



Minutes

ACADEMIC REQUIREMENTS COMMITTEE (ARC)

Friday, August 24, 2018

PRESENT:

Members:

Leila Notash, Chair
R. Subramanian, Vice Chair
Bob Dony
Ross Judd
Seimer Tsang
Remon Pop-Iliev
Stelian George -Cosh
Magdi Mohareb
Sanjeev Bhole

Allen Stewart
Jüri Silmberg
Ian Marsland
Waguih ElMaraghy
Judith Dimitriu
Shamim Sheikh
Amir Fam
Michael Hulley

Staff:

Moody Farag
Pauline Lebel
Anna Carinci Lio
Esther Kim
Irene Zdan
Ian Daniels
Claire Riley

Regrets:

Roydon Fraser
Amin Rizkalla
Barna Szabados
Meilan Liu
Gosha Zywno

George Nakhla
Medhat Shehata
Joe Lostracco
John Yeow
Faris Georgis (Staff)

Guests:

David Kiguel, ERC Chair
Changiz Sadr, ERC Vice Chair

1. Call to Order and Chair's Remarks

The meeting was called to order by the Chair, Leila Notash, at 10:30 AM. She welcomed everyone to the meeting noting that, for many members, it was the last meeting before the start of classes.

2. Approval of the Agenda

MOTION

It was **moved** by Waguih ElMaraghy and **seconded** Bob Dony that the agenda be approved by unanimous consent.

CARRIED

3. Approval of the Minutes of the July 20, 2018 Meeting

The Chair noted three minor changes:

- On page 2, the second bullet of Item 5 – The Chair’s Report, the acronym SMT was not written out in full to reflect Senior Management Team;
- On page 5, the first sentence on the page, “and” should be added before “the following comments”; and
- On page 5, the seventh bullet, there was a typo: “SA” should be “essay”;
- Professional Practice Exam (PPE) was added under Item 10 – Other Business.

MOTION

It was **moved** by Bob Dony and **seconded** by Waguih EIMaraghy that the minutes of the July 20, 2018 meeting be approved as amended.

CARRIED

4. Matter(s) Arising from the Minutes

No items were reported.

5. Chair’s Report

The Chair reported on the following:

1. She attended the PEO’s Experience Requirements Committee’s (ERC) Business Meeting on August 17, 2018. It was very informative. In particular, there was a Competency-Based Assessment System webcast, via teleconference, presented by Gillian Pichler, Director Registration and Don Gamble, Director, Information Systems of Engineers and Geoscientists British Columbia (EGBC). It’s a pan-Canadian project and mostly relates to the Canadian environment, the Canadian experience that has been raised by the Office of the Fairness Commissioner(OFC).
 - The project started in 2017 with a budget of \$1.073 M; it’s closing date is May 2020. It’s an online system to assess competencies. EGBC uses a set of 34 standard competencies in 7 categories. The system provides better clarity about requirements because it allows applicants to have access to their account to enter every aspect of their engineering experience they wish to report, including academics and course descriptions.
 - The system also identifies the referees, called validators. They can also validate the information the applicants provide. The information can then be assessed by the applicant, staff and assessors. Four regulators will be using the online competency-based assessment tool (with interest from three more). The Chair suggested that something similar could be initiated for PEO academic assessments.

- Ordre des ingénieurs du Québec (OIQ) will remove the junior EIT level. Its Professional Practice Examination (PPE) is no longer an essay-type. PEO is the only association that will have an essay-type PPE exam. OIQ also reduced the 3-year engineering experience requirement to 2 years; PEO has increased its engineering experience requirements from 2 years [1998] to 3, then to 4 years.
 - OIQ is considering an online model of 30 experience requirements to give exposure to the Canadian environment. This exposure will probably reduce or eliminate the 1-year engineering Canadian experience requirement.
 - The Chair requested that the EGBC presentation and list of 7 categories and 34 competencies be forwarded/distributed to Committee members.
2. The Chair received a communication from the PEO President requesting feedback from Committee Chairs regarding the search for a new PEO Registrar:
- To define the core outcomes/results required of the role; to define how the role should be performed to best deliver the results and fit with the vision, mission, strategy and culture of the organization.
 - The President asked Committee Chairs to meet with outside management consultants to share their feedback. Before moving forward, the Human Resources Committee (HRC) and the consultants that PEO engaged want some initial consultation to help define the position itself, to shape what it is PEO is looking for in a Registrar. There is no Council package as of yet; the consultations and feedback are to contribute to the creation of a Council package.
 - The Chair reported that she had emailed ARC members seeking their comments and input, so she can incorporate them with her own. She said that some comments regarding the new Registrar's profile were responded to in the ARC's submission regarding PEO's 2018-2020 Strategic Plan.

6. Acting Deputy Registrar's Report

Moody Farag reported on the following items:

1. Response to the Office of the Fairness Commissioner (OFC) Letter dated March,15, 2018
 - The response was sent to the OFC on August 2, 2018 in reference to the Canadian experience requirement and OFC recommendations. A copy of PEO's response letter was distributed to Committee members prior to the meeting.
2. Canadian Engineering Qualifications Board (CEQB) Activities
 - PEO has been working with the CEQB on behalf of the ARC to develop a syllabus for Aeronautical/Aerospace Engineering. The development of this syllabus will most likely be on the agenda at the September 14, 2018 CEQB meeting.

