

# Maine PE News

STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS

**VOL 1**.

### **SEPTEMBER 20, 2024**

by Brent Bridges, PE, Board Chair

If it feels like I am fixated on the singular purpose of encouraging people to take the NCEES Fundamentals of Engineering (FE) and Principles and Practice of Engineering (PE) exams, it's because hardly a day goes by that I don't see the impacts of not having taken those exams.

**PE Licensure** 

At my firm, we recently interviewed a candidate for a project management position who, while having graduated with an engineering degree and having passed the FE exam, is not licensed as a PE. When we asked why they didn't pursue PE licensure, they responded that it was not required by their last two employers and the further they got from providing technical support to projects, the more they felt they did not need a PE. We indicated that our firm would have PEs working on projects and the candidate said that is great and they look forward to supporting those PEs by being an excellent project manager and not a technical reviewer.

One of my colleagues recently told a story about their brother, who sought and received PE licensure even though the company he worked for did not require it. When the company faced a downturn in business and terminated a significant number of employees, the brother kept his job because he had a PE license. My colleague believes that because he is a PE, the firm saw value in keeping him on.

It's important to remember that <u>all</u> engineering work that falls under the definition of professional engineering (work product created using engineering principles and data that could impact safety, e.g. drawings, calculations, letters or reports with recommendations, etc.) requires a PE seal and signature along with the date.

The new hire to our firm (yes, we hired the candidate, who is a great match to fill our current needs), is fortunate to be joining a team of highly skilled PEs responsible for developing and sealing the work product. But what happens over time if graduating engineering students continue to forgo the FE and our current PEs get closer and closer to retirement? Makes you wonder.

The economy has a lot to do with why we are seeing a reduction in students taking the FE, which seems surprising since the FE exam is significantly more accessible than when my colleagues and I took it years ago. With multiple job offers per graduate, students often do not see any need to pass the FE, and they cannot see the future value of PE licensure. For most of them, however, their first job will not be their last job. So more experienced PEs need to let them know that licensure certainly won't hurt them, and may very well help them at some point in their career, as evidenced by my colleague's brother.

Those of you receiving this newsletter are already licensed as a PE or certified as an El, so you know the value of passing the FE and PE exams. Those in your circle of influence may not know. While we currently have over 7500 licensed PEs in Maine, there are already gaps and shortages. What if each of you encouraged one person every year to take the professional exams? That would help fill the shortage of professional engineers, benefit their careers, and assist our profession in its mission to protect the public. It's worth considering.

## PDH Audits are coming

We have had a new PDH audit system developed over the past several months. The new system coordinates with the licensure database, allowing the database to randomly select the percentage of licensees the Board wants to audit, automatically send out notices, and receive uploaded PDH documentation. We hope it makes the audit process easier for all.

### PDH AUDITS

PDH audits for the 2023 renewal will be here soon. Watch for an email notice. The board will audit 1.5% of licensees renewed by Dec 31, 2023, and 5% of licensees renewed from Jan 1 to Mar 31, 2024. All licensees renewed after Mar 31 were audited prior to renewal.

### Active-duty military and first renewals are exempt from PDH requirements and are not audited.

#### PDH REQUIREMENTS

Licensees are required to complete 30 hours of PDH in each 2-year licensure period prior to renewal. During renewal, all licensees attest to fulfilling the PDH requirement. Your attestation has legal significance.

#### PDH RECORDS

PDH records "supporting evidence of attendance" such as certificates of completion or payment or registration receipts must be furnished when audited. We will contact you if there are issues with your submission.

If you are audited, you can either upload your documentation through the database, email it directly to the Board at <u>professional.engineers@maine.gov</u>, or submit it through the <u>FREE</u>NCEES CPC registry <u>https://ncees.org/cpc/</u>. The NCEES CPC Registry can also track your compliance with each state where you are licensed and can track your license renewals.

### CARRY-OVER

If you claim carry-over from the prior renewal period, you <u>must</u> provide complete documentation from the prior renewal period to prove the carry-over. Maine law requires that each licensee maintain their records for 3 years. The board does not maintain any PDH records.

#### PENALTIES

Failure to respond to an audit request, failure to complete PDH, failure to maintain records, or failure to update contact information, can <u>each</u> be a violation of Maine law that can result in a fine or other sanction.

