

# Distributed Generation and The Future of Ontario's Electricity Grid

OCTOBER 26 & 27, 2008, WATERLOO, ONTARIO

Conference presented by



Institute for Energy and  
Environmental Policy



Waterloo Institute for  
Sustainable Energy

The Waterloo Inn & Conference Centre, 475 King Street North, Waterloo, ON N2J 2Z5 Canada

## SUNDAY, OCTOBER 26, 2008

4 - 5:00 pm **Registration**

5 - 9:00 pm **Reception and Dinner**

**Conference Chair** Glen Wright, *Chairman,  
Council for Clean & Reliable Electricity*

**Dinner Speaker** Minister of Energy - *Invited*

## MONDAY, OCTOBER 27, 2008

8:30 - 10:00 am

### Session 1: Ontario's Transmission Requirements

This session examines the multiple transmission requirements implied by the Ontario Government's generation mix mandate and the reliability requirements of the Ontario electrical grid as indicated in the Integrated Power System Plan. Subjects for discussion include the additional high voltage transmission out of the Bruce Nuclear plants and the "enabler lines" required to access increasingly remote renewable wind and water generation sites over the life of the plan.

#### Speakers

Ken Kozlik, *Chief Operating Officer of IESO*  
George Vegh, *McCarthy*  
Joe Tonneguzzo, *Ontario Power Authority*

10 - 10:30 am **Coffee**

10:30 - 12:00 noon

### Session 2: Regulatory and Political Constraints

This session details the multiple permissions and regulatory processes for building new energy infrastructure in the province. These include federal, provincial and local hurdles that are made increasingly more complicated by NIMBYISM and the more recent, but critical, "duty to consult" with First Nations.

**Chair** Tom McLaren, *Principal,  
Bridgepoint Group Ltd.*

#### Speakers

Mike Richmond, *McMillan Binch Mendelsohn*  
James Sidlofsky, *Borden Ladner Gervais*  
Paul Manning, *Willms & Shier  
Environmental Lawyers*

12:00 - 1:30 pm **Lunch**

John Kim Bell, *President & CEO, Bell and Bernard Ltd.*  
Mr Bell will speak on First Nations perspectives on energy development and electrical grid expansion in Ontario.

1:30 - 3:00 pm

### Session 3: Distributed Generation and LDC's

This session reviews the key technologies and economics of distributed generation embedded within large load centres (versus large scale centralized plants located at some distance from load). The session reviews the problems and prospects as seen by local distribution companies.

**Chair** George Todd, *Council for Clean  
& Reliable Electricity*

#### Speakers

Dr. Jatin Nathwani, *Executive Director, Waterloo  
Institute for Sustainable Energy,  
University of Waterloo*  
John Grotheer, *Cambridge Hydro*  
Rene W. Gatien, *President & CEO,  
Waterloo North Hydro Inc*

3 - 3:30 pm **Coffee**

3:30 - 5:00 pm

### Session 4: Transmission/Distribution System Futures?

This session is devoted to alternate visions of the Ontario electricity grid. Will it (or should it) be the traditional model of large scale generating plants located a long distance from load, or will it be more focused on the distributed generation model with generation embedded within large load centres? While the latter model minimizes the need for new transmission lines, it raises an entirely new set of issues with respect to meeting local reliability requirements.

**Chair** Bryne Purchase, *Executive Director,  
Queen's Institute for Energy and  
Environmental Policy*

#### Speakers

Jan Carr, *Corporate Director and former CEO of  
Ontario Power Authority*  
Don MacKinnon, *President of the Power  
Workers Union*  
Steve Dorey, *Hydro One*