



CCPE drops assessment program

by Connie Mucklestone

The Canadian Council of Professional Engineers (CCPE) is getting out of the business of assessing prospective immigrants' engineering qualifications for immigration purposes. The passage of Bill C-11, which will take effect on June 28, shifts the evaluation of potential immigrants from an occupational-based model to a skills-based one, emphasizing education. The new regulation states that education will be assessed by the applicants' country of origin.

The demise of CCPE's "Initial Assessment" (IA) program will have no effect on PEO's admission procedures, as

PEO has always reviewed each applicant fully itself. Under the authority of the *Professional Engineers Act*, PEO is the final arbiter for determining the acceptability of qualifications for licensing purposes. Consequently, anyone who intends to practise engineering in Ontario should apply directly to PEO, says Norman Williams, PhD, P.Eng., PEO deputy registrar, admissions. Under recently implemented changes to its procedures, PEO can now accommodate prospective immigrants by enabling them to begin the process before they leave their countries of origin, he adds.

CCPE anticipates that elimination of its IA program will result in a revenue shortfall of about \$2 million this year based on a scaled-back 2002 budget that CCPE's board approved on Feb. 20. The projected deficit will be covered by access to a four-year rolling reserve that CCPE created several years ago to deal with such a situation as it currently faces.

At the Feb. 20 meeting, the CCPE board also voiced a strong conviction that CCPE's current programs are of substantial benefit to the constituent associations/ordre, which it backed up with a motion that would double the per capita assessment for each full-fee-paying member of the constituent to \$17.30 in 2003. This is the funding that each constituent member pays to CCPE to maintain programs such as accreditation of Canadian undergraduate engineering programs, creation of model national guidelines and standards, research on emerging areas of practice, workplace and demographic trends and the negotiation of international mobility agreements. The proposal for an assessment increase is not effective until ratified by each constituent member. PEO Council is currently considering the request and will send comments back to CCPE through PEO President Gordon Sterling, P.Eng.

Labour ministers' report says mobility now easier

by Dwight Hamilton

A report from the federal government's Forum of Labour Market Ministers concludes that inter-provincial mobility for those in regulated occupations (such as professional engineers) is increasing. "The rules around licensing and certifying people to work in regulated occupations are becoming more consistent, transparent and fair across Canada," said the forum's co-chair, Drew Caldwell, minister of education, training and youth for Manitoba.

The report examines the "Labour Mobility Chapter" of the Agreement on Internal Trade, which was signed in 1994 by all provinces and subsequently reinforced in 1999 by the Framework to Improve the Social Union for Canadians, signed by all provinces except Quebec. The report commends engineering licensing bodies for dropping their requirement that engineers have five years of experience before

they can be recognized by another province without an in-depth review of their qualifications. It also says the Inter Association Mobility Agreement (IAMA) signed by all provincial/territorial engineering associations in 1999 "improves the traditionally easy labour mobility of engineers."

Taken to task however, is the "notwithstanding clause" of the IAMA. This "leaves the regulator with the right to have practices that conflict" with the trade agreement. "As a result of this clause, a regulator may deny registration for any reason," it states. But according to Richard Furst, P.Eng., manager, licensure for PEO, the clause is used sparingly by PEO and in a responsible manner, mainly to prevent the circumvention of important legislative requirements. An example is that Alberta and British Columbia do not insist on one year of Canadian experience as part of their four year training periods, but PEO does.

"In certain areas of engineering, American practices are quite different

and provincial regulations exist to ensure compliance with local codes and standards, which may well be based on specific demographics or climate conditions," says Furst.

The report also draws attention to the treatment of practitioners, who within two years of obtaining their licence, transfer to jurisdictions where four years is the minimum requirement. But since Quebec is the only province in Canada with a two-year EIT program (it plans to go to a three-year program this month), this occurs only if an engineer licensed in Quebec moves to the rest of Canada immediately after being licensed on the basis of having satisfied the minimum two-year requirement. In the experience of PEO's admissions department, this is seldom the case. The vast majority of Quebec engineers who move to Ontario have already worked long enough to satisfy PEO licensing criteria, says Furst.

