



Energy hopes and dreams

I have to admit that I was feeling a bit smug when gas prices went through the roof just after Hurricane Katrina.

Filling up my car was not the low-light of my day. In fact, I barely noticed the difference at the pumps. That's because a couple of years ago I chose what was then probably the most microscopic car on the market.

The real reason for my choice wasn't motivated by the thought of paying through the nose for gas, but because I'm not altogether happy about the impact my typical North American lifestyle has on the planet.

Certainly nobody could ever accuse me of anti-consumerism, but like most people these days (I hope), I am a devoted recycler and TTC user, and generally try to minimize the junk I'm responsible for sending to the landfill or up into the atmosphere.

So, from the moment I first heard about fuel cells, one of the most promising renewable energy sources, I've been anxiously awaiting their arrival. There's something really appealing about heating your house or driving around in a car powered by something that emits nothing but harmless water. But make no mistake, fuel cells definitely have their challenges. For one, they're taking a lot longer than expected to come down in price. Then there's the question of how to manufacture the hydrogen they run on in a way that doesn't obliterate all the good that fuel cells do.

As you'll see in this issue, Ontario's engineers are part of some innovative projects to create hydrogen in environmentally responsible ways (p. 50). And, despite the obstacles, industry experts are confident that the challenges facing fuel cells are no worse than those that other technologies had in their infancy, and they'll be worked through in time. Although it looks like the first mainstream fuel cells will be used to heat buildings, you can bet when the first mass market fuel cell cars are in production, I'll be first in line to get one.

Fuel cells, and other alternative energy forms, will do a lot to fulfill Ontario's

new energy mandate (p. 46). Last December, Bill 100, the *Electricity Restructuring Act, 2004*, was passed, which encompasses practically every aspect of energy in the province: conservation, generating new supply (including electricity from renewables), realistic pricing, and upgrades to the transmission system. This bill is the culmination of a total restructuring that has been happening over the last few years to transform energy production in Ontario from a monopoly to a competitive market.

The intent of it was to bring some stability to the industry. And, it has. But there is still a long road ahead for engineers working at the new and reinvented organizations charged with implementing this new integrated power plan—the first of its kind in the province in 15 years.

Although it's only November, it's time to turn our attention to the topics we'll tackle in *Engineering Dimensions* in 2006. We're always looking for P.Engs to help us fill our pages so, if you see a topic that you would like to write about, or know of an expert we can tap into, call or email me. (Keep in mind that articles for Viewpoint, Professional Practice, Management, and so on, don't necessarily have to match our editorial themes.) Just contact me with your idea, and we can take it from there.

Have a great holiday season and we'll see you back in January.

Jennifer Coombes
Managing Editor

2006 Editorial Calendar

January/February—Volunteerism

Member volunteers are the backbone of PEO; without them, many of the organization's key activities would grind to a halt. We'll spotlight some of the volunteers who are giving back to their profession.

March/April—Self-Regulation

Threats to the self-regulatory status of the engineering profession are prompting PEO to step up efforts to make its voice heard. We'll review efforts to reverse the trend of regulatory incursions.

May/June—Health and Safety

Recent catastrophic events worldwide have put new focus on engineers' ability to keep the public healthy and safe. We'll look at what went wrong in these instances and what steps engineers can take to better protect the public.

July/August—Complaints and Discipline

What really happens when a complaint is made against a P.Eng.? Some changes are in the works at PEO. We'll walk readers through the entire process, from complaint to resolution.

September/October—Access to the Profession

Access to the engineering profession is a perennial challenge, and not just for graduates of international programs. We'll delve into issues surrounding diversity in engineering.

November/December—Strategic Plan

PEO's five-year strategic plan is well underway, with almost 20 supporting projects in full swing. This issue will focus on the progress of the plan to date.