#### PDH WAIVERS

<u>Any licensee can request a waiver of PDH requirement *prior to renewal*. To request a waiver, you need to submit a written request to the board asking for a waiver of all or part of the PDH requirements for "extenuating situation, hardship, or disability." Waiver requests submitted only *after* being audited are not likely to be approved.</u>

### Stakeholder Meeting

The Maine PE Board holds a meeting each Fall with stakeholders, including representatives of professional engineering societies, engineering firms, and individual professional engineers. Over the years, the Board has received valuable input and support resulting in positive legislative outcomes.

Discussions have covered issues including: attacks on occupational licensure, legislative and rulemaking initiatives, public safety issues, the performance of professional engineering by unlicensed engineers or other unqualified persons, practice overlap, and other areas of concern.

This year the meeting will focus on the US-UK Mutual Recognition Agreement and the proposed legislation to allow the MRA to take effect in Maine. The meeting will be held <u>October 10 from 9:00am-12:30pm</u> <u>at MaineDOT in Augusta</u>. If you want to attend, or your organization would like to send a representative, either in person or remotely, please contact the board office at <u>professional.engineers@maine.gov</u>.

### **Proposed Legislation**

The draft of the proposed legislation to permit the implementation of the US-UK Mutual Recognition Agreement:

### An Act Regarding Reciprocal Professional Engineering Licensure

### Be it enacted by the People of the State of Maine as follows:

Sec. 1. 32 MRSA § 1352-A (1)(B) as amended by PL 2019, c. 375, § 11 is further amended to read:

B. A<u>n applicant</u> person for licensure holding an active national council record whose qualifications meet the requirements of this chapter upon application may be licensed without further examination.

### Sec. 2. 32 MRSA § 1352-A (1)(B-1) is enacted to read:

<u>B-1. An applicant for licensure who meets the requirements of a mutual recognition agreement</u> between the State of Maine and another state, territory or possession of the United States, the District of Columbia or any foreign country, whose licensure qualifications are, in the opinion of the board and by the language of the agreement, deemed substantially equivalent to the requirements in this chapter, may be licensed without further examination.

### SUMMARY

Section 1 revises the language of § 1352-A (1)(B) to make the beginning consistent with all other paragraphs in the same sub-section. Section 2 enacts § 1352-A (1)(B-1) to allow qualified individuals licensed by signatories of the Mutual Recognition Agreement recently signed by UK Engineering Council and the National Council of Examiners for Engineering and Surveying (NCEES) to receive reciprocal licensure as Chartered Engineers in the UK and Professional Engineers in participating US jurisdictions. This bill allows reciprocal PE licensure in Maine of Chartered Engineers from the UK who meet the qualification specified in the MRA without requiring additional testing. The language also allows for additional MRAs anticipated to be considered in the future.

### Mutual Recognition Agreement US-UK in brief:

On 8 June 2023, in a ceremony at the White House, the US President Joe Biden and U.K. Prime Minister Rishi Sunak announced the Atlantic Declaration for a Twenty-First Century U.S.-UK Economic Partnership. Speaking at the ceremony, Prime Minister Sunak declared it "An agreement to work towards mutual recognition of more professional qualifications in areas like engineering..."

David Cox, CEO of the National Council of Examiners for Engineering and Surveying (NCEES), and Dr. David Clark of the UK Engineering Council, worked over the ensuing year to craft a Mutual Recognition Agreement (MRA) that would facilitate professional engineering licensure mobility between the two nations.

The MRA provides access to business opportunities, allows for the transfer of knowledge and ongoing collaboration, and can address skills shortages in specific areas. According to the UK Foreign, Commonwealth & Development Office (FCDO), US engineers provide over \$700,000,000 worth of engineering in the UK every year. The proposed Maine offshore wind project also presents significant opportunities for collaboration.

Building the trust necessary for the MRA required verification of the licensure standards and protocols of each country and recognition that they are substantially equivalent. To assist in that, a trade delegation made up of representatives of PE licensing boards from across the US went to the UK early in 2024, visited featured manufacturers and projects, and held discussions with representatives of the UK Engineering Council, professional societies, and the UK Foreign, Commonwealth & Development Office (FCDO).

By determining the substantial equivalency of qualifications, both countries continue to assure that the safety, welfare, and property of the public is protected.

The MRA is founded on the participation of NCEES and the UK Engineering Council in the International Engineering Alliance (IEA) and the International Professional Engineers Agreement (IPEA). Qualifying professional competencies have been agreed to by IPEA members, including both NCEES and the UK Engineering Council.

