

2008/2009 PROGRAMME

April Lecture

“Balancing the Risks of Climate Change in the Power Sector”



SPEAKER: Jim McConnach, SMIEEE, FIET, P. Eng.

DATE: Tuesday 21st April 2009

TIMES: Light refreshments 6:30 pm.

Lecture 7:00 pm

WHERE: Toronto Westin Bristol Place Hotel,
950 Dixon Road, Toronto ON M9W 5N4

Tel: 416-675-9444 *n.b. Different Hotel this month*

PARKING

There is parking on the premises. Please bring parking tickets into meeting for validation.

COST:

There is no charge for this event

DIRECTIONS:

See map overleaf.

REGISTRATION

Please e-mail hon-secretary@imeche-ccb.org or telephone Phil Apperly at (905) 936-2855 by Thursday 16th April

ABSTRACT:

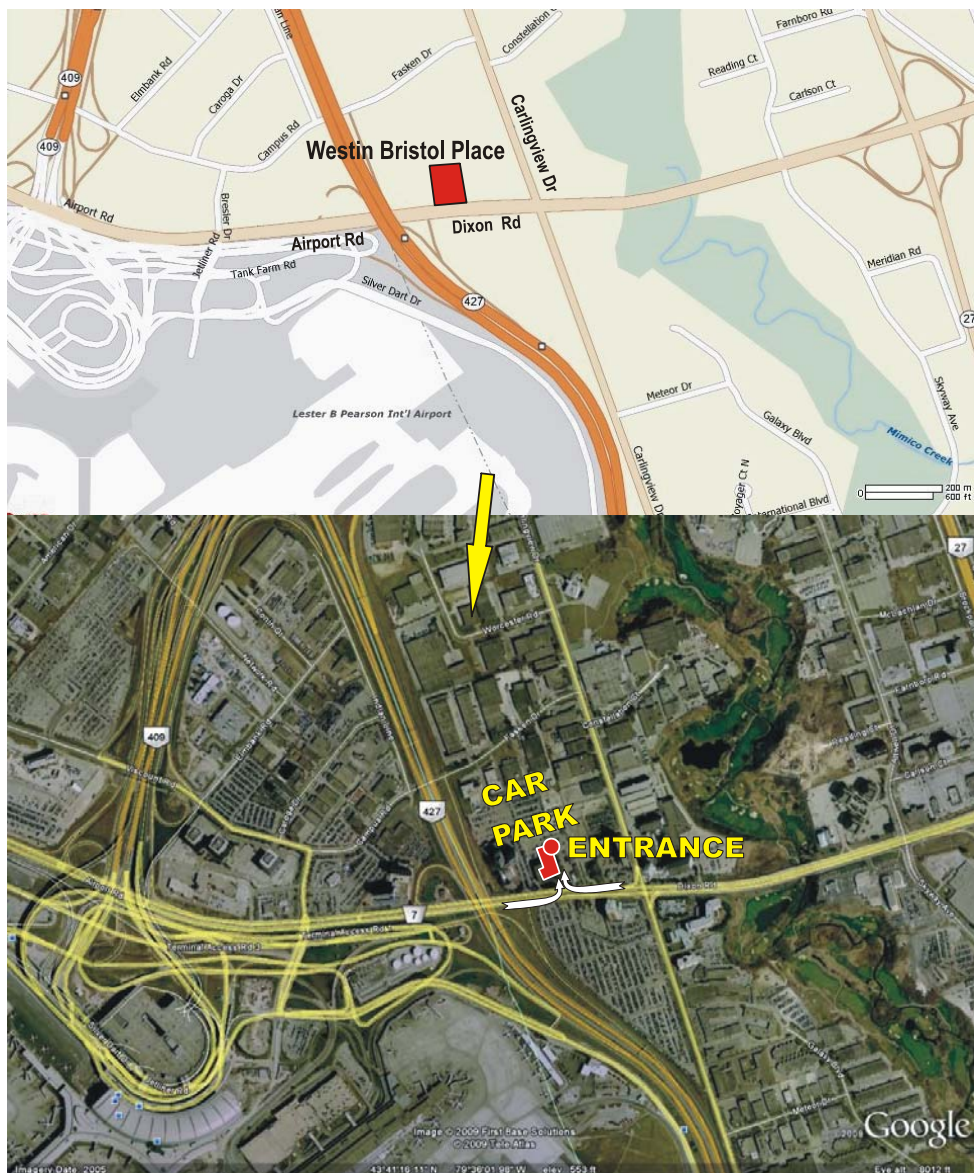
This presentation advocates a risk management approach to studying climate change impacts on system planning and operational decision-making.

The complexities and uncertainties surrounding our current-day body of knowledge of climate science and the natural and man made affects on climate change motivates a risk management approach. Major impacts, risks and costs to the power grid infrastructure are considered. Risks also come from such factors as over-dependence on fossil fuels, uncertainty about the regulatory structure, intermittent resource behavior, the aging infrastructure and its capability to handle new demand patterns (e.g. charging electric vehicles), the implementation and schedule for a smart grid, and the level of investment applied to renewing the infrastructure. A risk assessment and risk management approach will naturally help to prioritize strategies for flexibility and hedge against these risks.

Adaptation costs to cope with gradual changes in climate can be orders of magnitude less than mitigation costs to reduce GHG emissions. This suggests having a balanced approach between the two. Some strategies and priorities for mitigation and adaptation measures are suggested along with the benefits of these to the power industry. The main conclusion is to have a balanced and flexible combination of mitigation and adaptation measures to manage the costs and risks.

ABOUT OUR SPEAKER:

James (Jim) McConnach, SMIEEE, FIET, C. Eng., P. Eng.: After graduating from St Andrews University, Scotland in 1964, Jim enjoyed a long career in the electricity supply industry in the UK and Canada. This included 23 years with Ontario Hydro (OH) where he had the opportunity to work on and manage a wide range of challenging projects in HVAC and HVDC transmission, hydro, fossil and nuclear generation, and energy efficiency. In the 1990s he played a key role in the OH Demand/Supply Options Study; development of the OH Demand/Supply Planning Strategy and the early versions of the provincial Demand/Supply Plan now referred to as the Integrated Power System Plan (IPSP). He retired from OH in 2000 and continued to practice as an independent consultant up to the end of 2008. He has been involved with the Climate Change Technology file for over 13 years and his main interests include mitigation and adaptation measures, greenhouse gas (GHG) market mechanisms and GHG standards development. Jim is a registered Professional Engineer in Ontario, a Fellow of the Institution of Engineering & Technology (IET), UK, and a Senior Member of the IEEE, USA. He is a past member of the Technical and Professional Services Board (TPSB) of the IET and past TPSB Representative on IET Council. He is also Chair of the IEEE-Power & Energy Society (PES) Policy Development Coordinating Committee (PDCC) and past Chair of the PES Working Group on Implementing Technology to Limit Climate Change (CCWG) - now the PES Climate Change Technology Subcommittee (CCTSC). Jim also remains an active member of the PEO Experience Requirements Committee (ERC).



For your Diary

On Saturday May 9th we are planning a family-friendly morning trip to the Halton County Radial Railway (A streetcar museum) near Guelph. As well as static displays, there are many working cars to take you through the wooded grounds. We hope to have a short technical talk from one of their volunteers and lunch at a local restaurant afterwards.