- PEO made an official request to CEQB that the syllabus for Biochemical and Biomedical Engineering to be separate. He will inform the Committee of the feedback received from the CEQB.

3. PEO Council Meeting - September 20-21, 2018

- There will be two Briefing Notes presented to Council for approval:
 - the list of engineering programs accredited by the Canadian Engineering Accreditation Board (CEAB) for the 2017-2018 Academic Year.
 - Prescribed examination program for three McMaster University B.Tech. Programs as recommended by the ARC.

4. PEO Representative Vacancy on the CEAB

- There was a posting sent to all PEO members inviting them to apply for the 3-year appointment. A separate email was sent to ARC members by the administrative assistant, Licensing and Registration with a link to the posting. Candidacy will be reviewed by the HRC and then HRC members will present their recommendations to PEO's Council as the representative is a Council appointee. All members were encouraged to apply; the deadline for applications is August 31, 2018.

5. Meeting with Ordre des ingénieurs du Québec (OIQ)

- On August 13, 2018, he met with the OIQ President, CEO and Registrar at PEO. It was a stop on their Canada-wide tour to inform their counterparts of the changes that have happened within the organization, which is now under government trusteeship for two years. OIQ was asked to make dramatic changes to their requirements.
- OIQ has a mandatory Junior Engineer Program similar to PEO's EIT Program. They were asked by le gouvernement du Québec to remove this requirement. Once an applicant meets the academic requirements and passes the PPE, they become a Junior Engineer. They must gain the required experience before becoming an engineer.
- OIQ has 3 years of engineering experience required and this may change to 2 years. PEO had a 2-year requirement for experience in 1998; then it changed to 3, and then 4 years.
- There will also be a change in the 1-year Canadian experience policy. They will most likely remove the 1-year requirement altogether. There will just be a 2-year engineering requirement.
- OIQ will also assess the engineering experience on competency. And since 2-years, they have changed the essay-type PPE to multiple choice.

6. The Institute for Canadian Citizenship (ICC)

- The ICC delivers programs and special projects that inspire inclusion and the creation of opportunities to connect and encourage active Canadian citizenship. It is a national charity co-founded and co-chaired by the Right Honourable Adrienne Clarkson and John Ralston Saul [Canadian writer, political philosopher and most widely known for his writings on the nature of individualism, citizenship and the public good. Spouse of Rt. Hon. A. Clarkson].
- In 2017, the ICC wrote a report on lawyers; in 2018, the ICC engaged a consultant to write its report on engineers, focusing on international engineering graduates (IEG) and their requirements for licensure. In the report, the ICC will remark on how the immigration system may or may not accommodate IEGs in terms of mobility and jobs, with licensing being only one part of the report.
- The title of the report is *Engineers – Closed Shops*. PEO was given the opportunity, August 21, 2018, to review a draft of the report, along with Engineers Canada and other associations. PEO provided final feedback on August 23, 2018 and the report is to be finalized August 24, 2018. Once the report is made available by the ICC, a copy will be forwarded to ARC members.

In reference to the Acting Deputy Registrar's Report, the Chair remarked:

- With regard to PEO's response to the OFC addressing committee membership, one of the areas of attention she would like the new Registrar to be proactive on is in expanding on an equity and diversity module for committee volunteers as a condition of appointment.

7. Endorsements

7.1 Reading Assignment of Technical Reports/Synopses

- There was one Mechanical Engineering synopsis that was revised several times based on the results of the reviewer. The title is: Mechanical Design of Gas Turbine Fuel Filter and Separator to Survive Shock Test: Submitted by applicant with File Number: 100169424. A second report was submitted and assigned to a new reviewer: Dr. Marc LaViolette, Royal Military College of Canada, Kingston, ON.
- There was a second synopsis in Manufacturing Engineering that the Chair asked member Judith Dimitriu to review and provide feedback on: Centrifugal Pump Sizing and Troubleshooting: Submitted by applicant with File Number: 100504693.

7.2 Issues Arising from ARC/Deputy Registrar Recommendations

No issues were reported.

7.3 Issues Arising from ERC Recommendations for Applicants Referred by ARC

No issues were reported.

7.4 Professional Practice Examination (PPE) Results Report

Anna Carinci Lio reported on the additional sitting written at PEO on June 20, 2018:

- The passing rate was 81% which is in keeping with previous PPE results.
- Seventy papers were written; 57 applicants passed; 11 failed once; 2 failed twice; there were no third-time.
- Those applicants who failed will be permitted to re-write the PPE and will be forwarded guidance letters, suggesting general preparations techniques to promote future success.

8. Procedural and Related Matters

8.1 PEO Representative on the CEAB

There was a posting sent to all PEO members inviting them to apply for the 3-year appointment. Candidacies will be reviewed by the HRC and then HRC members will present their recommendations to the PEO Council as the representative is a Council appointee. The deadline for applications is August 31, 2018.

