



Minutes

ACADEMIC REQUIREMENTS COMMITTEE

Meeting of Friday, February 24, 2017

PRESENT:

Members:

Leila Notash, Chair
Ramesh Subramanian, Vice Chair
Judith Dimitriu
Ross Judd
Roydon Fraser
Meilan Liu
Joe Lostracco
Ian Marsland

Shamim Sheikh
Juri Silmberg
Jacqueline Stagner
Allen Stewart
Barna Szabados
Seimer Tsang

Staff:

Anna Carinci Lio
Moody Farag
Faris Georgis
Esther Kim
Pauline Lebel
Marsha Serrette
Irene Zdan

Regrets:

Sanjeev Bhole
Bob Dony
Waguih ElMaraghy
Amir Fam
Stelian George-Cosh
Santosh Gupta, ERC Chair
Magdi Mohareb
George Nakhla
Suresh Neethirajan
Remon Pop-Iliev
Amin Rizkalla
Medhat Shehata
John Yeow
Gosha Zywno

Guests:

David Kiguel, ERC Vice Chair

1. Call to Order and Chair's Remarks

The meeting was called to order by the Chair, Leila Notash at approximately 10:35 AM.

2. Approval of the Agenda

The Chair, Leila Notash suggested that items 8.5 and 8.3 be moved to earlier in the meeting so Roydon Fraser can present the items. Added to the agenda after item 8.3 is the PPE results.

MOTION:

It was **moved** by Ramesh Subramanian and **seconded** by Shamim Sheikh that the agenda be approved as amended.

CARRIED

3. Approval of the Minutes of the January 20, 2017 Meeting

MOTION:

It was **moved** by Barna Szabados and **seconded** by Ramesh Subramanian that the minutes of the January 20, 2017 meeting be approved.

CARRIED

4. Matter(s) Arising from the Minutes

The Chair, Leila Notash questioned if CIE is a discipline. Council recognized CIE as a discipline in September 2010, however ARC has not developed a boardsheet. It was suggested at the January business meeting that a subcommittee would be formed to address Limited Licences and update the Redbook. Faris Georgis asked if any committee members would like to volunteer to join the subcommittee. Judith Dimitriu, Barna Szabados and Allen Stewart will sit on the new subcommittee for the Limited Licence. Also, the existing subcommittee for updating the Redbook will continue with its current members Barna Szabados, Leila Notash and Seimer Tsang.

5. Chair's Report

No items to report

6. Deputy Registrar's Report

No items to report

7. Endorsements

7.1 Reading Assignment of Technical Reports/Synopses

There are two technical reports, HVAC Load Calculation and Energy Analysis using HAP (by Carrier) Software and SPC (Statistical Process Control) analysis on bolted joint failure mechanism for transit mirror bracket assemblies. Judith Dimitriu

reviewed the files, both applicants submitted their reports and did not submit a synopsis. The report on HVAC was not accepted because it contained mainly software results. The second file SPC was more design and manufacturing orientated. It was suggested by Leila Notash to ask Waguhi ElMaraghy if he could review the file or recommend a potential reviewer.

7.2 Issues Arising from ARC/Deputy Registrar Recommendations

No issues to report

7.3 Issues Arising from ERC Recommendations for Applicants Referred by ARC

No issues to report

8. Procedural and Related Matter(s)

8.5 Discussion Paper- Assessment of Non-Accredited Degree Applications

Roydon Fraser suggested that depths and breadths be added to the agenda for the next meeting.

Roydon Fraser addressed the committee on the CEQB White Paper. A copy of this discussion paper on the assessment of non-accredited degree applicants was distributed to members of the Committee with comments. He requested that the committee provide additional feedback through the ARC Chair, Leila Notash. The ARC fully endorsed the comments of Dr. Roydon Fraser. It was suggested by Seimer Tsang to add ARC's interpretative statement to the White Paper for submission to the CEQB. The interpretative statement will be submitted once it is approved by Council

8.3 CEAB Update

Roydon Fraser addressed the committee on behalf of Bob Dony. Bob Dony is organizing a workshop with CODE and the CEAB for the Deans of Engineering. He has requested the ARC to provide him with suggestions on how to run the workshop. The goal of the workshop is to deal with the issues of attributes, academic units, workload and flexibility.

The Committee responded with the following suggestions:

- The big question is the Deans have not been able to articulate how they cannot accomplish their goals in the current structure. Some of the fundamental questions should be a part of the workshop.
- Short presentation of what the regulators find critical to the CEAB process when looking at the depths of an individual.
- Minimum path needs to be emphasized.

When you have been to a workshop what factors made it great?

- Crisp presentation in the beginning then take questions, e.g. what you see as the problem with how things are done now?
- Bob needs to clarify the requirements of the CEAB. The K factor is the most important one because the Deans do not appreciate what they could do with the K factor.
- Give examples of what they could do. He needs to give updated examples and show flexibility on how K factor could be used, in addition to the lab and project courses, e.g., for online courses.
- Emphasize the outcome based assessment is a program assessment that regulators do not care about. As regulators, that is not our problem or concern.
- Do not tell the Deans that their problems are not problems. We want a win, win message and emphasize on that.

Any further suggestions please contact Leila Notash, she will correspond with Bob Dony over the weekend.

8.9 PPE Results

Anna Caranci Lio shared the results of the December PPE results. There was an 84% pass rate. This sitting also had two candidates who were writing for the 4th time.