Assessing core professional engineering competencies varies by country. In the US, each state licensing board verifies that licensure candidates possess the required education, experience, and national examinations. In the UK, under the oversight of the Engineering Council, each professional society uses a mentored process that includes reviews of experience and an ultimate oral examination/project review that is described as being similar to a thesis defense.

To participate in the MRA, individual licensees must meet the requirements of their home jurisdiction and then enroll in the International Professional Engineers Register. Individuals enrolled in the international register in either the US or UK are deemed to have met substantially equivalent requirements. Enrolling in the international register eliminates the need to repeat basic qualifying requirements but does not eliminate jurisdiction-specific or discipline-specific requirements, such as the seismic or wind load testing required by certain US jurisdictions.

US PEs who meet the requirements to be on the international roster can become Chartered Engineers in the UK. UK Chartered Engineers who meet the requirements to be on the international roster can become PEs in a US jurisdiction that adopts the MRA. Because professional licensure in the US is by jurisdiction, each state licensing board must decide to participate in the MRA and enact any legislation or rules needed to support the MRA.

### MRA in brief (continued)

Qualifications needed under each organization to enroll in the international register:

NCEES:

- \* Current NCEES Record (transcripts, exams, licenses, references, employment, discipline)
- \* Model Law Engineer designation, which requires:
  - EAC/ABET-accredited engineering degree (An engineering degree from a Washington Accord signatory can also qualify.)
  - Passing result on the NCEES FE exam
  - Passing result on the NCEES PE exam
  - 4 years of engineering work experience
- \* 7 years of engineering work experience (3 years beyond MLE requirement)
- \* Record of continuing education
- \* No record of discipline
- \* Competencies are assessed by the NCEES PE exams, which are mapped to the IPEA competencies to assure there are no gaps.

Engineering Council:

- \* Accredited BS Engineering or Honours Engineering degree plus I-year engineering MS
- \* 7 years of engineering work experience
- \* Record of continuing education
- \* No record of discipline
- Competencies are assessed by mentors evaluating mapping work experience to competencies and then presenting the candidate to the professional society for two levels of review followed by an oral interview conducted by a committee of Chartered Engineers, similar to a thesis defense. During the oral review the applicant connects their experience to the required competencies.
- \* On average, applicants take about 10 years to meet all competencies.

Individuals who qualify to be placed on the international registers are deemed to have met substantially equivalent qualifications.

Immigration and visa requirements are not impacted by the MRA.

NCEES and the Engineering Council will maintain a register of individuals who apply and meet these competencies and any other requirements of the IPEA.

NCEES and UK Engineering Council will ongoingly share disciplinary and enforcement information on individuals applying for licensure or licensed under the MRA.

The processes for determining substantial equivalency are subject to audit under the IPEA. Both organizations will be audited every 6 years to ensure compliance, and they will review and update the MRA every 5 years.

### The NCEES Honor Cord Program



NCEES created a program to award honor cords to students who pass the FE exam prior to graduation. The photo shows the FE honor cord. A similar cord in red and black is available for Surveying graduates who pass the FS exam.

Students have embraced the honor cord and are proudly wearing them with their graduation robes and caps. UMaine students receive their honor cords each year during the Francis Crowe Ceremony.

Each school is required to opt in and notify NCEES that they will be participating in the program and supply contact information for the administrator or faculty member who will be coordinating the program for the school. Students must include their school information in their NCEES account so they can be connected to the program. NCEES tracks who passes the FE exam and ships the required honor cords directly to the school.

Check with your engineering programs to see if they are participating in the honor cord program. Students appreciate receiving this recognition.

### **New FE Practice Exams**

NCEES now offers online FE practice exams. NCEES has created practice exams in each of the 7 FE exam disciplines. They are available in an online interactive format for \$50 or a downloadable e-book for \$34.95.

Each exam has practice questions of the type you will find on the FE exam and contains alternative item types such as fill-inthe-blank and drag-and-drop. The interactive exams remain available for 1 year, and the PDF version gives you lifetime access.



State Board of Licensure For Professional Engineers 92 State House Station Augusta, Maine 04333-0092 **Current PE Board** 

	Seat	Name	Position
	I	Robert Dorko, PE	Member
	2	Jude Pearse, PE	Member
	3	Joyce Taylor, PE	Vice Chair
	4	Brent Bridges, PE	Chair
	5	Kim Powers, PE	Member
•	6	VACANT	Public member
	7	Bob Chaput Jr., PE	Member

T: 207-287-3236 E: professional.engineers@maine.gov

www.maine.gov/pe