



2000 AGM

It's official! Agreement signed for engineers' advocacy body

by Karen Hawthorne

With 81 per cent of voters participating in the membership referendum in favour, the creation of the Ontario Society of Professional Engineers (OSPE) became official at a signing ceremony during PEO's annual general meeting on April 15.

A memorandum of understanding setting out the terms for creation of OSPE, including its governance, funding and membership structures was signed by then PEO President Patrick Quinn, P.Eng., and Canadian Society for Professional Engineers (CSPE) President Gary Macro, P.Eng.

"I believe we have an unprecedented opportunity before us—an opportunity to create an organization that can make a significant difference to the future of our profession," said PEO Councillor Bob Goodings, P.Eng., who co-chaired the Joint Advocacy Implementation Committee (JAIC) that worked over the past year to see the new member-interest professional society come into being.

"This is an opportunity to create a respected voice for our profession, one that will be heard regularly on issues having to do with engineering, and with our built and natural environments," he said.

Recently incorporated, the mandate of the new society will be to advance the professional and economic interests of professional engineers.

Goodings said the immediate challenge will be "housekeeping" items—setting up an office and support services, and creating a logo and visual identity. Other next steps include development of OSPE's bylaws and negotiations between PEO and



In a historic moment at the April AGM, then PEO President Patrick Quinn, P.Eng., and Canadian Society for Professional Engineers (CSPE) President Gary Macro, P.Eng., sign a memorandum of understanding between PEO and CSPE on creation of the new Ontario Society of Professional Engineers (OSPE). Also in the photo are volunteers who helped lay the ground work for OSPE through participation on the Joint Advocacy Implementation Committee (JAIC), five of whom have been appointed to OSPE's interim board.

In the back row, from left are: Councillor Max Perera, P.Eng., interim board member; Todd Springer, P.Eng., interim board member; Ben Burke, P.Eng.; Councillor Dick Braddock, P.Eng.; Councillor Bob Goodings, P.Eng., interim board member and JAIC co-chair; PEO President-elect Gordon Sterling, P.Eng.; Joyce Rowlands, staff advisor to the JAIC; Stewart Crampton, P.Eng., interim board member and JAIC co-chair; and Jeremy Cook, P.Eng., interim board chair. Missing from the photo is former Councillor Roydon Fraser, P.Eng., who was an advisor to the JAIC.

OSPE on the transfer of non-regulatory programs and associated funding.

An interim board has been established until such time as an election can be held for representatives to OSPE's first general assembly, later this year. Council has appointed PEO Councillors Goodings and Max Perera, P.Eng., to the interim board. CSPE has appointed Jeremy Cook, P.Eng., and Stewart Crampton, P.Eng., who are both CSPE board members. Cook will chair the OSPE board. The fifth member is Todd Springer, P.Eng., who was an advisor to the JAIC.

"We have been handed a golden opportunity to make a difference to the future of our profession," Cook said at the signing ceremony. "This is the challenge facing Ontario engineers. Let's make the most of it."

The goal is to have the first general assembly of OSPE and an elected board of directors in place by November.

The Ontario Society of Professional Engineers' goals

- ◆ Speaking for engineers on issues affecting the profession
- ◆ Promoting the engineering perspective on public issues
- ◆ Defending individual professional rights of members
- ◆ Working to advance the economic situation of engineers
- ◆ Providing a technical perspective on public policy issues
- ◆ Providing specific member services

Advocacy highlights Quinn's presidential term

by Karen Hawthorne

An eventful presidential term culminated with the recent passage of the advocacy referendum—providing the opportunity for engineers “to take control of our destiny,” Patrick Quinn, P.Eng., said in his farewell remarks for his 1999-2000 PEO presidency.

He spoke to over 150 members, staff and guests at PEO's annual general meeting, held April 15 in Toronto.

The separation and independence of PEO and the new advocacy body, the Ontario Society of Professional Engineers (OSPE), will see engineers establish clear mandates for each body, and decide what benefits are required, Quinn said, calling for continued support of OSPE to advance the profession and demonstrate its relevance to young and future-oriented engineers.

“OSPE can become a vocal, visible, proactive voice for engineers in Ontario, committed to addressing strategic issues over the long-term,” he said.

Other highlights of his term included the much-awaited results of the Task Force on Admissions, Complaints, Discipline and Enforcement, struck in 1998 to review these processes and policies in the name of fairness, efficiency and accessibility, Quinn noted. Council approved 66 of the task force's 68 recommendations last December, paving the way for administrative changes and revised regulatory policies. The remaining recommendations will require revisions to the Professional Engineers Act and Regulation 941, before they can be implemented.

