

## Professional engineering in Ontario:

# Open door or closed shop?

by Dwight Hamilton

The process to become a licensed professional engineer in Ontario has never been more open and accessible. Yet too often, people who were engineers in their homelands still arrive here without really understanding the licensing requirements—or worse still—with unrealistic expectations. They've been caught between a national immigration policy that's concerned with supporting Canada's future labour needs and PEO's statutory mandate to protect the public interest by licensing only those who have the required qualifications. With the most recent changes to its admissions procedures, PEO hopes it has found a way to bring perception and reality closer together—to everyone's benefit.

Commenting on a recent report on trends in international migration by the Organization for Economic Cooperation and Development (OECD), Canadian Citizenship and Immigration Minister Elinor Caplan asked: "Who will support the current and future needs of so many of the labour-intensive sectors of our economy? In Canada in 2010, for every retired Canadian, roughly five will be working. To maintain this ratio, the OECD projects that Canada would need a net intake of about 8.6 million people over the next 20 years. This [rate] is nearly two and a half times the number Canada accepted in 1999."

How does Citizenship and Immigration Canada (CIC) choose which prospective immigrants it will pick to meet this need? Since 1967 it has relied on a points system that factors in occupation and grants the maximum score in that category to "engineers" on the assumption that Canada's technology-intensive economy of the future can never have too many engineers.

Enter the Canadian Council of Professional Engineers (CCPE), the federation of 12 provincial/territorial licensing bodies for engineering. Faced with budget restraints some years ago, Manpower and Immigration Canada (CIC's predecessor) sought to outsource some of its assessment activities and retained CCPE to do "Informal (now called Initial) Assessments" of whether foreign-trained "engineers" wishing to immigrate to Canada really were engineers.

In 2000 alone, CCPE assessed 24,122 prospective immigrants, who each pay a non-refundable \$175 for the opinion. But because licensure is a provincial/territorial

responsibility, CCPE does a very general evaluation and can't make any commitment on whether someone will be licensed.

In fact, its literature says clearly: "The Initial Assessment program is not part of the registration process to become a licensed professional engineer in Canada. Your initial assessment result is used by CIC solely for immigration selection purposes. You will not be assessed to determine whether you are qualified to be a licensed professional engineer in Canada until you have arrived in Canada, and applied for registration and licensure to the professional engineering association in the province or territory where you wish to work. A visa is not a licence to practise engineering, and does not give you the right to practise engineering."

Unfortunately, many immigrants appear to overlook this disclaimer. Once they've landed, they wind up at PEO's door, expecting their P.Eng. licence.

### Defining the problem

PEO's Admissions, Complaints, Discipline and Enforcement Task Force saw this clash of expectations and requirements as a key problem with CCPE's "informal" assessments. Its 1999 report states: "Immigrants from such countries assume that if the Canadian consulate (which is equated with the Canadian government) has the power to grant them a visa on the strength of their qualifications, the Canadian government has acknowledged their qualifications."

Their confusion is understandable. "I think if the Canadian government is accepting professionally trained immigrants, they should do something to help us. They have already checked our backgrounds and they have decided that Canada needs us," reads a testimonial on the website of the Coalition for Access to Professional Engineering (CAPE), a Toronto-based organization that strives for "the removal of all systemic barriers to foreign-trained engineers in the licensing process in Ontario."

And for PEO, the numbers of potentially dissatisfied foreign-educated licence applicants are large. Ontario gets more immigrants than any other province, with engineers making up over half of those immigrants who expect to enter a regulated profession.

### What it takes

In fact, PEO's licensing requirements are the same for all applicants, no matter where

they come from. They must:

- ◆ be at least 18 years old;
- ◆ be a citizen or permanent resident of Canada (this may soon be eliminated);
- ◆ be of good character;
- ◆ hold a degree from a Canadian Engineering Accreditation Board (CEAB)-accredited program or possess equivalent qualifications;
- ◆ successfully complete PEO's Professional Practice Examination; and
- ◆ have at least four years of acceptable, verifiable experience in engineering, one of which must be acquired in Canada under a P.Eng.'s supervision.