8.1 Licensing Committee Update

No items to report.

8.2 EChat Forum

Barna Szabados circulated a document on Examination Program Assessment. The document was also posted on the chat forum and circulated at the last meeting. In the Redbook, the paragraph was open to misinterpretation. The last paragraph of the document is the addition, *For the new or existing multi/cross disciplinary programs for which a PEO board sheet does not exist, a combination of up to three PEO board sheets may be used to fulfill the required number of Section A and Section B examinations. The considered technical courses shall not be double-counted.* It was suggested that *normally* be added to the paragraph. Barna will make the suggested change to the paragraph and circulate the document for approval at the next meeting.

8.6 Specific Examination Program

Leila Notash reminded the committee that at the previous business meeting the winner of the V. G. Smith award was assigned 10 technical exams and her overall average was 78%. The concern was why did this applicant write so many exams, based on her performance some of her exams could have been waived. Leila Notash recommended that once an applicant is assigned a specific exams program and the applicant writes at least 50% of the assigned exams, depending on good performance the file should be brought back to the ARC for reevaluation. Based on the recommendation of the ARC the remaining exams could be waived or reduced.

Moody Farag reminded the committee that this was previously done and the good performance clause applied to all exams. In 2002 the ARC took the position that because we are bridging applicants from non-engineering programs to practicing engineering the ARC wanted to ensure that they have knowledge in the areas that they did not study in the past. Furthermore, PEO had two types of exams in the specific examination program. There was Phase 1 in the basic studies and then the full program with all sections. ARC decided to move away from assigning partial exams and assign the full examination program with emphasis that the applicant must address basic studies first.

The Committee agreed that after an applicant completes their basic exams the file should be re-evaluated.

Barna Szabados moved and Ross Judd seconded that for a specific examination programs that include basic studies, on completion of the basic studies the file will come back to the ARC for re-evaluation.

CARRIED

8.8 ERC Report:

David Kiguel reported on the following items:

- The ERC Business meeting was on February 17, 2017.
- ERC amended their Terms of Reference and it will be submitted to Council for approval.

9. New Procedural Matter(s) For Discussion

10. Other Business

i) Fire Protection Engineering Technology

The Committee discussed at length their concern with applicants from the Fire Protection Program at Seneca College.

- Seimer Tsang suggested that applicants should be asked what engineering principles you will be using in your scope of practice. That would be a better approach to assess these types of applications.
- Faris Georgis reminded committee members that the ARC has jurisdiction over academic requirements. The ERC has jurisdiction over experience requirements. ARC should provide guidance to the ERC on the relevant areas that the ERC should review in detail when interviewing applicants.
- David Kiguel informed the committee of the ERC interview process. When an applicant for a limited licence comes to an ERC interview what the interviewers try to verify is the applicant has the knowledge and understanding of Engineering principles. Along with a depth of knowledge which is equivalent to what a fully licenced professional engineer would have for that reduced scope of practice. There are certain principles that should be

there. The scope of practice should define engineering activities not applied engineering principles.

Ross Judd suggested that PEO should bring back ARC interviews which was done in the past. Faris Georgis reminded committee members that if ARC interviews are conducted the focus would only be on academics. The focus would be if the applicant's educational institution and program meets the requirements of the regulations, not whether his experience meets the knowledge that the applicant is seeking licensing on. Experience should strictly be under the jurisdiction of the ERC. Consequently, if ARC is to conduct interviews there should be three ARC members in attendance and the interview should be done in accordance with PEO practices for interviews.

The applicant in question from the fire protection engineering technology program at Seneca College is scheduled for another ERC interview since the scope of practice has changed.

ii) Communication Infrastructure Engineering (CIE)

There was a joint meeting of the Communication Infrastructure Engineering (CIE) working group and Emerging Disciplines Taskforce (EDTF) on January 30, 2017.

- Council recognized CIE as a new discipline in September 2010. It was based on an interim report from the emerging disciplines taskforce.
- In March 2016, Council directed the Chairs of the ARC, EDTF, ERC and LIC to work on a priority basis with the Deputy Registrar, Licensing and Registration, to develop and implement a strategy to license a “critical mass” of practitioners in this discipline.
- PEO has reviewed resumes from a group of practitioners employed by a large telecommunications company. From the information, available it appears that many applicants practicing in CIE are cross discipline.
- The working group discussed the challenges of assigning these applicants confirmatory exams or conducting ERC interviews that are not in their area of practice.
- The question going forward to the ARC is whether they could select some or all their exams from the CIE syllabus instead of their original discipline and if referred to the ERC whether they could be interviewed in the CIE discipline. This matter has not been resolved.
- In addition, some applicants who could apply for a limited licence do not meet the minimum academic requirements. They have Arts based degrees or only a high school diploma. Discussion is still ongoing.

Leila Notash also reminded the committee that the ARC has not approved the PEO, CIE syllabus. Barna Szabados further added that there should not be special processing rules for CIE applicants. There are many instances where your practice is not in the area that you studied. If changes are going to be made it must be made for all applicants not just CIE applicants.

- iii) Anna Carinici Lio reported to the Committee that Engineers Canada has a new set of syllabi that they would like to receive comments on. She will be sending the proposed new syllabi to the examiners. Any feedback received will be sent to Engineers Canada.

Meeting adjourned at 12:53 pm

Next Meetings: March 17, 2017