This June, Council expects an interim report from the new Evolution of Engineering Admissions Task Force—set up to further examine alternatives to the current admissions process, so that it both protects the public interest and is seen to be fair. The process must be able to adapt and evolve to accommodate societal and technological change, Quinn explained.

Quinn also mentioned the work of the Chapter Structure and Revitalization Team, a group of 10 chapter leaders who consulted with chapter executives over the past year and produced a white paper to define the integral role the chapter system should play to boost the profession's image.



Past PEO President Patrick Quinn, P.Eng., takes the podium at PEO's AGM to recap his 1999-2000 presidential year.

Province-wide programs like Engineers-in-Residence and the Engineering-in-the-Classroom initiative, and Canada-wide programs, such as National Engineering Week, have all made significant strides with government support, Quinn said, such as the \$45,000 from the Ministry of Energy, Science and Technology to develop educational resource material for the Engineers-in-Residence program.

With the launch of its second phase in September 1999, the program reached 3100

students and 70 teachers in 15 schools across Ontario, with 15 Engineers-in-Residence committing one day a week to improve delivery of science, technology, engineering and math curricula.

“We have about 100 schools waiting for sponsorship and engineer volunteers,” Quinn said. “The value of this rewarding experience is attested to by the enthusiasm of the participants. When you return to your own communities, please promote participation to others within your chapters.”

Quinn also applauded PEO's work on emerging disciplines, opening up the professional engineering licence and scopes of practice to recognize bioengineers and software engineers. A new Bioengineering Task Group has been struck to investigate how best to regulate this discipline.

Under criteria developed last year, PEO licensed almost 150 software specialists as professional engineers in 1999. “If the Y2K problem and cyber vandalism have taught us anything, it is that every advance in technology must be critically examined for its potential impact on the public and the ways in which professional accountability can be brought to bear to minimize negative impacts,” Quinn said. “As the creators and managers of new technology, there is no group better placed than professional engineers to do this.”

2000 AGM

Members pass motion to rethink definition of engineering

by Alison Piper

Following over an hour of lively discussion in which about a dozen engineers had their say, members attending the business meeting portion of April's AGM passed a motion meant to be an initial step toward a modernized definition of engineering and a stronger enforcement program. Specifically, the motion calls on Council to produce a reference paper describing what the phrase "application of engineering principles" means, with clear examples demonstrating how current disciplines and evolving areas of engineering impact on public safety.

The motion was moved by Paul Ballantyne, P.Eng., and J.M. MacDonald, P.Eng. In speaking to the motion, Ballantyne said he believes PEO's current definition of professional engineering practice does little to impart understanding of what engineering is, except in a few traditional areas—partly because it uses "the application of engineering principles" as a criteria, but doesn't define what this means. "We are on a slippery slope. It's in the best interests of engineers and the public, and enforcement will be easier, if we do a better job of defining engineering work," he said.

Many members seemed to agree that a clear understanding of what work requires a P.Eng. is crucial to the Ontario engineering profession, calling for greater enforcement efforts by PEO to help ensure that this work is done by licensed professional engineers. Ravi Gupta, P.Eng., said he sees the application of engineering principles as being "all inclusive" and not excluding some types of engineering work.

Councillor Anthony Warner, P.Eng., proposed that PEO approach the problem from another angle. "Our objective is not to define what engineering is, since non-members can do engineering right across the globe," he said. "Rather, we should be defining the benefits of getting your P.Eng. in Ontario. It's a sales job."



Ravi Gupta, P.Eng., is at the mike during debate over a members' resolution at PEO's annual business meeting, held April 15 in Toronto.

Update on resolutions presented at '99 AGM

Four members' resolutions were presented for debate at the association's 1999 AGM, one of which was passed. At the 2000 AGM, PEO 1999-2000 President Patrick Quinn, P.Eng., reported on actions taken to address the motion that was passed, as well as action taken by Council in relation to two of the others.

The members' motion passed by last year's AGM called for votes of Councillors to be recorded and made part of the public record of PEO, except in matters of confidentiality. Moved by Peter Hiscocks, P.Eng., and Nancy Hill, P.Eng., LLB, the motion was discussed at length at Council's September 1999 meeting. Although Councillors were supportive of the principle involved, given the length of Council's agenda and the lack of an electronic voting system, they voiced concerns about the time required to record Councillors' votes.

As a compromise, they suggested that Councillors be encouraged to ask for recorded votes on contentious issues. It was also suggested that chapter chairs advise their Regional Councillors of the issues on which they'd like a recorded vote.

