

[LETTERS]

"I see a lack of leadership in councillors who voted in favour of the proposal"

LACK OF LEADERSHIP

I am appalled that, at a time when citizens in Tunisia and Egypt demonstrated on the streets with the support of the largest democracies in the world, Canada included, in our association we the members are losing our democratic right to elect the president ("Strengthening our governance model," *Engineering Dimensions*, January/February 2011, p. 3).

The decision to cancel a referendum prior to moving along with the changes is a display of an "us vs. them" culture from the councillors who voted in favour of the cancellation. To say that taking away the right from members will strengthen the governance model because "some have felt that PEO presidents have focused on their own priorities" is not a valid reason not to have a member referendum to address the issue, and only shows the inability of councillors to recognize their differences, focus on the issues that are important, and effectively work as a team.

Adopting a leadership structure used by other self-regulating organizations in Ontario is analogous to agreeing that, in Canada, we shouldn't have a democratic form of government simply because more people around the world do not live in a democracy. I think of simple advice we give our children not to do something simply because others do it, and I see a lack of leadership in councillors who voted in favour of the proposal, because they do not want to lead, but rather follow others who have done the same.

If the issue is to improve focus, effectiveness and cohesiveness in council, there must be other mechanisms that can be implemented to mitigate the dysfunctional performance of council without taking this right away from members.

PEO council should be an example of honest and transparent leadership that steers the course of a self-regulating organization—and I understand the word "self" includes each one of its members, who express their views and have their voices heard through an elected president.
Alberto Quiroz, P.Eng., CITP, Toronto, ON

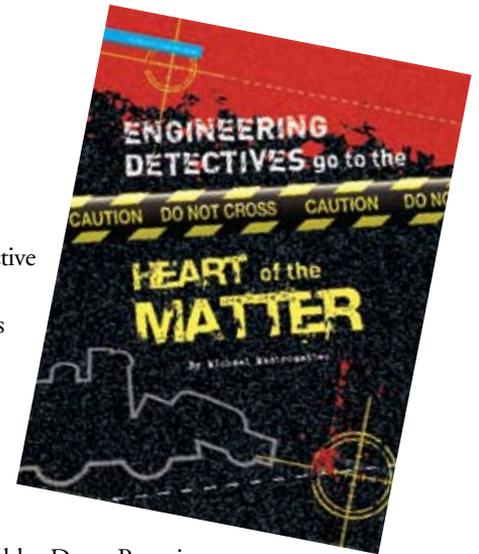
CREDITING FORENSICS WORK

I enjoyed reading your article and your perspective on forensic engineering ("Engineering detectives go to the heart of the matter," *Engineering Dimensions*, January/February 2011, p. 46).

I understand the case examples you included were provided by Doug Perovic, PhD, P.Eng. Regarding case study 1, I would like to clarify that this investigation is not recent. I worked on the reconstruction of this case nearly 14 years ago (while I was employed at Walters Forensic Engineering) and retained the shards of glass at that time because of the suspicion it was not properly tempered. If my memory serves me correctly (and to give credit where credit is due), I think at the time the boy's father also had the same concern. The samples were sent to Perovic many years later for microscopic and materials analysis, and his work appears to have been extremely valuable in this case.

For accuracy's sake and in tune with the multi-disciplinary and multi-dimensional aspects of forensic engineering that appear to be recognized by PEO, it may be noteworthy to note that the case involved an accident reconstruction engineer, myself, who conducted investigations, analysis and research, and ultimately decided to involve a materials expert.

Sam Kodsi, P.Eng., Mississauga, ON



[LETTERS]

PEO ELECTIONS

I always enjoy the issue of *Engineering Dimensions* that precedes the annual PEO elections. It reminds me of the things we all experienced last fall before our local municipal elections. Should this issue be published two months earlier so that members have a chance to write letters to the editor before we cast our ballots?

