

By JENNIFER COOMBES

Council approved motions to enhance inclusiveness in the profession by creating an Engineering Intern Training (EIT) Credit Program at the January meeting and at the March meeting approved its implementation. Under the program, which will launch May 1, certain applicants will be able to apply for the professional engineer licence at no cost and be registered into the EIT program at no cost for the first year (see p. 12).

Qualified applicants are graduates from programs accredited by the Canadian Engineering Accreditation Board (CEAB) who apply within six months of graduating, and international engineering graduates who apply within six months of landing in Ontario. It is expected the incentive will result in 4000 CEAB graduates and 5000 international engineering graduates applying for licensing annually, up from 1300 and 2000, respectively, in 2006. The numbers of those licensed annually are expected to climb from 1200 to 2400 for CEAB graduates and from 1300 to 2000 for non-CEAB graduates.

Although the credit will mean a loss to PEO of \$853,500 in the first year of the program, there is predicted to be positive cash flow in the third year, full payback within four years, and a net cash flow of \$2.2 million in five years.

In addition to the financial incentive, PEO will provide resources and activities to support a seamless transition to a full licence, including:

- increasing awareness of the Student Membership Program;
- providing free seminars and informing applicants of the licensing process and the requirements for licensure, preparing them to write the Professional Practice Exam, and involving them in chapters; and
- assessing experience of EITs annually.

### Software engineering specialization

At the September 2006 meeting of Council, Peter DeVita, P.Eng., chair, External Groups Task Force (EGTF)—Software, presented the task force's final report, which

## Council approves new EIT Credit Program to enhance inclusiveness

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contains recommendations concerning the regulation of software engineering and PEO's current software policies.

Among other issues, the EGTF pointed out areas of software engineering that should be regulated by PEO, especially software that controls mission-critical products and equipment that have public safety implications, and recommended a new designation be given to software engineers, such as P.Eng., Software Specialist.

At the same meeting, Council approved motions to strike a task force to deal with border disciplines to engineering and define a scope of practice for software engineers that could eventually be used to revise the *Professional Engineers Act* (PEA). Council directed the CEO/Registrar to develop an implementation plan for the specialization of software engineering, including the financial and regulatory implications, to present at its next meeting.

At the January meeting, Council approved the Registrar's implementation plan, which includes creating a working group under the Professional Standards Committee to interface with border disciplines to engineering. This working group will proceed independently of a broader PEO study of disciplines, designations and specializations. The working group will prepare a definition for a scope of practice for engineers who design software-based systems, and develop a professional standard and/or guideline to enhance the existing PEO guideline, to ensure best practices for software design are implemented at the corporate or management level. The working group will also work with PEO staff to create a proposal for a unique designation for the specialty of software engineering (e.g. P.Eng., Software Specialist, or similar).

The findings of the working group will be presented to Council. If approved, they will result in changes to Regulation

941 to create a new specialty designation for software engineers. This would require that PEO initiate actions to ensure compliance with any regulation change introduced for the unique designation for the specialty of software engineering and defined scopes of practice.

### Professional standards

PEO is required under the PEA to establish, maintain and develop professional engineering standards of practice. At its January meeting, Council approved definitions for practice standards and for performance standards, which will be used as the basis for future development of professional standards:

*"Performance standards are statements describing the expected outcome of specified tasks. These standards are used as metrics that are used to assess the outcome achieved by the performer against a clearly defined statement of objectives established for the task."*

*"Practice standards provide lists of sub-tasks considered necessary for successful completion of the main task. The practitioner is expected to perform each subtask or at least to consider why it is unnecessary to do so in the particular circumstance."*

Performance standards define essential features of acceptable output of the work undertaken, while practice standards set out the essential features of the process that must be considered while carrying out the task.

Council also approved a Professional Standards Policy to cover the development, implementation, and monitoring of practice and performance standards.

The policy requires that PEO performance and practice standards be incorporated in regulations. Professional standards will be implemented only when there is a demonstrable public interest need, or when their use is required to protect the integrity of the profession but will not impinge on the pro-

fessional judgment of practitioners. These standards will deal only with matters pertaining to the practice of professional engineering and the professional obligations associated with providing professional services to clients and employers. PEO will create standards to clarify a practitioner's role in a particular activity by describing a set of subtasks that must be accomplished, or the acceptable quality of the output of the engineering activity.