A motion that was defeated at last year's AGM proposed that PEO's membership list be updated annually and pro-

vided free to members on searchable electronic media, such as CD ROM format. It was moved by Eugene Canby, P.Eng., and Michael Rosenblitt, P.Eng.

Although the motion was not successful, steps are being taken to enable PEO to maintain an up-to-date membership database and to make portions of it available to members and the public. Council recently approved a proposal to replace PEO's current member database with software provided by KPMG-Versa Systems Inc. During the first phase of the project, to be completed by September, all of PEO's regulatory functions will be transferred to the new database. The second phase will bring e-commerce to PEO. Although still being defined, it's expected to include an online register enabling members to update their PEO information themselves.

Another defeated motion brought Council's attention to financial and other barriers to volunteer participation in PEO. Moved by Tim Kirkby, P.Eng., and Michael Godard, P.Eng., it called for a new policy to reimburse members for income lost while serving on PEO committees during business hours. To address this issue, Council has directed the Regional Councillors Committee (RCC) to investigate the barriers to PEO participation members face and to propose solutions. The RCC is expected to report back to Council in this summer.

Chapter white paper presented at AGM

by Alison Piper

Summarized by Councillor Tony Cecutti, P.Eng., chair, Chapter Structure and Revitalization Team (START), START's white paper received support from chapter leaders and other members at a chapter session held April 15 during PEO's AGM. The white paper is the result of a resolution passed at the Chapter Leaders Conference in February 1999, which called for a comprehensive discussion paper outlining a renewed chapter system's vision, role, objectives, organizational structure and staffing, operation, geographic boundaries and funding.

Cecutti, who has been leading the chapter system review process over the past year, said that although trying to create change is like "pushing a bus," he firmly believes that renewal of PEO's chapters is possible "if enough people get behind it."

Revitalizing the chapter system

Recommendations in the Chapter Structure and Revitalization Team's (START) report would see:

- ◆ an enhanced chapter system maintained and linked to PEO and OSPE;
- ◆ chapters continue to comprise volunteer PEO members, with OSPE membership optional;
- ◆ a more flexible system used to establish boundaries for chapters, other than geographic representation. For example, some chapters may choose to restructure based on areas of common interest or form partnerships with other associations and educational institutions in order to deliver programs;
- ◆ local/regional offices established to provide administrative support to chapters;
- ◆ increased funding to enable chapters to expand programs and activities;
- ◆ chapters form stronger communication links with PEO staff, and provide "grass-roots" input to committees and task forces; and
- ◆ an enhanced reward system for dedicated chapter volunteers.

"The chapter system can serve dual roles for both the Ontario Society of Professional Engineers (OSPE) and PEO," he said. "OSPE will need to deliver services at the local level, providing things members can touch and feel. The chapter system can do that. It makes sense for chapters to be part of both organizations."

Cecutti also noted that the chapter system is valuable to PEO, since it serves as a training ground for volunteers. "Current

funding just allows chapters to exist," he stressed, noting that additional staff support to enable chapters to expand activities and a better volunteer reward system are two priorities identified by START.

The white paper has been endorsed by a majority of chapter leaders. The next step is review of its recommendations by the Regional Councillors Committee, the Registrar, the PEO Chapter Manager and OSPE's interim board.

Immortalizing engineering history on a stamp



Pictured here, Canada Post's commemorative iron ring stamp marks the 75th anniversary of the Ritual of the Calling of an Engineer.

The stamp, designed by Darrell Freeman, art director of Halifax's Art Works, is Canada's first tête bêche stamp (a stamp in a joined pair in which the two parts are inverted in relation to each other), with each stamp depicting half a ring. The stamp also depicts significant Canadian engineering achievements: Lethbridge, Alberta's CP High Level Bridge; Sarnia, Ontario's Polysar Limited, producers of synthetic rubber; the pace-maker, developed by John Hopps, P.Eng., at the National Research Council's laboratory in 1949; and a microwave transmission tower from the Trans-Canada Microwave Radio Relay System.

Stamps and first day covers are available at participating postal outlets, or by calling 1-800-565-4362 in Canada, or (902) 863-6550 from other countries.

Electrification heads U.S. list of top 20 engineering feats

by Susanne Frame

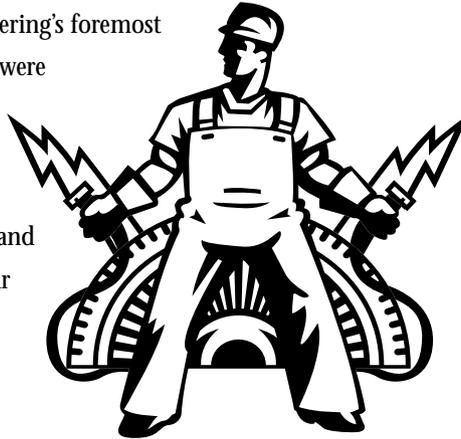


Electrification, creation of the vast networks that power the developed world, was voted the number one engineering contribution to the 20th century in a United States survey to mark National Engineers Week in the millennium.