After reading some of the platforms, I must wonder what members think the word “democracy” means. I also wonder whether PEO is intended to be a representative democratic institution, like a municipality, or whether it should be like a gigantic polling organization and reporting the majority opinion accurate to three percentage points, 19 times out of 20. Or, should we be governed from the floor of the AGM (by whoever shows up)?

Is it a goal of PEO to be a global leader in professional self-regulation? I think not. The goal of PEO ought to

be a competent and just regulator of the practice of professional engineering. PEO ought to prosecute people who practise professional engineering without a licence through the provincial courts, and ought to impose professional discipline/sanctions upon licensees who practise contrary to “the rules.”

Is it a role of PEO to promote professional engineering? If yes, how should this be done: support learned societies; hire staff experts to promote and disseminate best practices; cold call people who engage engineering companies? On the latter, who does engage us? Usually, it's various governments, developers, major industry. Who actually makes the hiring decisions? Other engineers, mostly?! Should PEO move the promotion cross hairs a tiny bit to simply promote engineering? This might engage CETs and those with university engineering degrees who have not thus far “joined the club.” Is a larger membership base, comprising engineering

firms, individual engineers and the general public, a good thing for PEO? Is it a role of PEO to regulate the business of professional engineering? Does it do this well now? What are the criteria for an answer? Profit? Safety record? Sustainability (corporate, societal)?

It seems to me that PEO touches on each of the above questions from time to time; however, “we” rarely make wise moves that have lasting value. I suggest to you, my peers, that when you vote for PEO council members, you do your best to select people who exhibit the qualities you would look for in hiring staff. Hopefully, you want people who listen well, think sensibly, consider the small details and the big picture, and are content with change in rational increments.

PEO does not need a saviour, and we do not need anyone trying to turn back the hands of time or pining for the good old days.

John Este, P.Eng., Parry Sound, ON

RISK MANAGEMENT

It was interesting to note that PEO questioned how the 30,000 USWG (United States water gallon) threshold was established (“Propane safety regulation amended,” *Engineering Dimensions*, January/February 2011, p. 21). As presented by Birk and Katz, this total capacity would have covered only 49 of 183 propane storage facilities in Ontario. The new threshold capacity of 5000 covers all 183 facilities (Birk and Katz, *Report of The Propane Safety Review*, p. 14).

I worked on the MIACC Lists of Hazardous Substances 1994. The threshold value listed for propane was 10 tonnes, which falls in the 5000 USWG range. Indeed, it still is a mystery to me how this value was accepted by our large committee of 33 reviewers listed in the acknowledgements. I was the only one to question this limit and I never did get a response.

The US EPA threshold limit for propane is 10,000 lbs (5 tons, or 4.54 tonnes) or about half the MIACC threshold value. The US EPA risk management program (RMP) has been in place for some time now and I have used it in Canada, as have many others. It is a mystery to me why we

have not simply adopted the US RMP program and saved ourselves time and money in the process. The RMP Comp computer program is available for free on the EPA website and is extremely easy to use.

Regarding Level 2 RSMP (risk safety and management plans) being performed by professional engineers: the only qualified engineers in Canada in the field of risk management for determining explosion/fire consequences and set back distances for land use planning are a few consulting firms. There are a few of us who specialized in this field in industry, but we learned our trade by learning on the job. No university in Canada teaches us how to perform risk studies and to determine consequence analyses or quantitative risk analysis by statistical formats. This was the number one recommendation by Birk and Katz (p. 2).

I have tried to encourage students at the University of Western Ontario for over 14 years to use risk methods in their fourth-year chemical engineering plant design projects, but few have ever made the effort because of zero training in this field. Maybe it's about time to expand their horizons by including a risk course?

Richard Hawrelak, P.Eng., Sarnia, ON



PROPER SCIENTIFIC DEBATE

Re “Discredited comments,”
Engineering Dimensions, January/
February 2011, p. 70

I am sure that few people with a technical or scientific background have any doubt that the global climate is and has always been changing.

However, there is no consensus regarding the current trend or scale of climate change, likely causes, the extent of the contribution of human activity to change, or what actions should be taken either to modify or mitigate it.