These requirements are in place to assure public safety where engineering practice is concerned. That's why PEO administers the *Professional Engineers Act* on behalf of the government, says Norman Williams, PhD, P.Eng., PEO deputy registrar, admissions, which makes it "responsible for developing and implementing standards which ensure that those who are granted a licence to practise here are suitably qualified to do so."

One attempt to speed up the process of assessing a foreign-educated applicant's educational qualifications is via Mutual Recognition Agreements (MRAs). These are international arrangements negotiated by CCPE that allow PEO and the other provincial/territorial licensing bodies to consider exempting applicants from technical exams. To be eligible for "looking-to-exempt" status, the applicants have to be grads from university engineering programs accredited by bodies that CCPE believes function in a manner substantially similar to the CEAB (see "Where credit is due," *Engineering Dimensions*, Sept./Oct., 2001, pp. 29-31), and there must be no unusual circumstances related to their degree (for example, if their degree is the result of credits from two institutions—one covered by an MRA, one not). CCPE negotiated the first MRA in 1989 with accreditation institutions representing professional engineers in the U.S., the U.K., Ireland, Australia and New Zealand. Later agreements were signed with Hong Kong (1995) and South Africa (1999).

But the usefulness of MRAs in streamlining educational qualification assessments is still limited, because so far CCPE has negotiated them with only a few countries, and graduates of the programs covered by an MRA are eligible for "looking-to-

exempt" status only from the date the agreement with their jurisdiction was signed. And the largest number of prospective immigrants using CCPE's Initial Assessment (and subsequently applying for licensing once in Canada) hail from China, Iran, India, Pakistan and the Middle East, jurisdictions with which there are no MRAs.

In these instances, PEO's Academic Requirements Committee (ARC) and its Experience Requirements Committee (ERC) must evaluate each applicant's qualifications. After reviewing transcripts and course content, ARC may assign a program of four confirmatory exams of the applicant's choice from within an assigned discipline, if the applicant is a graduate of a university that's included on CCPE's "List of Foreign Engineering Educational Institutions and Professional Qualifications." To date, over 3000 institutions in 150 countries have been recognized on the list as having an engineering school.

If the applicant is a graduate of some other institution or has a science or technology degree instead of engineering, he or she will be assigned a customized program of technical exams designed to fill in their academic gaps.

If applicants assigned confirmatory exams have five years experience, their experience will be assessed by the ERC to determine if it warrants relief from any of the assigned technical exams. If any applicant assigned confirmatory exams passes the first two technical exams with a mark of at least 70 per cent, the other one is waived. Applicants assigned a specific technical exam program may have their experience assessed by ERC if they have 10 years of experience.

"In our business, there are never exact formulae to exempt anybody from anything. We have to exercise a degree of judgment. If you have a bachelor degree from a CEAB-approved program, you don't have to write any technical exams for sure," says Richard Furst, P.Eng., PEO manager, licensure. "For everybody else there are guidelines but no formulae for exempting."

### The problem with reciprocity

With all this assessment, would it be better if CCPE sought agreements that recognize qualifications at the full professional level, rather than just the equivalency of academic accreditation systems? The rub here is that outside the U.S., no other country has "licensed professional engineers" in the same sense as ours, Furst says. So

the necessary qualifications to practise engineering in Canada and the U.S., where practice is restricted to those who have been licensed, might be significantly different than those someplace where the only restriction is on the ability to call yourself an engineer, or to be recognized as an engineer on a register.

PEO's International Mobility Task Force was struck to examine such sticky wickets. "We feel it's inappropriate for CCPE to negotiate agreements [that recognize full professional status] with jurisdictions that do not have licensure regimes," says Norbert Becker, P.Eng., co-chair of the task force. "When CCPE is considering equivalencies of practice (i.e. beyond academic equivalencies), it's gone too far. It's circumventing standards that PEO has put in place for the safety of the public."

### Seeking solutions

To give prospective immigrants a binding opinion on what will be required for them

to be licensed in Ontario, PEO recently began allowing them to apply for licensing before making the decision to emigrate from their country of origin, and then to continue the process with no loss of momentum once they land in Canada. It's an attempt to eliminate uncertainty for prospective immigrants by assessing their qualifications against the particular requirements for Ontario licensing.