PEO staff will determine the priority of developing potential professional standards based on these criteria:

- (a) evidence from disciplinary hearings, public complaints or practice advisory inquiries of a demonstrated need to have qualitative or quantitative criteria against which the activity of practitioners can be judged;
- (b) evidence that the public lacks confidence in practitioners' professional judgment in regard to a given activity;
- (c) evidence of practitioners' lack of understanding of their role and responsibilities in regard to a given activity;
- (d) evidence of a need to resolve conflicts between practitioners and the public and/or other professionals (including other professional engineers) regarding the duties and responsibilities of practitioners;
- (e) importance of the issue to the practice of professional engineering, based on the extent of its applicability and the impact to the public and practitioners caused by lack of standards; and
- (f) currency of present practice guidelines and standards.

Council directed the Registrar, assisted by the Professional Standards Committee (PSC), to implement processes to develop and operationalize the Professional Standards Policy. The Registrar will investigate whether additional staff or volunteers are needed and whether changes to the PSC's mandate are necessary to develop and implement specific professional standards.

### CEAB licensed faculty criteria

The Canadian Engineering Accreditation Board (CEAB) criteria for accrediting engineering programs state that deans of engineering, or the equivalent, are expected to be registered professional engineers in

Canada. Similarly, faculty teaching courses in an engineering curriculum are, where applicable, expected to show dedication to the profession by being licensed engineers. Faculty teaching courses that are primarily engineering science and design are expected to be licensed.

Although PEO introduced a program in June 2003 to help faculty members become licensed, the universities report that CEAB requirements for licensed faculty still put undue strain on them.

A discussion paper focused on means of facilitating the licensing of engineering professors was put before Council in July 2006 and published on the PEO website for comment.

Council reviewed a revised paper and recommendations at its January meeting, and approved motions:

- that PEO seek to revise the CEAB Accreditation Criteria and Procedures, with CEAB using its stakeholder consultation process to:
  - (a) recognize all engineering licences issued by constituent members as meeting its requirement [since limited licences, for example, are not recognized], and
  - (b) determine acceptable percentages of faculty teaching engineering subjects that include significant engineering science and engineering design content, and the overall percentage of licensed teaching faculty required to be accredited;
- that PEO amend Regulation 33(1)2 to reflect the experience requirements specified in PEO's *Guide to the Required Experience to be licensed as a Professional Engineer in Ontario*; and
- that the CEO/Registrar prepare the draft regulation changes, document the supporting operational rules and procedures, and work with the CEAB to implement Council's policy direction.

At Council's March meeting, PEO CCPE Director George Comrie, P.Eng., reported that CEAB is now undertaking the requested review of its criteria in this area.

### Strategic plan update

At its November meeting, Council approved a transition plan for the current strategic projects, including requiring proj-

ect steering committees to provide recommendations to the Executive Committee for bringing the projects to completion or termination (see *Engineering Dimensions*, November/December 2006, p. 32). Activities associated with initiating new strategic plan projects were to be stopped. The plan also included closing the Strategic Investment Fund at the end of 2006 and prioritizing potential projects for funding from the 2007 operating budget at Council's 2007 spring planning session.

At its January meeting, Councillors were asked to identify any new PEO improvement projects for consideration by the Executive Committee, and eventually by Council at the spring Council Workshop.

As of its March meeting, Council was informed several of the projects are now complete, including designing Key Performance Indicators (KPI) for PEO, review of and recommendations regarding proposals by Consulting Engineers of Ontario to enhance the value of the Consulting Engineer designation, groundwork for creation of PEO Performance Standards, an Agenda Management Protocol for Council, and PEO Meeting Management Guidelines.

A project that was to define the Attributes of an Engineer and ensure they are assessed as part of the licensing process will shift focus to competencies rather than attributes, and will be considered at the spring session, as will the challenge presented to the value of the P.Eng. licence posed by External Certifications, PEO's use of Activity-based Costing, and the working relationships of PEO staff and volunteers.

The steering committees recommended to the Executive Committee and Council that projects dealing with Voluntary Annual Reporting by licence holders of information on their qualifications and professional development, surveys to benchmark the public's confidence in the P.Eng. licence and PEO as a regulator, and the overall management of the approved strategic projects continue. It was recommended that a project dealing with the requirements of those listed in Section F of the Certificate of Authorization (C of A) application form be terminated, since the issues it was to address are part of the C of A revitalization plan already approved by Council.

## Election process amendments

Based on recommendations from a PEO Election Procedures Task Force, Council passed several motions at its June 2006 meeting concerning aspects of PEO's election process (see *Engineering Dimensions*, July/August 2006, p. 30).