Known as the Greatest Achievements project, the top 20 list was a joint effort by the National Academy of Engineering, the American Association of Engineering Societies, National Engineers Week and 29 engineering societies in the U.S.

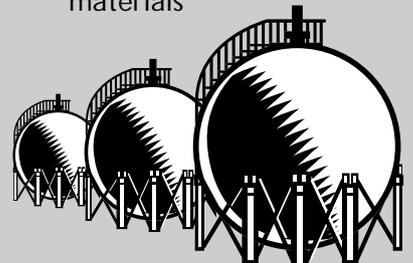
A panel of engineers organized by the National Academy of Engineering selected and then ranked 105 nominations for engineering's foremost achievements. The top 20 achievements were selected on the basis of having made the greatest contribution to quality of life over the past 100 years. Inventions from the 1800s, such as the automobile and the phone, were included because of their impact on the 20th century.

For more information, visit <http://www.greatachievements.org>.



Top engineering achievements of the 20th century

1. Electrification
2. Automobile
3. Airplane
4. Safe and abundant water
5. Electronics
6. Radio and television
7. Agricultural mechanization
8. Computers
9. Telephone
10. Air conditioning and refrigeration
11. Highways
12. Space exploration
13. Internet
14. Imaging technologies
15. Household appliances
16. Health technologies
17. Petroleum and gas technologies
18. Laser and fibre optics
19. Nuclear technologies
20. High performance materials



New blueprint for national standards to strengthen Canada as a global player

by Karen Hawthorne

In the wake of e-commerce and disappearing borders, international standards have become a significant element in an increasing number of trade agreements—and Canada wants a piece of the action.

The Standards Council of Canada recently unveiled a new strategy for the National Standards System (NSS) to map out the standardization measures and priorities necessary to keep Canada competitive in the changing international marketplace.

“Universal standards are the invisible gateways to the global economy,” said John Manley, minister of industry and minister responsible for the Standards Council. He spoke at the March 29 NSS strategy launch in Ottawa, broadcast via satellite to seven other Canadian cities, including Toronto.

“Canada needs not only to comply with, but also to help shape a growing number of international standards to ensure unfettered access to markets around the

world,” he said, calling for collaboration by many stakeholders, including consumer groups, industry associations, labour, business and governments, to establish well-defined and widely applied standards.

The new standards system is aimed at positioning Canada as an influential player at international forums, such as the International Organization for Standardization (ISO), where more than 130 other countries are looking after their own agendas.

In Toronto, Robert Gillespie, P.Eng., CEO and chair of GE Canada, told an audience at the Toronto Board of Trade that, more than ever, Canadian business must become actively involved in global standards development.

“In fact, incorporating standards into an organization’s strategic plans is now simply a matter of sound business practice,” he said. “Companies that understand the strategic advantages of standards are more competitive, better able to prosper in mul-

multiple markets, and better able to differentiate themselves in the marketplace.”

For example, Canadian companies are using the ISO 9000 series of standards as tools to help them streamline their quality management systems to improve efficiency and grow their businesses abroad, Gillespie said.

Traditional processes to establish standards, like forming technical committees and subcommittees, can’t always work, especially in the internet world where standards are driven by the market, Gillespie added. “Neither governments, nor standards bodies, can move fast enough to keep up with the relentless demands and break-neck speed of the new global electronic village. We must both use the internet in the development of new standards, and also pave the way for new standards for the internet itself.”

For more information on the national standards strategy, visit the Standards Council’s website at www.scc.ca

What Canadians need to do

The new national standards strategy comprises eight elements that call on Canadians to:

- ◆ participate in the development of international standards, and use standards adopted from internationally accepted standards;
- ◆ focus efforts and resources on three key areas: health, safety, the environment or other social issues; trade sectors that could benefit Canada; and harmonization of standards;
- ◆ keep an eye on changes in conformity assessment practices, and take part in international conformity assessment agreements that will benefit Canada;
- ◆ make Canadians, especially public- and private-sector decision makers, more aware of the benefits and challenges of standardization;
- ◆ encourage the use of standards in regulation and the development of Canadian public policy;
- ◆ establish ways to apply standardization principles to new social and economic areas;
- ◆ make the system more responsive and increase participation;
- ◆ develop partnerships and strategic alliances among current and potential participants.