Pending government approval is a new subsection to Regulation 941 of the *Professional Engineers Act* that will see applicants get a provisional licence if they've satisfied all requirements except the 12 months Canadian experience stipulation. In this case, provisional licence holders will have to be supervised by a P.Eng. who will take responsibility for their work. In fact, anyone can practise engineering in Ontario if their work is "signed off" by a licensed professional engineer. Nevertheless, some foreign-educated engineering grads say that not having a licence hampers their employability.

Another recent initiative is the creation of a "fact sheet" by PEO and the Ontario Ministry of Training, Colleges and Universities' Access to Professions and Trades Unit. The plain language fact sheet includes a list of engineering activities, details of the right to practise and an explanation of the application procedure. The expected language proficiency is also outlined, as well as information on labour market trends.

The plan is to disseminate the document to over 80 visa offices worldwide. "It's going to be a huge help," says Kirsten Mason, a program officer for the unit. "I think that one of the key barriers for an individual, professional or not, is the lack of occupation-specific information before coming to Canada, and if we're able to provide an accurate picture of what the licensure process is before arriving, this will help with some of the decisions that are made by them particularly about resources, money coming into the country and expectations for themselves," she says.

To get still more information into the hands of foreign-trained applicants, PEO developed brochures last year on the ERC interview and how to prepare for it. In addition, a new licensing guide has been created that puts all the necessary information in one package. Prospective applicants, community groups and government agencies dealing with foreign-trained applicants can receive these on request, and bulk quantities are left behind after PEO presentations. The licensing guide, as well as information just for offshore licence applicants, is also available on PEO's website at [www.peo.on.ca](http://www.peo.on.ca).

And some foreign-trained applicants see the Canadian licensing system as a necessary step in establishing themselves in their new country. On the CAPE website, Nanthee Velupplai, P.Eng., writes: "We have to prove ourselves and show that we are capable of handling the engineering work in Canada, because there are different systems here. We have to adjust ourselves and change with the times. Sometimes we think, 'we have so many certificates, why do we have to sit for exams?' It's psychology. You don't know anything about me, so I have to prove to you that I am a capable person and can handle the work. Back home, we know the people. We are from the same community. Here, it is multicultural; we don't know each other. In this type of society, we have to prove ourselves. If we are straightforward and have the skills—we can." ♦

## A step forward?

Included in the new *Immigration and Refugee Protection Act* (Bill C-11) are plans to scrap occupation from the immigration selection criteria and choose newcomers with transferable skills instead.

Known as the "Human Capital Model," the new selection criteria reflect a desire for immigrants who can adapt to new careers and not necessarily work in their previous one. Implementation is expected at the end of 2002.

The model has not met with rave reviews by all the regulated professions. The Coalition of Regulatory-related Agencies (CORA), an organization comprising agencies that represent many of Canada's professions, presented a submission to the standing committee that examined C-11. The submission "strongly" disagreed with the premise that "immigrants who are bringing in significant human capital will be able to compete in the knowledge-based economy even if they are restricted from immediately practising their former profession in Canada," because it runs counter to the experience of CORA's member agencies.

Instead, the submission stated, these immigrants "express their frustration with Canada's high professional standards by challenging decisions in the courts or with provincial and federal Human Rights Tribunals. They also express their frustration through organizations like CAPE and the International Association of Physicians and Surgeons of Ontario. From a public perspective, the worst outcome is that some of these people—knowingly or unknowingly—may practise their profession illegally in Canada or offer services they are not licensed to perform."

Because it deals with issues linked to national security, Senate debate on C-11 was curtailed to speed the passage of legislation after September's terrorist attacks.

For its part, PEO agrees that prospective immigrants should understand their options before making the life-changing decision to immigrate, and that false expectations or incomplete information can only lead to frustration. That's why it now allows prospective immigrants to apply for licensing before they decide to leave their countries of origin, and then to continue the process with no loss of momentum once they land in Canada. With the new immigrant selection criteria now on the horizon, PEO's introduction of this service is timely.