In response to concerns raised regarding possible warming, measures are being put in place and technical innovations made to reduce emissions, conserve energy, etc., many of which are beneficial regardless of climate change. But some incur a waste of resources far exceeding any discernable benefit.

There is certainly a significant number of highly respected scientists (whose expertise is actually relevant to discussion of climate), who question assertions of a trend of significantly increasing temperature, rising sea levels, etc., and the relative role of CO₂, volcanic or solar activity, or other factors.

As in many areas of “environmentalism,” there are those with sincerely held beliefs who feel their cause is so vital to society that selective use of data or exaggeration is justified. There are also substantial vested interests in “warmism,” from seeking continuity of research funding, to taxpayer-subsidized wind farm construction.

Unfortunately, there has been a tendency for politicians/governments to climb aboard the bandwagon and seek to outdo each other in setting unrealistic targets for meeting increasing

energy demand from “renewable.” It might be said that the situation is approaching what could justify a new chapter in *Extraordinary Popular Delusions and the Madness of Crowds* (Charles Mackay, 1841).

The University of East Anglia team may indeed have been cleared, but neither the scope, rigour nor independence of the investigation inspires great confidence.

Paradoxically, a factor that has fuelled skepticism is precisely the attitude displayed by Mr. Moffat, namely the desire to suppress consideration or publication of dissenting views. In some instances, the hysterical tone of those attacking skeptic opinions has served only to increase suspicion that the “warmist” position cannot withstand scrutiny.

This is clearly the antithesis of proper scientific debate. It may be that, despite recent exceptionally severe winters in Europe, Asia and North America, claims of a long-term trend of increasing global temperature have validity, but the subject is extremely complex and the true picture is more likely to emerge from reasoned open discussion and meticulous standards of investigation, than from exclusion of views at odds with favoured theory.

C.J. Knight, P.Eng., Cornwall, ON



AMUSING ARGUMENT

I was amused to see the latest shot from David Moffat in the collapsing fight to save the “climate change” scare (“Discredited comments,” *Engineering Dimensions*, January/February 2011, p. 70).

Sadly, more people are realizing that the whole climate change campaign is all about money (earned, taken from taxpayers, or stolen), and the response from alarmists such as Mr. Moffat is to call for all opinions contrary to theirs to remain unpublished. Meanwhile, an official with the Intergovernmental Panel on Climate Change, the source of much of this campaign, apparently let the cat out of the bag by admitting that “...we distribute *de facto* the world’s wealth by climate policy...One has to free oneself from the illusion that international climate policy is environmental policy. This has almost nothing to do with environmental policy anymore.”

It gets worse. *The Daily Telegraph* reports that the EU has suspended its carbon trading scheme, under which electrical utilities are forced to pay billions to operate, after hackers stole \$50M in emissions permits. In 2009, billions in carbon credits had been stolen in one of the biggest frauds in EU history. A US carbon “exchange” closed recently due to lack of interest. As for the work by the research unit at the University of East Anglia, my understanding is that they were not vindicated, as Mr. Moffat claims, since the review committees carefully limited their reviews to the research methods and avoided looking at the correctness of the results, ignoring all those who pointed out errors and manipulations that led to the research unit being discredited. CTV reported that research claiming that the world’s temperatures will rise 2.4 C is “false” and “impossible.”

Like letter writer Mr. Norminton, we represent a threat to the whole carbon credit/research grant/wind turbine subsidy party (another gravy train?). Is it possible that this is the real complaint of Mr. Moffat?
Archie Bennett, P.Eng., Oakville, ON

[LETTERS]

TV ADVERTISING NEEDED?

