



Minutes

ACADEMIC REQUIREMENTS COMMITTEE (ARC)

Friday, July 19th, 2019

PRESENT

Members

Juri Silmberg
Ian Marsland
Judith Dimitriu
Roydon Fraser
Magdi Mohareb
Chair: Ramesh Subramanian

Leila Notash
Seimer Tsang
Stelian George-Cosh
Sanjeev Bhole
Remon Pop-Iliev
Shamim Sheikh

Staff

Moody Farag
Faris Georgis
Tracey Scott
Esther Kim
Irene Zdan
Anna Carinci Lio

Regrets

Gosha Zywno
Joe Lostracco
Barna Szabados
Bob Dony
John Yeow
Ross Judd
Meilan Liu
V.Chair: Waguhi ElMaraghy
George Nakhla

Medhat Shehata
Allen Stewart
Michael Hulley
Amin Rizkalla
Amir Fam

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 Chair Ramesh Subramanian at 10.34 am

2. Approval of the Agenda

MOTION

It was **moved by** Leila Notash and **seconded** Stelian George-Cosh that the agenda be approved as distributed.

- Leila Notash requested to add a new item to the agenda, 9.2. Discussion of Section A & B of the Board sheet.

CARRIED

3. Approval of the Minutes of June 14, 2019

MOTION

It was **moved by** Juri Silmberg and **seconded by** Sanjeev Bhole that the minutes of the June 14, 2019 be approved.

CARRIED

4. Matters Arising from the Minutes

No matters arising

5. Chair's Report

Chair Ramesh Subramanian had no issues to report, however he made the following remarks:

- Since the last ARC meeting the Regulatory Performance Review report of Harry Cayton was released; an agenda item will be added to the next meeting to discuss its recommendations.
- In order to move forward the committee needs to have clarity on PEO's position of the recommendations and to define consistency.

A lengthy debate regarding the definition of consistency ensued as Ramesh indicated Harry Cayton thought in order for the PPE exams to be consistent they should be multiple choice questions, however, some members voiced that the exam structure was already, in the legal definition, consistent, and instead the discussion should indicate whether or not the assessments had equal or fair results.

6. Staff Report

Moody Farag, Manager, Admissions reported the following:

Next week, staff from the Ontario Fairness Commission will be attending the PEO office for their Annual meeting. We will update the members on the outcome during the next ARC meeting.

7. Endorsements

7.1 Reading Assignment of Technical Reports/Synopses

There were 2 Synopses:

1. A synopsis in Manufacturing Engineering titled: "Gas metal Arc Welding Robotic Power Source Evaluation" Submitted by File no. 100229185.

The report will be reviewed by Stelian George-Cosh.

2. A synopsis in Manufacturing Engineering titled: "Investigating of a Transmission Shaft Failure: A practical and Theoretic Analysis" submitted by File no. 100204140.

The report will be reviewed by Remon Pop-Iliev

7.2 Issues Arising from ARC/ Registrar Recommendations

There were no issues to report.

7.1 Issues Arising from ERC Recommendations for Applicants Referred by ARC

There were no issues to report

7.4 PPE Results

Anna Carinci Lio reported on the following on the June 19th PPE exam:

- 75% of applicants passed;
- 25% failed, 17 on their 1st attempt, 3 on the 2nd, and zero for 3rd and 4th attempt;
- 4 applicants didn't show up.

Anna advised the Committee regarding her opinion on the multiple-choice discussion. She indicated that most provinces have moved to the multiple-choice exams; there has been a vast improvement of computer-based model exams over the last 25 years and it seems like PEO is heading in that direction.

Roydon commented that multiple choice and essay exam measure different knowledge and skills. We need to ensure that the applicants are studying and understanding the material provided, and not simply memorizing the exams in order to pass the test. It is hard to convey an ethical concept on a multiple-choice exam, there is no thought pattern or explanation shown to the marker. As the answers are in front of the applicant, it could also mean, that statistically, people will pass the exam.

Leila commented that the current exam format also has flaws, applicants can study sample exams instead of text books and get a passing grade without the understanding of the material of the exam.

7.5 Technical exam performance

The Technical exams were written in May and the results were released a few days ago.

- 567 applicants, 86 applicants had good performance (wrote 2-3 exams)
- Average performance was 69
- Allowed to continue (written part of their program) was 342.
- 90% of applicants who wrote, passed. 10% did not.
- 4 applicants found cheating.

Judy enquired about the 4 cheating applicants, and the process PEO takes in dealing with such applicants.

PEO treats all cases differently depending on the evidence at hand. The legal team investigates each case, and if there is strong evidence against the applicant, a registration hearing will take place, with a good character discussion.

Leila suggested to add an extra column to the document presented to reflect the percentages.

8. Procedural and Related Matters

8.1 Licensing Committee (LIC) Update

No Activities to report

8.2 Canadian Engineering Accreditation Board (CEAB) Update

No Activities to report

8.3 Canadian Engineering Qualifications Board (CEQB) Update

Roydon Fraser reported that an entrepreneur briefing note will go to Engineers Canada board. The basis of the briefing note advises that all entrepreneurs will need a license. We are also providing a second document to the board which highlights the issues with the entrepreneurs.