Applied degrees move ahead as possible precursors to new professions

by Sharon Van Ihinger

The Ministry of Training, Colleges and Universities (MTCU) is making good on its promise to enable Ontario's 24 colleges of applied arts and technology to award applied degrees. As of last month, 22 applications for new applied degree programs had been submitted by the colleges to the Post-Secondary Education Quality Assessment Board (PEQAB), which will assess the proposals and recommend to the MTCU which of them should be implemented.

A proposed new program—"regulatory administration"—was developed by George Brown College in Toronto, with the participation of the Ontario Building Officials Association (OBOA). Scheduled to be submitted to the PEQAB in the second round of submissions in May 2002, it has been designed to lead to a four-year Bachelor of Applied Technology (Regulatory Administration).

John DeVries, CBCO*, an OBOA program steering committee member, says the introduction of an applied degree in regulatory administration will address a clearly defined need to understand and effectively administer the many federal and provincial acts and statutes. "These new acts and statutes are being enacted on a daily basis, often without due regard for administration and/or enforcement," he said, citing the Walkerton tragedy as an example of the potential consequences of a lack of understanding of fundamental health and safety requirements.

According to Michael Ludolph, director, Centre for Advanced Building Technologies at George Brown, the proposed program aims to provide necessary training for occupations related to municipal/provincial building regulatory administration. The program syllabus comprises technical, human relations, legal, regulatory and administrative components, and would be structured with the aim of providing the skills to enable graduates to protect the public through employment with municipalities, government agencies, regulatory bodies, entrepreneurs, franchise companies, etc.

The proposal for George Brown's regulatory administration applied degree program comes at a time when governments appear to be redefining their roles as "keeper and creator" of acts, laws and regulations that pertain to public safety and protection, and placing greater onus on the private sector to be aware of and comply with regulatory requirements.

Objective-based building codes, set for introduction in 2003, are an example of the trend away from the government prescribing how the private sector will meet legislated public safety requirements. Evaluating whether a building design meets the objectives set out in the codes could well require more professional judgment than is needed to ensure compliance with traditional prescriptive-based building codes. The question is to what degree? Professionals such as engineers and architects have already met liability insurance requirements and other professional obligations in order to protect the public, (see "PEO representatives participate in process toward objective-based building code," *Engineering Dimensions*, January/February 2002, p. 11).

In an article in the December 2001 issue of its journal, OBOA foresees that programs such as George Brown's proposed regulatory administration will enable graduates to fast track through the certification requirements of associations affiliated with the Canadian Council of Technicians and Technologists (e.g. Ontario Association of Certified Engineering Technicians and Technologists in Ontario, OBOA, etc.), because they will have been provided the kind of training that is normally part of the certification processes of these associations.

OBOA President Leo Grellette, CBCO, says his association will be pursuing self-regulatory status in the future: "We're looking to try and expand, so that we could achieve similar status to that of PEO and the Ontario Architects Association, in terms of being responsible for our own membership." He believes that developments such as objective-based codes will put greater demands on his membership in terms of their need to interpret the statutes and exercise professional judgment, which they must meet by elevating their level of professionalism.

However, John Este, P.Eng., CBCO, said in a recent letter to the editor of *The Link* (February/March 2002, p. 10), that objective-based building codes may be a non-issue in that the "prescriptive elements of the Code will remain, and compliance with these will be considered as meeting the objectives." Este says that in order to stay current and competent, all those involved in building design and construction will need to read and understand the new building codes.

*CBCO is a professional designation of the Ontario Building Officials Association.

Growth factors

Approximately 420,000 students are enrolled in Ontario's postsecondary system. It's estimated that 78,000 additional students will be enrolled at colleges and universities by 2005-06.

The government's plan to prepare for the "double cohort" of high school students graduating in 2003 includes creating new student spaces in postsecondary institutions and providing increased operating funds to support the projected enrolment growth.

However, the double cohort students are only one of the components leading to an increased demand for postsecondary education. Other factors include:

- ◆ demographic growth in the 18-24 age group; and
- ◆ the need for students of all ages to obtain new skills or upgrade existing ones to keep pace with the changing nature of the workplace.