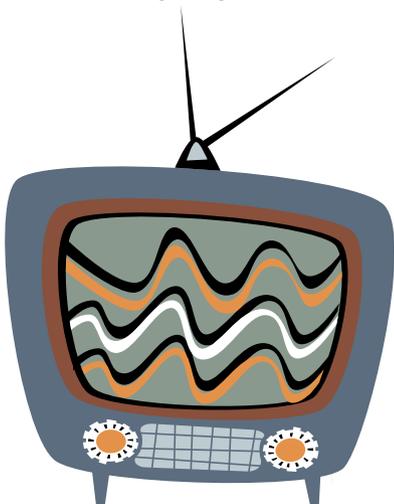
Why do I get annoyed at some particular TV advertisements? Your journal (*Engineering Dimensions*, March/April 2011) contained two relevant items: the book review, "The symbiosis of engineering and science" (p. 36), and the article "Engineers: It's time to work together and save the world" (p. 55).

My annoyance arises from the adverts of Certified Management Accountants, repeated daily over the past few months. They claim that (only?) they can give advice about (all?) decisions, because (only?) they can see beyond the numbers. Yet the numbers they refer to seem to me to be restricted to monetary quantities, especially "the bottom line."

In contrast, we engineers are concerned with many other numbers, e.g. relating to strengths, safety, reliability, physical performance, implementability, appropriateness for the current and future situations, etc. In addition, we need to consider non-numerical information in performing our duties, especially for designing technical systems and anticipating an improved future, for which we are responsible to society.

Is it not about time that PEO or our advocacy associates launch a TV campaign to highlight the capabilities and duties of the engineering profession? At the very least, it would counter the one-sided set of information presented by the chartered accountants. It may also help viewers to clearly differentiate between scientists and engineers, and enhance our standing in society.

W. Ernst Eder, P.Eng., Kingston, ON



REFLECTIONS ON COUNCIL

My term as councillor-at-large is coming to an end. I am proud to have been part of two councils that had a vision for the profession.

I look back at this time with mixed feelings, however. I'll start first with the positives. I served on councils headed by two young and dynamic presidents. President Catherine Karakatsanis brought a new atmosphere of respect and she searched for consensus while leading us in 2009-2010. In her term, council adopted the vision statement of being the global leader in professional self-regulation. The title may seem a little pretentious, but the goal is an honourable one.

President Freeman continued this direction in her term. Council made a bold decision to alter the selection of the president. That move was bold but, unfortunately, it wasn't very well communicated to the membership. This has resulted in a large backlash by the 16 per cent of the membership who bothered to vote in the last election. In retrospect, council should have first put the question of reform to a referendum before making the decision it did. As one councillor who supported the initiative, I was soundly defeated by a candidate who vehemently opposed it. That's fine. It's the democratic process. I have no regrets with regard to the positions I took, because I believe they were taken in the best interests of the profession.

Congratulations to the new councillors who have been elected. You have challenges to meet. The profession is counting on your success in meeting them. You will find that making decisions to meet those challenges will take more than tapping into anger. I look at the senior leadership in the upcoming council and I wonder who among them represents the young engineers. Council will have to engage younger engineers and find ways to get them represented on committees and task forces as well as in council. This is essential for succession planning. Finally, the fact that we are a self-regulating profession is a privilege granted to us by the people of Ontario through the *Professional Engineers Act*. This privilege has an accompanying responsibility to regulate the profession well. PEO isn't merely about, by and for the engineers of Ontario. Our profession is so vital to the health and safety of the province that the provincial government appoints professional and lay members of council to represent the people at the council table.

If we expect to remain a self-governing profession, we will have to respond to the needs of Ontarians. The challenge for this new council is to keep an outward focus on how the profession benefits Ontarians and how we can regulate it better for the benefit of all. If council shirks this responsibility, it may also lose our privilege of being a self-governing profession.

Good luck to you all.

Allen Jones, P.Eng., Toronto, ON



Letters to the editor are welcomed, but should be kept to no more than 500 words, and are subject to editing for length, clarity and style. Publication is at the editor's discretion; unsigned letters will not be published. The ideas expressed do not necessarily reflect the opinions and policies of the association, nor does the association assume responsibility for the opinions expressed. All letters pertaining to a current PEO issue are also forwarded to the appropriate committee for information. Address letters to naxworthy@peo.on.ca.