

Minimize downtimes and drive profitability!



# SMART GRID

October 14<sup>th</sup> & 15<sup>th</sup>, 2009 | Four Points by Sheraton Toronto Airport | Toronto, ON

## Summit

**Minimize Downtimes | Improve D&T Efficiency | Maximize Security  
Reduce Capital Expenditures | Prepare For Regulations | Conserve Energy**

Hear from these leaders

**KEYNOTE**



**Massoud Amin,**  
*Electrical and Computer Engineering  
Professor, Director, Center for the  
Development of Technological Leadership,  
University of Minnesota*



**Pamela Nowina,**  
*Vice Chair,  
Ontario Energy Board*



**Karl Camilleri,**  
*CEO,  
Enemalta Corporation (Malta)*



**Anthony Haines,**  
*President,  
Toronto Hydro Electric Systems Ltd.*

Don't miss the opportunity to benefit from  
**12** world-class case studies, panels and experts:

- 1 **Hydro One**
- 2 **BC Hydro**
- 3 **Manitoba Hydro**
- 4 **Enemalta Corporation (Malta)**
- 5 **Ontario Energy Board**
- 6 **Toronto Hydro Electric**
- 7 **Burlington Hydro Electric**
- 8 **Newmarket Hydro**
- 9 **Chatham-Kent Hydro**
- 10 **Canadian Electricity Association**
- 11 **Electricity Distributors Association**
- 12 **Natural Resources Canada**

Source these **8** immediate benefits:

- |  |   |   |   |
|--|---|---|---|
| 1. <b>INCREASE</b><br>efficiency & reliability   | 2. <b>ENHANCING</b><br>interoperability | 3. <b>PROTECT</b><br>against cyber attack     | 4. <b>REDUCE</b><br>outage frequency & duration |
| 5. <b>OVERCOME</b><br>barriers to implementation | 6. <b>PROMOTE</b><br>cleaner energy     | 7. <b>INTEGRATE</b><br>distributed renewables | 8. <b>OPTIMIZE</b><br>ROI & productivity        |

Cocktail Reception: **SIEMENS**

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# Improve efficiency, lower costs, conserve energy, minimize outage & drive profitability!

High profile outages, escalating economic costs and environmental concerns mean modernizing the grid cannot be put off! "Business as usual" is no longer sustainable. Utilities, governments and consumers are realizing that major change must take place to address the challenges facing the economy and the environment.

***Your next step? This conference!***

## ELEVATE ENERGY SECURITY, RELIABILITY AND ENVIRONMENTAL RESPONSIBILITY

– take away **12** key strategies on:

- 1 Reducing capital expenditures
- 2 Better utilizing assets
- 3 Increasing efficiency
- 4 Enhancing interoperability
- 5 Protecting the grid
- 6 Reducing outages and improving quality
- 7 Overcoming barriers to implementation
- 8 Promoting cleaner energy
- 9 Enabling distributed and renewable energy integration
- 10 Optimizing ROI and productivity
- 11 Meeting and exceeding regulations
- 12 Drive profitability



**The Canadian Smart Grid Summit** is part of a series of annual events designed to help Canada's power industry, regulators, policy makers and stakeholders to overcome the challenges of implementing the smart grid to move the electric industry forward. The event brings peers together to share information, challenges and successes, and will give Canada's utilities a clearer vision on how to boost profit while benefiting the public and preserving the environment.

## SOURCE STRATEGIES AND TACTICS

From **7** Leading Case Studies:

- 1 Hydro One
- 2 BC Hydro
- 3 Toronto Hydro Electric
- 4 Enemalta Corporation (Malta)
- 5 Manitoba Hydro
- 6 Burlington Hydro Electric
- 7 Chatham-Kent Hydro

Emulate their success. Learn from their challenges to save time and money. Establish your organization as the next leader! This conference comes around only once a year; **register now, as this event is sure to sell out!**

## TAKE ADVANTAGE OF THE

Interactive Format and Extraordinary Networking Opportunities!

- Exclusive and extended Q&A
- Interactive peer-to-peer learning
- Face-to-face interaction
- Networking breaks
- Vendor exhibits
- Connect with innovators and leaders

Take this opportunity to see how your colleagues are doing; share your experiences and exchange ideas and strategies! If you want to meet with your peers and form valuable connections, this is your best opportunity of the year.

**You Cannot Afford To Miss This Unique And Timely Event: Register Now!**

Don't miss this chance to network, discuss and debate the issues with representatives at the core of the future of the nation's infrastructure. Register for our limited spaces by calling 1-866-298-9343 or e-mailing [registrations@strategyinstitute.com](mailto:registrations@strategyinstitute.com) today.

