one and two hundred email responses, showing a 3:1 ratio in favor of eliminating the professional development requirement.

With such a small sample, it was suggested that the results were not truly representative and were possibly skewed by respondents in states, such as Massachusetts, where there was no continuing education requirement. So a second, targeted email was sent directly to licensees with Maine residential addresses.

Out of 1939 emails sent to licensees, 829 responses were received. 491 licensees, or 59.23% of those responses received, expressed a desire to eliminate the professional development requirement; 338 licensees, or 40.77% of the responses, expressed a desire to see the requirement remain. The split between those for or against remained fairly consistent, hovering around 60/40 from beginning to end, with those opposed to eliminating the PDH requirement closing the gap slightly as the responses dwindled.

Many individuals emailed expressing strong arguments supporting or opposed to the elimination of professional development. Those few who expressed neutrality were included with the group opposed to eliminating PDHs, since it appeared that no preference indicated support for maintaining the status quo, rather than making changes.

The most frequently cited arguments for maintaining the PDH requirements were: first, that the requirement for continued education was a hallmark of a profession, therefore eliminating the PDH program would reduce the image of the profession; and second, to keep the public safe by assuring that licensees were current on technological advances.

A number of people also stated that they were concerned that a lack of professional development requirements in Maine might make it more difficult to obtain reciprocal licensure in another state. It is not clear where this fear first arose, because no US jurisdiction requires continuing education after initial licensure as a prerequisite for reciprocal licensure.

The most frequently cited arguments in favor of eliminating PDHs were the lack of programming suited to the individual engineer, the cost in money and time, and the inconvenience of recordkeeping. Many licensees indicated that the niche in which they were working was fairly narrow, and no one offered any programming directly in their field, so it was felt that the majority of the time they spent pursuing PDHs was wasted on busywork. Many people who were self-employed expressed frustration with the PDH requirements. As rationale, they frequently listed the expense of taking time off from work to take courses that added little to no value to their engineering practice. Many felt that the courses offered did not provide much in the way of additional knowledge, so they felt their efforts were expended only to comply with a regulation that seemed ineffectual. A number of people cited the inconvenience of recordkeeping across multiple jurisdictions with different beginning and end dates, as well as different requirements and course standards. While we were able to point people to the helpful free system NCEES has set up to record PDHs, we were not able to resolve the underlying issues.

Ultimately, it became obvious there was no acceptable compromise language that could be reached during this session, and LD1165 was voted Ought Not to Pass by the LCRED Committee, and therefore failed. The PDH requirements remain in place, and will be enforced for the December 2017 renewal. Please keep copies of all documents in case you are audited. PLEASE MAKE SURE THE BOARD HAS YOUR CURRENT CONTACT INFO.

Maine PE News Page 6

## 2017 Engineering Expo



The 2017 Engineers Expo took place at the University of Southern Maine campus in Westbrook. Over 2,900 people attended. Students and their parents took part in many fun and educational activities. Sponsors and exhibitors gave out information and involved participants in experiments and tasks like: making

slime; designing bridges on software; competing to build structures from spaghetti and marshmallows; programming robots and robot arms; controlling construction equipment; 3-D printing; scanning things into virtual reality; using virtual reality glasses; floating objects on a column of air; and many other interest-





ing and exciting STEM exhibits. Students of all ages who are interested in STEM, or who might become interested in STEM, should be encouraged to attend this yearly event. Next year, it will be held in the fieldhouse at UMaine Orono. Hope to see you there!

## Licensure Mobility — More or Less — Your Choice

In 1920, a dozen states created a national council, now known as NCEES, to establish national standards for examination and licensure, with the goal of promoting interstate licensure mobility. Progress has been made over 97 years, but we are far from achieving the vision of those early council members.

Licensure is granted by each individual jurisdiction after candidates meet requirements in three areas: education, examination, and experience. Each jurisdiction sets its own requirements for licensure. Jurisdictional sovereignty has created challenges to creating single licensure standard.

NCEES has developed Model Laws and Model Rules, as well as the national examinations for the fundamentals of engineering (FE), the principles and practice of engineering (PE), and for structural engineering (SE). Engineers who meet the aspirational standards of the Model Law can receive the "Model Law Engineer" (MLE) designation from NCEES, which grants expedited licensure in most jurisdictions.

All US jurisdictions accept the results of NCEES FE, PE, and SE exams. However, because some jurisdictions identify factors that are unique to them, they require and administer separate exams that cover topics like soils, seismic activity, or extreme temperatures. A recent trend nationally has been to require additional testing on jurisdiction-specific laws, rules, and/or ethics. Some jurisdictions waive exam requirements based on advanced education or experience.

The education requirement varies by jurisdiction as well. Some states license only graduates of ABET-accredited engineering programs, while others include graduates of ABET-accredited engineering technology programs, and others include programs substantially equivalent to an approved program, or those that meet or substantially meet the NCEES Engineering Education Standard. Some also allow "allied-science" degrees, and some have no educational requirement whatsoever.

The amount of engineering work experience, and what counts as valid work experience, also varies by jurisdiction. Some require that a PE actively supervise the work, while others allow a less "hands-on" approach. Some jurisdictions mandate that the required work experience must be complete prior to sitting for the PE exams, while others require that it be complete prior to applying. Some vary the amount of experience required based on the level of education, and others may even waive examination requirements based on experience.

We talk about "comity" licensure, but it doesn't exist. Comity is a legal principal that one jurisdiction recognizes the legal actions of another. For example, you can drive on your home state driver's license in every other state; you don't get stopped at the border and asked to take a road test, or to pay a fee. When you vacation or move, they don't make you get remarried under their version of the law, or even pay a fee for local marriage credentials. That's comity.

When it comes to professional licensure, we do not have true comity. We don't even have a single licensure standard. The closest thing we have is the Model Law Engineer designation from NCEES. A graduate of an ABET-accredited engineering degree program who passes the FE exam, works for four years under the supervision of a licensed PE, and then passes the PE exam, meets the requirement for the Model Law Engineer designation and would be accepted for licensure everywhere. However, while every state accepts MLE candidates, very few states have adopted this as their minimum standard of licensure; so it remains largely aspirational.

The question remains: Is it possible to create a universally-approved minimum standard of professional engineering licensure? In 2020, NCEES will celebrate its 100th anniversary. Do we want more or less licensure mobility by then? And are we willing to do the work to get there? STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS 92 STATE HOUSE STATION

AUGUSTA, ME 04333-0092

ADDRESS SERVICE REQUESTED

PRESORT Standard U.S. POSTAGE PAID PERMIT NO. 8 AUGUSTA, ME

#### Find us on the web! www.maine.gov/professionalengineers



#### State Board of Licensure For Professional Engineers

92 State House Station Augusta, Maine 04333-0092

Phone: 207-287-3236 Fax: 207-287-3239 Email: professional.engineers@maine.gov

### **PDH Reminder**

All licensees are required to complete and maintain documentation of 30 hours of Professional Development during each two-year licensure period. The current licensure period ends on December 31, 2017.

Those who received their original Maine PE licensure within the current two-year licensure period are required to complete an amount of PDH that is prorated based on the date of their initial licensure.

A link to the table of Prorated PDHs can be found on our website:

http://www.maine.gov/professionalengineers/pdh.html