Leila added that she will be seeking LEG committee approval to submit a briefing note for the September Council Meeting regarding issuing a certificate to applicants once their academic and PPE Requirements have been met, and it also refers to entrepreneurs.

8.4 ARC Distance Education (DE) Subcommittee Update

This item was not discussed.

9. New Procedural Matters for Discussion

9.1 Experience start date for the “CEP like” Applicants

Leila Notash introduced the item and made the following comments:

The McMaster subcommittee met this morning to discuss the experience start date for McMaster graduates that apply to PEO and are assigned a “CEP-like” examination program. You may recall that the subcommittee (Bob Dony, Juri Slimberg, Shamim Sheikh and Leila Notash) visited McMaster last year and reviewed three B.Tech programs. A report on the visit was presented to the ARC and the ARC accepted its recommendations which was also approved by PEO Council.

The recommendations include assignment of a prescribed “CEP-like” examination program consisting of three exams from section A, two from section B and an Engineering report. The policies and rules of the “CEP-like” program is to mirror those of the CEP including referring applicant’s to ERC to waive or reduce their exam program if they have five years of experience following their graduation date, in addition to “good performance” and fail to confirm”

The Committee discussed the item at length, with varying opinions.

Shamim made the argument that a person can be licensed even if they do not have a bachelor’s degree in engineering, the general idea is for applicants to write the exam to prove they have the knowledge.

As we do not know their experience it would be easier to make the decision once PEO has “vetted” the applicant, especially since the five-year experience doesn’t specify what experience it is.

Judith expressed that we are not looking for experience from the time the knowledge was confirmed but rather from the time the applicant graduated. We should be looking to recognise their experience as soon as they graduate.

Seimer referenced the Redbook section stating that the referral to ERC is five years of experiences from graduation and this should apply to McMaster and B.Tech graduates.

Roydon agreed with Seimer because Red Book says it is five years from graduation. He provided some background information on the pre-graduation experience as well he made the following points:

- The pre-graduation motion was brought to Council when the requirement for experience changed from two years to four years so applicants could be licensed earlier.
- It is not Engineering experience that gives you the academic knowledge; engineering experience is how you expect to get the knowledge but a person could be working as a technologist and still gain engineering experience, and the ERC would have to work within their realm of expertise to make a recommendation on the applicant, It could be unjust if the ERC made its decision before an applicant walked in the door.
- At what point do Engineers have sufficient background to have engineering experience for the experience requirement purpose?
- There are three items to consider for acceptable engineering experience: time period, competency and challenge for credit, and they may not be the fairest, but it would be the most equal.
- It is important to understand the purpose. Is it good practice? Is the public's safety at the top of your list of considerations? Knowledge on how to apply these applications? Why are we delaying them on experience when they might be outstanding in their field? A failed exam doesn't indicate lack of experience.

David commented that applicants are referred to ERC for interview to give relief from the exams and some are referred to assess experience for licensure, and the two experiences are very different.

It was **moved by Leila Notash** and **seconded by Juri Silmberg** that:

The experience for licensure clock for applicants who are graduates of McMaster B.Tech program that are assigned the "CEP like" prescribed examinations programs who meet the academic requirements for licensure without failing to confirm, starts from the date the B.Tech degree was conferred.

Carried

10. Other Business

Leila initiated a discussion on Section A & B on the CEQB board sheets. Sometimes, there is a need to consider a technical elective from another board sheet. Leila suggested we add a

row to the board sheet under Section B to say, “other relevant subjects”, the ARC reviewer can add any subject from other board sheets.

Some members felt as the board sheet is already quite full, and it might not be able to accommodate the request. It was suggested simply crossing out any exam form Section B and replace it by a different one.

In the end, the committee decided the board sheets are to remain the same.

11. **Experience Requirements Committee (ERC) Update**

ERC Chair David Kiguel reported the following:

The ERC last met on June 27th and no big decisions adopted. However, David had the following notes:

- As advised by Moody, PEO staff will be meeting with the Ontario Fairness Commission staff next week (July 25th) with the objective to review the 4 outstanding recommendations.
- One recommendation which should affect the ERC and ARC is the policy on eliminating bias. PEO developed a document which was approved by Council in February. It is of the expectation the Fairness Commission will have comments for the document.
- The regulatory review was also released the morning of the meeting. It was discussed to a degree but two things to mention were the expressed interest or concern that the ERC should have the opportunity to provide feedback on the recommendations before implementation from Council; and the desire to invite Johnny Zucco and Nancy Hill to the next business meeting on August 23. We are yet to receive a response.
- The ERC initiated a pilot for the interview reviews. The Interview Quality Review Board reviewed random interviews and found several issues which will need to be addressed. They will continue working on this and consolidate the comments for a presentation to the ERC, as well as an updated training program for the members.

The current ERC Council liaison, Marissa Sterling, had communicated that having a new job may not permit her to have sufficient time to fulfill her role, so the ERC Chair discussed and proposed that Christian Bellini potentially replaces her, he expressed his willingness but PEO’s procedure must be followed and all Councillors are asked to submit expressions of interest.

12. **Adjournment**

The meeting adjourned at 12:51 PM

The next ARC meeting is schedule for **August 16, 2019**