## ATTEND THIS HIGH-LEVEL SUMMIT

# specifically designed for the following:

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### Utilities, Electricity Generators, Distributors, Transmitters, Independent System Operators, Local Distribution Companies

C-level executives, Directors of: Smart Grid, Smart Metering & AMI, Demand Response, Operations, IT and Communications, Regulatory & Government Affairs, Billing, Conservation

- **IMPROVE** electricity efficiency, reliability and security
  - **LOWER** operating costs and reduce expenditures
  - **INTEGRATE** communications for a self-healing, efficient grid
  - **CREATE** security and resiliency against cyber attacks
  - **INCORPORATE** technologies to optimize assets and operating efficiency
- 

### Federal, Provincial and Municipal Government Departments, Agencies and Crown Corporations

Public Works, Regulatory, Policy, Environment, Natural Resources

- **CONNECT** with constituents
  - **INCREASE** energy independence
  - **ENCOURAGE** distributed renewable power
  - **REDUCE** environmental impact
  - **EMPOWER** consumers
  - **FULFILL** your mandate
- 

### Vendors of Smart Grid Technology, Products and Services; Legal and Advisory; Consultants

- **BE** short listed on RFPs
- **CONNECT** with million dollar spending budgets
- **LEARN** new developments
- **NETWORK** with decision-makers
- **FORM** new alliances
- **DRIVE** innovation and progress



Send Your Entire Management Team and Benefit from Special Pricing

Ensure that you develop a common vision across your group by sending your entire team to this premier event. Allowing everyone on your team to attend will ensure open communication and an effective smart grid implementation.

### Ensure Your Leadership With A Customized Sponsorship/ Exhibit Package

By sponsoring this one-of-a-kind event, you can showcase your company as an industry LEADER. Ensure your presence is known—be visible at this premier event! Select sponsorship packages are still available. To learn more, contact **Bill Lem** at **1-866-298-9343 ext. 250**, or email **bill@strategyinstitute.com**.

**Strategy Institute** is proud to be a facilitator in connecting business and industry leaders in a variety of sectors for over 15 years. We strive to strengthen the foundation of Canada's economy through annual conferences such as "Asset Management for Utilities", "IFRS for Utilities", and more. One of our higher purposes is to provide decision-makers with the knowledge and tools they need to provide good corporate governance, which will benefit stakeholders, and ultimately the public good.

**7:30 AM**

## Registration & Sponsor Exhibits Open – Continental Breakfast

**8:15 AM**

## Opening Address From Day One Chair



**Linda Bertoldi**,  
Senior Partner, Chair, National Electricity Markets Group,  
Co-chair, Energy Markets Group,  
Borden Ladner Gervais LLP

**8:30 AM KEYNOTE ADDRESS:**

## Enabling A Smarter Grid To Meet Energy Requirements And Encourage Innovation

Recent policies combined with potential for technological innovations and business opportunities have attracted a high level of interest in smart grids. We face both opportunities and challenges.

- How to retrofit and engineer a stable, resilient grid with large numbers of unpredictable power sources?
- What roles will assets optimization, increased efficiency, energy storage, electrification of transportation, cyber security, and other technologies play in the grid of the future?
- What are the emerging technologies to enable new products, services, and markets?



**Massoud Amin**,  
Electrical and Computer Engineering Professor, Director,  
Center for the Development of Technological Leadership,  
University of Minnesota

*Dr. Amin has pioneered R&D into smart electric power grids, coined the term 'self-healing grid' and has led the development of more than 24 advanced technologies for national critical infrastructures. He is in high demand as a speaker and author, has given briefs on Capitol Hill, and is an active member of numerous boards and associations including IEEE.*

**9:15 AM CASE STUDY: HYDRO ONE**

## Economic Analysis: Exploring the Costs and Benefits to Smart Grid Implementation

One issue around smart grid adoption is that of investment costs and expected subsequent rate increases to consumers. What are the likely costs associated with implementation? The economic analysis will be framed by Hydro One's experiences in developing its Smart Grid.

- Background and the next steps
- Building the business case: economics and justifications
- Addressing the societal perspective



**David Curtis**,  
Director, Asset Management, Processes and Policies,  
Hydro One Networks Inc.

**10:00 AM**

## Sponsor Exhibit Area – Networking Break

Interact with conference speakers and fellow attendees.