The first round of 22 applications was submitted by 14 colleges on December 3, 2001. The second round of applications, which will include "regulatory administration," will be submitted on May 6. The Minister will approve 24 programs in total. New applied bachelor degrees will include the following fields:

- ◆ business;
- ◆ arts;
- ◆ technology;
- ◆ environmental studies; and
- ◆ information sciences.

Long-awaited Innovation Strategy announced by government

by Sharon Van Ihinger

Canada's Innovation Strategy, released by the federal government on February 12, looks at ways to boost innovation and productivity in industry. Presented in two papers, *Knowledge Matters* and *Achieving Excellence*, it focuses on what Canada must do to ensure equality of opportunity and economic innovation in a knowledge-based economy and society.

The papers acknowledge that while the demand for high-level skills will continue to increase in all sectors, Canada is trending toward fewer workers, whose skills development is not keeping pace with the competition. The papers predict shortages in several occupational groups, including engineers, and note that Canadian workers spend less time than workers in many other industrialized countries upgrading their skills. The papers look at ways to promote research in Canada, and to get industry to move more quickly in adopting research results in its day-to-day operations.

Engineering issues

The Innovation Strategy raises issues with which engineering has been grappling for some time. For example, it discusses fostering an innovation climate, which it says depends on protecting the public from potentially harmful effects of new developments while reassuring them with accurate information on the developments' safety and benefits. It also discusses skills shortages in certain sectors, and the need for continuous learning throughout one's career.

The *Achieving Excellence* paper says: "To encourage excellence across all sectors, we must work to continually improve our investment and regulatory environment so that Canadians can benefit from new scientific and technological breakthroughs, and know that their quality of life will be protected. We must also ensure that our scientific investments are focused on emerging public policy areas in line with our international competitors."

The report also states that in order to ensure effective decision making for new and existing policies and regulatory priorities, potential public and business con-



From left: CCPE President Pierre Boucher, ing.; HRD Minister Jane Stewart; Peter DeVita, P.Eng. Stewart spoke at CCPE's parliamentary reception held in February in Ottawa. DeVita and fellow CCPE board members PEO President Gordon Sterling, P.Eng., and Walter Bilanski, P.Eng., attended the event. Human Resources Development Canada is taking the lead in addressing the skills side of the government's Innovation Strategy.

fidence challenges should be addressed before they develop. It says that the government is committed to undertaking systematic expert reviews of existing stewardship regimes through international benchmarking, and collaborating internationally to address shared challenges.

PEO President Gordon Sterling, P.Eng., believes the plan confirms an important role for the engineering profession in public policy formation. While emerging technologies are experiencing rapid growth in many areas, e.g., software engineering, it is important that steps are taken by the regulatory authorities to ensure that engineering work is carried out by qualified licenced individuals in the interest of public safety. "At the same time," he adds, "it's also critical to avoid any perceived barriers to individuals carrying out their responsibilities."

The Ontario Society of Professional Engineers has also recognized that providing governments and the public with an unbiased source of technical information can increase the profession's profile.

Its recently released Strategic Plan (available at www.ospe.on.ca) commits the organization to "make a solid contribution to the public policy process" through a variety of initiatives.

The Canadian Council of Professional Engineers (CCPE) also sees the early collaboration of the engineering profession and the federal government as key to a successful innovation strategy. CCPE's CEO Marie Lemay, P.Eng. says: "Engineers bring more than just the ingenuity and skills to make innovation happen. As professionals, engineers carry with them the ethical and regulatory regime that works in the interest of public safety." CCPE has already laid the groundwork for its future involvement with two federal government departments—Industry Canada, which is heading up the *Achieving Excellence* component, and Human Resources Development Canada, which is heading up the *Knowledge Matters* component.

Human Resources Minister Jane Stewart provided the keynote address at

CCPE's Annual Government Relations Reception held February 20 on Parliament Hill, which was attended by politicians, government officials and CCPE board members. The minister praised the inter-provincial mobility of the profession and commented on how far ahead engineers are in relation to many other professions. Stewart pinpointed mobility and the reduction of barriers for skilled workers as areas for future dialogue between her department and the profession.

CCPE's Government Relations Committee Chair Geoff Emberley, P.Eng., says the Innovation Strategy will be "one of the committee's top priorities in 2002."