In particular, Council approved recommendations that:

1. the two-stage nomination procedure for candidates be replaced by a single stage that includes a common nomination process for all candidates and a common date for the close of nominations;
2. all nominations for election be supported by 15 signatures from members in good standing, where for the position of Regional Councillor all signatures must be from members residing in the applicable region, and for the positions of Councillor-at-Large, Vice President, and President-elect there must be at least one member signature from each region among the 15;
3. the Nominating Committee be renamed the Central Election and Search Committee, and that its role be changed to encourage rather than nominate candidates, assist the Chief Elections Officer, and resolve disputes regarding the interpretation of election procedure guidelines;
4. the Regional Nominating Committee for each region be renamed the Regional Election and Search Committee and that its role be changed to encourage rather than nominate candidates to run for Regional Councillor;
5. the Council experience for candidates for President-elect and Vice President be obtained within the five years immediately preceding the date they would take office;
6. Regulation 941 be amended as necessary to enable electronic voting options for PEO Council election;
7. the CEO/Registrar be directed by Council to engage legal counsel to draft regulations to support the preceding motions; and
8. an amendment to section 8(3) of the PEA be sought to enable electronic confirmations by members of by-law amendments.

At its November 2006 meeting, Council rethought the previously approved prior Council service requirements for those seeking to run for positions of President-elect and Vice President, and instead approved rescinding June's motion 5 and deleting the current sections 7 and 11 of Regulation 941, so that no Council experience whatsoever would be required of those seeking these positions.

The required amendments to Regulation 941 to revise the election procedures according to the approved policy direction were approved by Council at its January meeting, and the President and CEO/Registrar were authorized to sign the Order-in-Council containing the regulation amendments and forward it to the Lieutenant Governor-in-Council for final approval. Once the regulation changes are approved by Cabinet and filed by the Registrar of Regulations, they will be forwarded to all Certificate of Authorization and licence holders through their publication in the Gazette section of *Engineering Dimensions*. The revised Regulation 941 will also be immediately published to the PEO website.

The approved amendment to the *Professional Engineers Act* to enable members to confirm by-law amendments electronically requires passing a bill in the legislature, and so has been left with the attorney general's office for introduction when appropriate.

## Titles for licence classes

At present, there are no regulations under section 7(1)(15) of the PEA to specify the names of and designations for holders of temporary, limited and provisional licences, although Council did pass a motion at its March 2005 meeting to apply the name Licensed Engineering Technologist (and the designation LET) to a particular class of temporary licence holder. Accordingly, at its January 2007 meeting, Council sought to rectify this situation by approving the making of a regulation, for approval by the Lieutenant Governor-in-Council, to specify the designations to be used by temporary, limited and provisional licence holders. The measure is intended to clarify the names and designations for both licence holders and the public.

## PEO contracts

To streamline the process for executing contracts for operational purposes, at its January meeting Council approved an amendment to section 45 of By-law No. 1 that would enable contracts with an aggregate value of less than \$20,000 to be signed by any two of the association's senior management.

To effect the amendment, PEO members must confirm it. Accordingly, a letter ballot on the amendment was included in the PEO Council election package sent to members at the end of January. Letter ballots to confirm two other by-law amendments were also included in the package. Results of the member confirmations are expected to be known in mid-March.

If the by-law amendment is confirmed by members, the internal control documents, entitled "Expenditure Approval Policy" and "Procurement Policy," both dated September 23, 2006, will be updated to ensure compliance with the revised section 45.

## CCPE now Engineers Canada

At its meeting in February, the board of the Canadian Council of Professional Engineers (CCPE) approved making Engineers Canada, and Ingénieurs Canada in French, its "operating style name." The organization's legal name will remain The Canadian Council of Professional Engineers.

CCPE believes its current name is insufficiently recognized and impedes it furthering its issues. It sees the new name as an opportunity to rebrand itself with a "short, clear, bilingual and dynamic" name to clarify its role and increase recognition, similar to PEO's 1993 rebranding as Professional Engineers Ontario from the Association of Professional Engineers of Ontario.

At its March meeting, PEO Council gave its support to Engineers Canada, although the Council of the Association of Professional Engineers, Geologists and Geophysicists of Alberta voted not to support the new name. In remarks to Council, CCPE President Ken McMartin, P.Eng., who is also a PEO director on the CCPE board, indicated that the council does not require the consent of its constituent mem-

bers to adopt its new name, since the legal name will not change. However, it is continuing to consult with stakeholders and has said it will not implement the new moniker if there is significant opposition.