**10:30 AM CASE STUDY: MALTA**

## Smart Grid Country: Benefits and Realities with Designing a Nationwide Smart Grid

Malta's project is a world first for a nation, deploying smart meters within its network and creating at the same time the foundations for a smart network. The advantages of a small nation are offset by the complexity of the network realities, while major projects are being done in parallel to ensure that by 2012–2013 this small European nation is at the forefront of energy and resource management.

- Replacement of analog electricity meters
- Integration of water meters with radio communications
- Expected benefits to consumers and the community

*Hear how key utility processes will be transformed over three years through a nationwide smart grid implementation.*



**Ing. Karl Camilleri**,  
CEO,  
Enemalta Corporation

**11:15 AM PANEL DISCUSSION**

## Grid Security: Communications Requirements and Safeguards for a Reliable and Protected Smart Grid

As data collection increases through the application of SCADA, smart meters and more, the backbone to support two-way communications is critical. Join this panel of experts to:

- Assess upgrades required and options, including BPL and wireless
- Identify potential threats, risks and vulnerabilities
- Review defenses, countermeasures and tools to bolster security

*Walk through the options available to make your smart grid reliable and safe.*



**David Curtis**,  
Director, Asset Management,  
Processes and Policies,  
Hydro One Networks Inc.



**Doug Houseman**  
Global CTO Energy,  
Utilities & Chemicals  
Capgemini



**Tyler Williams**,  
President & CEO,  
Wurldtech Security  
Technologies, Inc.



**Moderator:**  
**Pan Kamal**  
Marketing Director  
AlertEnterprise



**Hyman Chantz**,  
Executive Consultant Security & Privacy Services,  
IBM



**12:00 PM**

## **Exhibition Area – Networking Luncheon**

Join the conference speakers and your peers for a relaxing luncheon.

**1:30 PM CASE STUDY: MANITOBA HYDRO**

## **Building the Business Case for Smart Meters and the Smart Grid**

Manitoba Hydro looks at operational efficiencies, capital investment, and impacts on the rate base and the customer. Hear valuable details about the business case for smart metering and the smart grid:

- Improve performance
- Optimize investments
- Increase efficiency

**Ted Cotton,**

*Business Solutions Manager,*  
**Manitoba Hydro**

**2:15 PM CASE STUDY: TORONTO HYDRO**

## **Connecting the Smart Grid: Strategy for Toronto Hydro's Electricity Network of the Future**

The Smart Grid represents the single greatest quantum leap in the history of the electric utility, a transformation of how it functions in its social, economical and environmental contexts. The perfect storm has arrived. The challenge lies not in the vision, but in translating vision into action by navigating a path through this perfect storm. This presentation will discuss Toronto Hydro's course.

- Defining Toronto's Smart Grid
- Impact of external drivers such as the Green Energy Act, City of Toronto's Climate Change Plan and technology evolution
- Roadmap towards Smart Grid realization
- Launching of Toronto's Smart Grid community



**Anthony Haines,**  
*President,*

**Toronto Hydro Electric Systems Ltd.**

**3:00 PM**

## **Sponsor Exhibit Area – Networking Break**

Continue the debate and discussion with your peers while enjoying a refreshing break.

*Afternoon  
Refreshment Break  
sponsored by:*



**3:30 PM**

## **Advancing the Framework for Standardization and Interoperability**

Interoperable applications that cross the boundaries between systems are needed before widespread smart grid adoption. Hear how leading organizations are laying out the framework for plug-and-play of systems and devices from the meter to the control center. This session will:

- Identify the most critical communications protocols and data formats
- Demonstrate how the industry is building alliances and partnerships
- Enable acceleration of technology with a predictable technical infrastructure

**Gary Rackliffe**

*Vice-president, Smart Grids*  
**ABB Inc.**

**4:15 PM CASE STUDY: BURLINGTON HYDRO**

## **Optimizing Cost-Effective Electricity Service with Smart Grid Technology**

Burlington Hydro has embarked on an initiative to transform the electricity system into the smart grid of tomorrow with the GridSmartCity™ plan. In order to build a greener electricity system, the plan brings together stakeholders to promote the growth of smart grids.