Proposed solutions

The Innovation Strategy also proposes solutions to the skills shortage issues it raises that might directly impact how professions are regulated. One of the goals in the *Achieving Excellence* paper is ensuring that Canada receives the skilled immigrants it needs and enabling them to achieve their full potential in the Canadian labour market and society. Toward this end, the strategy foresees having the new *Immigration and Refugee Protection Act* implemented this year. It is also committed to developing "an integrated and transparent approach to the recognition of foreign credentials by working in collaboration with provinces and territories, regulatory bodies, employers and other stakeholders to develop fair, transparent, and consistent processes to assess and recognize foreign qualifications before and after arrival."

Norm Williams, P.Eng., PEO's deputy registrar, admissions, believes PEO is already well positioned to take on this challenge, saying: "PEO wholly supports this aim." In fact, he says, "our admissions/ licensing process is indicative of [this approach]." PEO's assessment of foreign-trained applicants' qualifications combines traditional credential review with a facility to recognize prior experientially gained knowledge. The two complementary processes permit a comprehensive evaluation. Using this approach, approximately 60 per cent of foreign-trained applicants satisfy PEO's academic requirements for licensure annually, and are not required to write any technical exams. In the past five years, the number of P.Eng. licences granted to foreign-trained applicants has almost doubled.

In the next several months, the government will conduct a series of regional and sectoral meetings with business,

Blueprint for next decade

The government's Innovation Strategy identifies four key challenges that must be met over the next decade to achieve the strategy. They are:

- ◆ *The Knowledge Performance Challenge*: Find better ways to create knowledge and bring these ideas to market;
- ◆ *The Skills Challenge*: Find ways to develop, attract and retain the best and the brightest;
- ◆ *The Innovation Environment Challenge*: Look at ways to improve business and regulatory policies to support innovation;
- ◆ *Finding Ways to Strengthen our Communities*: Support innovation at the local level so that communities continue to be magnets for investment and opportunity.

Although no price tags are attached, initiatives aimed at meeting the challenges include:

- ◆ a commitment to review government regulatory frameworks to ease red tape for the private sector;
- ◆ more aid to Canadian graduate students, including a doubling of federally funded scholarships and fellowships;
- ◆ a reiteration of past pledges to double federal spending on research and development (R & D) and lift Canada into the top five countries in the world by 2010; and
- ◆ a renewed promise to bring high-speed Internet service to remote communities by 2005, by exploring a "private sector solution."

labour, the provinces, universities and social advocacy groups, on how best to achieve the goals and targets outlined in

the new strategy. These meetings will result in a national summit this fall, in which CCPE will be participating.

Society now administers Professional Engineers' Benevolent Fund

by Sharon Van Ihinger

The Benevolent Fund, once administered through PEO on behalf of the Foundation for Education, has been transferred to OSPE.

The PEO-Ontario Society of Professional Engineers (OSPE) Agreement of November 7, 2000, provides for the transfer of member services and certain other non-regulatory activities from PEO to OSPE. Although the Benevolent Fund is

not a PEO program, the Foundation for Education has agreed that its administration is more in keeping with OSPE's mandate, and transferred those duties to the Society from PEO.

The Professional Engineers' Benevolent Fund was established in 1986 to honour a bequest earmarked to provide a fund for engineers who are going through personal financial hardship. The emergency assistance provided through the Fund may be in the form of a loan or as a grant, depending on each applicant's circumstances and preferences. Spouses, widowers or widows, and/or children may also be eligible.

Circumstances that may qualify for support include:

- ◆ rehabilitation following mental or physical disability;

- ◆ retraining (for example, following redundancy or obsolescence);
- ◆ unemployment during an unusually prolonged job search; and
- ◆ compassionate circumstances requiring immediate and urgent assistance.

Situations not covered include applicants who require income supplement on an ongoing basis, or who have substantial income or assets.

Application to the fund is confidential, and disbursements are recommended by an advisory committee of respected professional engineers. For further information contact Andrea Vecera at 416-223-9961, ext. 222, or: Professional Engineers Benevolent Fund, c/o OSPE, 4950 Yonge St., Suite 1000, Toronto, ON M2N 6K1.