## Enhancing the consulting engineer designation

The Consulting Engineer designation is a protected title that PEO administers under the PEA. Over the years, Consulting Engineers of Ontario (CEO), the business organization for consulting engineering firms, has conducted initiatives aimed at adding value to the designation, including a 2004 survey of its member firms for input to a discussion paper containing proposals for enhancements to the designation, which it presented to PEO in May 2005. In July 2006, after having done significant work on its own to enhance the designation on the CEO proposals, PEO conducted a survey of the holders of the consulting engineer designation, the results of which were analyzed by the Consulting Engineer Designation Committee (CEDC), which also reviewed CEO's proposals. The results of the CEDC review and recommendations for dealing with the CEO proposals were presented to the Executive Committee and Council. Council approved the following changes to the consulting engineer designation at its March 2007 meeting:

- change the regulation and interpretive guideline to increase the minimum experience qualifying period from four to five years beyond the four years to obtain a P.Eng. licence, two years of which must be Canadian;
- change the interpretive guideline to require an additional experience reference, if none of the references are consulting engineers;
- change the application form to capture areas of practice;
- have PEO support voluntary professional development by promoting recommended activities, such as writing papers, attending conferences and seminars, etc.;
- have PEO develop criteria for a "professional log book" to maintain an up-to-date record of professional development activities;

- add a section for comments on applicants' project management and technical skills to reference letters; and
- have PEO adopt CEO's standards and best practices for commercial entities and welcome suggestions and input.

## Equity and diversity paper

In 2004, Council established an Equity and Diversity Committee (EDC) to help integrate equity and diversity values into PEO policy and business operations. At Council's March 2007 meeting, the EDC presented its first position paper, which is based on two research projects: *Towards Fairness*, which surveyed 12 Canadian regulators and professional associations, and *Towards Fairness II*, which surveyed PEO senior management. The EDC's resulting position paper contains recommendations to ensure PEO promotes "an environment free of stigma, prejudice, discrimination, harassment and marginalization for all stakeholders" and that its policies and procedures are in compliance with the *Ontario Human Rights Code*.

While universally in favour of openness, transparency and removal of barriers, Councillors voiced concerns over some details of the recommendations. Most troublesome seemed to be the idea that the percentages of members of currently under-represented groups among PEO licence holders should be targeted to reflect the general population of Ontario. Many Councillors said such an operating philosophy is both unnecessary and unrealistic.

After discussion, Council received the position paper. The EDC will now seek additional input on the paper and will develop an action plan for Council approval that reflects the feedback it receives.

## LPTF final report

At its March 2005 meeting, Council established a Licensing Process Task Force (LPTF) to review licensing issues raised in a review of the licensing process by PEO's Registrar and to make recommendations to Council on how to deal with them (for a complete list of the LPTF's goals, see *Engineering Dimensions*, January/February 2006, p. 23). Councillors received the LPTF's final summary report and 40 rec-

ommendations at its March 2007 meeting, and were asked to determine the next steps for dealing with them. Council opted to consider the LPTF report and recommendations in a future special session, dealing with one recommendation at a time. In the meantime, the LPTF will consult further with stakeholders.

## Education conference planned

PEO will convene a one-day conference to start discussion around the future academic requirements for licensure amid the increasingly demanding and rapidly changing engineering profession. Intended to forge a stronger link among educators, practitioners and regulators of engineering, the conference will feature interactive panels and expert-led plenary sessions on the theories, methods, purpose and role, and public requirements of the future engineering education for licensure. At its March meeting, Council approved the necessary funding for the conference, which is planned for June 21 in Toronto.

## Governance study

Concerns about PEO's current governance structure, voiced recently by several Presidents, sparked Council approval of a motion appointing President Pat Quinn, P.Eng., to lead a study on PEO governance, including consultation with the Centre for International Governance Innovation or other external governance experts.

Included among the issues to be examined is the size and composition of Council, which has long been a subject of debate and was the focus of a strategic plan project aimed at "strengthening Council's ability to be an effective and efficient policy-making body."

Town hall meetings held by President Quinn in January and February uncovered other issues members have with the current PEO governance structure, among them the perceptions that the Executive Committee wields too much power, that Council is unable to execute matters in a timely manner, and that an annual leadership change derails the progress of long-term issues.

A status report on the governance study will be presented to Council in June 2007. ❖