

Shared concern

In the September/October issue of *Engineering Dimensions*, Mr. Moffat wrote to the editor with his views on the article, "Do engineers know the *Electrical Safety Code*?" by Peter Marcucci, P.Eng. (*Engineering Dimensions*, July/August 2005, pp. 20-22). He suggested that PEO should be doing everything within its power to bring disciplinary action against those engineers reported to have submitted deficient plan submissions to the Electrical Safety Authority (ESA). Although constrained by the confidentiality provisions of the *Professional Engineers Act* (PEA) regarding the specific information we can disclose about PEO actions in this matter, I can generally address several of his points.

In the article, Mr. Marcucci stated that he had previously shared the quoted information with PEO. Indeed, we have had several meetings with Mr. Marcucci and

ESA report should be immediately brought before the Disciplinary Committee for incompetence," PEO has no such authority to act unilaterally in this manner. Our complaints and discipline processes are defined in sections 23 to 30 of the PEA, and are summarized in the booklet *Making a Complaint*. All of this information is available on our website. It is the Complaints Committee that decides whether there is sufficient evidence to refer a complaint to the Discipline Committee. Although investigations by the Complaints Committee are strictly confidential, discipline hearings are open to the public. When a hearing is scheduled to consider a matter referred to discipline, the dates of the hearing, the name of the member, and general information concerning the allegations, are publicized in *Gazette* and on our website.

In conclusion, while we cannot comment on any specific investigative action PEO is taking in this matter, we can state

Questioning our ethics?

Now retired, I have been a member of PEO for almost 30 years. I can hardly recall a single year in which I was not reminded by the association that I am a member of an "invisible profession," which is not looked upon very highly by society at large. I have always wondered why this is the case. The Editor's Note on page 6 (July/August 2005, *Engineering Dimensions*) may give at least a partial answer.

There, we learn that "sadly, many of today's engineering students don't regard ethics with any particular reverence." What is this righteous, generalizing statement based on? Having been in close touch with engineering students for most of my professional life, I know that a great majority of them have a strong sense of ethics and professional honesty. Later in the same paragraph, Enron is mentioned. Should I somehow infer that the majority of fraudulent executives of that company were engineers, including PEO members and my former students? Obviously not. Yet, this is the message some journalists might get while using *Engineering Dimensions* as a source material, and send it on to the general public.

I cannot imagine another professional organization (a medical association, for example) publicly questioning the ethics of their current or future members in the same breath with the Enron scandal. They protect their members and don't pass unwarranted judgments on them. I do hope our new President will be able to overcome this sense of negativism, which seems to permeate our association. Yes, do punish the few bad apples, but at the same time, send the public a clear message that the great majority of professional engineers are honest professionals adhering to very high ethical standards. Then, maybe, we will have a chance to become "an invisible profession no longer."

Vladimir Hornof, P.Eng., Ottawa, ON

Risk vs. fact

I think that it is extremely disappointing to read messages from highly technically trained individuals such as professional engineers about how "contentious" the issue of

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—Vladimir Hornof, P.Eng.

his colleagues in which we discussed this and other issues of mutual regulatory concern. It was based on these discussions and the ESA's assurances that to the best of everyone's knowledge the deficiencies in non-compliant submissions are being rectified before ESA gives its regulatory approvals, that we supported the publication of the article. Because the public safety issues are being taken care of, the article was seen as a positive, proactive step in addressing non-compliance by bringing it to the attention of our members and advising them, as a group, to increase their compliance, rather than immediately resorting to disciplinary action. In addition, Mr. Marcucci has assured us that ESA is committed to continuing to assist PEO in any investigation of these matters.

As for the suggestion that "any engineer whose name appears twice on the

unequivocally that we share Mr. Moffat's concerns and are working with ESA to address them.

Roger F. Barker, P.Eng.,
PEO Deputy Registrar,
Regulatory Compliance

Kids today...

Mr. Petrie raises two very good questions in his letter ("The plague of dumbing down," *Engineering Dimensions*, September/October 2005, p. 8). The first is: "Why can't kids do algebra anymore?" One reason may be that they live in a "monkey see, monkey do"-type computerized gadget subculture, where disciplined and abstract thinking is unnecessary, if not an impediment. He also asks: "Is the human race getting stupider, in violation of the laws of evolution?" Well... maybe not stupider, just lazier.

Tom Fahidy, P.Eng., Waterloo, ON

global climate change is (“Our pragmatic approach,” *Engineering Dimensions*, July/August 2005, p. 8). I believe that a professional engineer should be much more capable of differentiating between a risk and a scientific fact, and work to mitigate risk factors for the public good, no matter what the popular opinion on that subject is.

IN RELATION TO THIS “CONTENTIOUS ISSUE,” TO BE ABLE TO MAKE A “STATISTICALLY SIGNIFICANT” DECISION ABOUT THE HYPOTHESIS CLAIMING THAT GLOBAL CLIMATE CHANGE WILL DAMAGE THE FUTURE OF THE PLANET EARTH, AND HENCE TO PROVE IT IN SCIENTIFIC TERMS, WE NEED TO RUN CONTROLLED EXPERIMENTS. I SUGGEST THE SKEPTICS OF GLOBAL CLIMATE CHANGE BUILD MICRO-EARTHS IN THEIR TEST TUBES, AND KEEP SEVERAL AS CONTROL SAMPLES, WHILE PUMPING EVER-INCREASING AMOUNTS OF GREENHOUSE GASES (OR GHG—FOR LACK OF A BETTER PHRASE TO DEFINE THIS SET OF GASES, NOT TRYING TO IMPLY THAT THEY REALLY ARE) INTO THE OTHER ONES. THESE TEST TUBES SHOULD BE SUFFICIENTLY COM-

I do not see much purpose in debating Bill 124. The Ontario Building Code (OBC) is lacking teeth, and is not enforced.

