

Association of Polish Engineers in Canada in a joint venture with

- IEEE Education Society and Toronto Section
- ISA Management Division and Toronto Section
- PEO Professional Engineers Ontario
- SDP Association of Polish Journalists Americas Chapter

Last in Series of Educational Energy Seminars

Energy Mini-conference Educational Series 2012: Joint Venture IEEE/ISA/PEO/SIPwK/SDP

- 1. January 19, 2012 The Urgency for a New Energy Paradigm for Ontario
- 2. February 16, 2012 Nukes after Fukushima
- 3. March 22, 2012 Fuel Cells vis-a-vis Wind Turbines and Photovoltaics
- 4. April 19, 2012 Energy-Passive Construction

5. May 24, 2012 Nanotechnology for all including a search for ultimate energy solution

SPK Halls 206 Beverley St, Toronto (1 block South of St.George and College). Free parking <u>Contact: Jan Jekielek e-mail: jekielej@aol.com</u>

AGENDA

(6:00 p.m. – Spontaneous networking, cash bar, dinner available at the downstairs restaurant) 7:00 – 10:00 p.m. – Moderated Panel; presentations followed by interactive sessions with participants Complementary refreshments, spontaneous breaks are anticipated.

ABOUT

Traditionally, energy has been a big subject for Ontarians. Truth-discovery centered Mini-conferences #1, #2 and #3 have dealt with Ontario electricity generation. Mini-conference #4 was about a wider subject of energy with focus on intrinsically green so called passive houses and buildings. Our panelists have dealt with a wide variety of technical and cost issues head on, no political correctness or pleasing establishments. Below is a short conclusion summary.

In the nutshell, Ontario is particularly unsuitable for using wind power since wind blows here best at nights when power is not needed. While nuclear stations must run flat out, with wind power having a preferred status on the electrical network any excess of wind energy necessitates shutting down starting with easiest to manipulate, cheapest energy generating hydro stations. When we need extra power, we have to fire polluting gas stations that meanwhile have been conveniently built. Wind turbines effectively are shutting down any new nuclear business in Ontario. With a few billion dollars of Wind Turbines still to be built, lots of energy storage (more costly) or nuclear power modulating capability (less costly) will be necessary.

Energy-passive construction is popular in Europe using a building as the super-green energy generator and storage. They use simple standards focused on direct energy savings 70-90% translating to more than 30% saving of total energy needs at 10-15% increase in building cost. USA and Canada follow socio-technical LEED and/or ENERGY STAR certification programs resulting in minimal total energy savings. Shouldn't we be aware of all that and have a say in what we want?

Mini-conference #5 will crown the Educational Energy Series introducing an unimaginable nanotechnology revolution as it moves swiftly into creation of dramatic improvements everywhere including delivery of ultimate energy solutions.



These educational seminars are dedicated to short and long term power challenges in Ontario and Canada, and are directly applicable to Polish as well as regional and global energy issues.