8.2 Licensing Committee (LIC) Update

There was no activity over the summer. The next LIC meeting is scheduled for September 27, 2018

8.3 Canadian Engineering Accreditation Board (CEAB) Update

Bob Dony informed the Committee that there was nothing to report other than the CEAB was getting ready for its September 2018 meeting. As well, activity will happen with regard to fall and winter accreditation visits.

8.4 Canadian Engineering Qualifications Board (CEQB) Update

There was no report.

8.5 ARC Distance Education (DE) Sub-Committee

Subcommittee Chair Waguih ElMaraghy reported the following:

The Subcommittee met prior to the ARC meeting at which its Interim Report #2 was presented; copies were made available to members. (Interim Report #1 was in March

2018.) He introduced the Subcommittee members: Remon Pop-Iliev (Subcommittee Vice-Chair), Judith Dimitriu, Moody Farag, Leila Notash, Ramesh Subramanian and Barna Szabados.

- a) The proposed process was discussed in March 2018. Additional work was done to define what “Distance Education” is. What is E-Learning? What are the various models? What are the various terminologies involved?
- b) He shared the Table of Contents of the Interim Report #2 that reflects the work the Subcommittee has done and the work remaining to do.
- c) He referred to the report’s introduction about the motivation and referred to a CEAB statement: “In future, engineering education in Canada may evolve such that students follow a program that is based predominantly on distance learning.”
- d) The Subcommittee’s work is directed toward the foreign-trained applicant or at least Non-CEAB applicants from various disciplines.
- e) The Subcommittee has a range of information and portals compiled on universities offering distance and online education in engineering that will be particularly useful to members and staff when checking and auditing information submitted by future applicants.
- f) The gaps will not only be technical gaps; there could be a gap in the use of engineering tools, or group work. There will be gaps of different natures relating to the engineering environment and also relating to experiential learning.
- g) The proposed PEO application addendum (for Non-CEAB applicants) has to be developed for the next report. What additional information and data does PEO need to ask the applicant to submit? Will the “virtual” experience be equivalent to the physical laboratory experience? The Subcommittee Chair asked for feedback and input from the ARC members regarding this matter, to develop a set of guidelines. The proposals will be sent to Council for approval, including any revisions and additions to the ARC Procedures Manual [The Red Book].

Sub-Committee Vice-Chair Remon Pop-Iliev presented the following:

- a) A summary of the report addendum: Classification of Education Systems Currently Existing Globally in Institutions Offering Engineering Bachelor’s Degrees.
- b) Three classifications were presented: Traditional face-to-face education system (accepted by PEO); distance education system enabled by the Internet (currently not accepted by PEO); and blended education (indirectly accepted by PEO for CEAB accredited degrees).
- c) Three areas were highlighted: Delivery, Learning and Assessment.

MOTION

It was **moved** by Bob Dony and **seconded** by Allen Stewart that:

The ARC rescind the previous motion regarding Distance Education and assess the applicants that have Distance Education noted on their transcripts or diploma on a case-by-case basis.

CARRIED

8.6 **ARC Input on New Registrar**

- The Chair quoted 8.1 of the *Professional Engineers Act*: The Registrar is responsible for the administration of the Association and reports to the Council. 2001, c.9, Sched. B, s 11(4)
- She requested that, on behalf of the ARC, the Licensing and Registration administrative assistant contact the HRC for a copy of past profiles for the Registrar highlighting credentials, qualifications and skills.

8.7 **Experience Requirements Committee (ERC) Report**

The ERC Chair, David Kiguel, reported the following:

- The ERC had its last business meeting August 17, 2018. An important agenda item was the Engineers and Geoscientists British Columbia (EGBC) webinar presentation. The presentation was an update on their competency-based assessment project which is currently in a pilot stage. The objective of the project is: to assess the experience using an online system. The system is accessible by applicants, referees (which EGBC refers to as validators), and by the assessors of the experience. Applicants assess their own competencies, and then the validators or assessors agree or disagree with the applicant's competencies, or they can suggest changes to them. EGBC presented a live demo of the system, demonstrating how an assessment is conducted.
- The ERC Subcommittee met on August 1, 2018 and discussed the Canadian experience requirement and the OFC request to look for alternative methods of meeting this requirement and to add some flexibility to it. The result of the discussion was a paper drafted by ERC member Cameran Mirza and reflects what the discussion of the Subcommittee was. The paper was included in the ARC meeting material and distributed to the members. The author will be very happy to have feedback from the Committee as it was suggested to him that the paper be submitted to *Engineering Dimensions* for publication.
- The ERC is also continuing its work on an interview appeal process and an interview quality review to verify that panel members meet the conduct requirements during the course of the interviews. Hence, the ERC continues to fulfill its obligations.

9. **New Procedural Matter(s) for Discussion**

There were no items to report.

10. **Other Business**

There was no other business to report.

11. **Adjournment** Meeting adjourned at 1:00 PM Next meeting: **September 28, 2018**