W. Ernst Eder, P.Eng.

PLICATED TO REPRESENT THE ECOSYSTEM OF THE EARTH. IF THAT IS NOT POSSIBLE, THE FEASIBLE APPROACH IS TO BUILD SUFFICIENTLY REPRESENTATIVE COMPUTER MODELS OF THE ECOSYSTEM AND, TO MY KNOWLEDGE, A MAJORITY OF THE COMPUTER MODELS FOCUSING ON THE CLIMATE INDICATE DEVASTATING IMPACTS IN THE NEAR FUTURE AS A RESULT OF GHG. OF COURSE, ONE CAN ALWAYS QUESTION THE VALIDITY OF ANY COMPUTER MODEL, BUT GIVEN THE DEPTH OF WORK DONE ON THIS SUBJECT (FOR AN EXCELLENT SUMMARY, CHECK THE AMERICAN INSTITUTE OF PHYSICS WEBSITE AT WWW.AIP.ORG/HISTORY/CLIMATE/), THE ONLY POSSIBLE CONCLUSION IS THAT THERE EXISTS A “RISK.” WE CANNOT TELL “WHAT WILL HAPPEN 100 YEARS FROM NOW,” BUT WE CAN FORESEE THE RISKS ASSOCIATED WITH OUR CURRENT ACTIVITIES. IT MIGHT START SOUNDING OVERUSED, BUT “SYSTEMS THINKING” IS ESSENTIAL FOR ALL OF US. IN OTHER WORDS, WHEN I DRIVE MY CAR, I SHOULD BE CAPABLE OF

ASSOCIATING THE BYPRODUCTS OF THAT ACT WITH THE INCREASING PROBABILITY OF DROUGHTS IN SOME OTHER PLACE ON EARTH.

Concerns about the future make me shiver when our suspicions about global climate change start coming from Michael Crichton books. I guess the United Nations is one of the “fringe environmentalist pressure groups” advocating action for global climate change as the United Nations Environment Program estimates tens of thousands of human lives already being impacted by this “dogmatic assertion.” I personally like to watch some episodes of ER on TV, but if we start getting our “scientific” facts from Crichton, we may risk turning our minds into a Jurassic Park.

What can we do as “pragmatic” individuals while “the biggest polluter of all, ignores it?” We can start simply by accepting the fact that there is a (potentially) devastating risk (especially) for future generations. We can then consider if driving a fuel-efficient car and supporting public transportation are much better decisions than driving a supposedly (definitely not scientifically) “safer” gas guzzler if we really value our children and grandchildren, if not the whole planet. As creative individuals, we can try to incorporate ecological sensitivity into anything we design and/or build. We can support PEO’s efforts to involve highly technical people in the search for less ecologically threatening tools and techniques and publish articles about it; instead of an endless discussion that global climate change is not a “reliable, testable fact.” It will never be, but I cannot take the risk of telling my children that I did not do anything because it was/is not a proven fact (if and) when they ask me what I did about the global turmoil that they may attribute to the climate change with some gloomy (but certainly not absolute) level of confidence.

Goksin Yilmaz, P.Eng., Kingston, ON

Lacking enforcement

I do not see much purpose in debating Bill 124. The *Ontario Building Code* (OBC) is lacking teeth, and is not enforced. The Ontario minister claims that enforcement is the role of the municipalities. They, in turn,

seem not to be responsible.

Ordinary dwelling houses are usually not designed by professional engineers. According to our city’s building inspection department, the OBC seems to apply only to new home buildings. We moved into an eight-year-old house just three years ago. Inspection seems to have been sorely lacking. Floor joists were not tied properly to the headers, the steel hangers were placed at an open angle that allowed the joists to move sideways—the floor was creaking. This should have been corrected on the new construction by order of the inspector.

Major repairs are not covered by the city’s interpretation of the OBC. A roof is obviously very important for the integrity of a house. The city will not issue a building permit for re-roofing. They will not inspect a re-roofing job if they have not issued a building permit, even if clear proof is delivered that the OBC has been violated. The only recourse that the city recommends is to sue in civil court, against an operator who already has outstanding debts against his name—an exercise in futility.

Until the OBC is properly enforced, with violators prosecuted, and this process is audited by the ministry, any examination of knowledge is useless.

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

Correction

In the “Mission Possible: Celebrating the innovative projects of Ontario’s engineers” feature in our September/October issue (p. 57), we neglected to mention the contribution of I&F Engineering Corp. toward the development of the hybrid glass fibre reinforced polymer (GFRP) composite structure for bridge building. I&F Engineering worked together with Saltech to create the hybrid composite and to develop the design methodology.

Letters to the editor are welcomed, but should be kept brief and are subject to editing. 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 jcoombes@peo.on.ca.