- Collaborate with partners
- Enable and benefit from new technologies
- Promote effective electricity cost management



**Gerry Smallegange,**

*President and CEO,*

**Burlington Hydro Electric Inc.**

## **5:00 PM Conference Adjourns to Day Two**

### **Evening Social Activities**

Network with industry leaders and stakeholders while enjoying some of the best Toronto has to offer. Start by joining fellow delegates and speakers for complimentary appetizers in the hotel lounge.\*\*



# DAY 2

October 15, 2009

**7:30 AM**

## Registration & Sponsor Exhibits Open – Continental Breakfast

**8:15 AM**

## Opening Address From Day Two Chair



**J. Mark Rodger,**  
*Partner, Co-chair, Energy Markets Group,*  
**Borden Ladner Gervais LLP**

**8:30 AM ONTARIO UPDATE:**

## Response to the Evolving Energy Industry: Attracting Investment Into Reliable and Renewable Energy

The Green Energy and Green Economy Act requires distributors to build a smart distribution infrastructure. The smart grid will allow better integration of production, delivery and consumption through improved communications and automation. The Ontario Energy Board has an important role in making this happen and is working quickly to ensure that the right regulatory structures are in place to support the government's goal for technological innovation through the smart grid. Find out how the Board will:

- Assess distributor plans for smart grid development
- Remove regulatory barriers while ensuring prudence
- Facilitate timely investment in renewable connection and smart grid development



**Pamela Nowina,**  
*Vice Chair,*  
**Ontario Energy Board**

**9:15 AM**

## Overview of National and International Developments: Regulatory, Economic and Technology

Smart grid is developing swiftly in different ways in different areas. Standards are being developed under the Obama Administration in the United States, the EU is also making great strides, and Canada is seeing developments at the national and provincial levels. This session will review the range of developments including three key areas:

- Regulatory
- Economic
- Technological



**Eli Turk,**  
*Vice President,*  
**Canadian Electricity Association**

**10:00 AM**

## Sponsor Exhibit Area – Networking Break

Interact with conference speakers and fellow attendees.

**10:30 AM**

## Integrating Clean Energy Into The Smart Grid For Long Term Sustainability

Utilities must keep abreast of the changes in the energy world, including consumer interest in green initiatives, grid complexities and changing politics and regulations. Distributed renewables presents a great challenge to the future of the electric system. Get up to speed with information on:

- Integration of clean energy and smart grid strategies
- Benefits of integrating renewables into a Smart Grid implementation plan

**David Beauvais,**  
*Smart Grid Project Leader,*  
**Natural Resources Canada**

**11:15 AM PANEL DISCUSSION**

## Smart Metering: Success Factors for Selection, Implementation and Management

A key component of a smart grid is that of smart meters, which allow two-way communications between the utility and customers. A robust system can measure consumption, record voltage, verify outages, and more. Join this session to:

- Identify needs and objectives of your organization
- Hear tips and success factors for vendor selection and implementation
- Learn about resources required and best practices for on-going management

*Take away insights to help you better select, implement and manage your smart meters.*



**Moderator:**  
**Paul Ferguson,**  
*President, Newmarket-Tay Power; Director,*  
**Newmarket Hydro**

**Patti Harper-Slaboszewicz,**  
*Senior Director, Utility and Energy Projects,*  
**UtiliPoint International**



**Mark Fecenko,**  
*Partner, National Director IT Practice*  
**Borden Ladner Gervais LLP**

**Sandip Dasgupta,**  
*Business Manager – Energy and Utilities Practice,*  
**TATA Consultancy Services**



**Bruce Orloff,**  
*IUN/Smart Grid Lead,*  
**IBM Canada**

**12:00 PM**

## Exhibition Area – Networking Luncheon

Join the conference speakers and your peers for a relaxing luncheon.



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1:30 PM

## Modernizing Electricity Delivery Systems With Smart Grid and Partnerships for Sustainable Communities

Bill 150, the Green Energy and Green Economy Act, is ambitious and enabling legislation that is making fundamental changes to the roles and responsibilities of the province's local electricity distributors. This presentation will inspect:

- Opportunities in renewable and distributed generation, smart grid development, and new responsibilities in the delivery of CDM activities
- Proposed changes to the electricity market, advocated through the vision of the LDC sector
- The future role of electricity distributors in building 'sustainable communities of tomorrow'



**John Loucks,**  
*Chair, Electricity Distributors Association;*  
*Chief Operating Officer, Brantford Power*

2:15 PM CASE STUDY: BC HYDRO

## Smart Grid As A Strategy: Building A Roadmap for Smart Grid Projects

BC Hydro is a national leader in Smart Grid development, and is building an integrated roadmap for a number of projects. Hear about the progress and upcoming developments to tie together the various initiatives, including:

- Advanced communications, smart grid applications, smart metering, DMS and substation automation
- Future requirements and planning including plug in electric vehicles, distributed generation and microgrids

**Yasuhiko Ogushi,**  
*Strategic Coordinator, Smart Grid,*  
**BC Hydro**

3:00 PM

## Sponsor Exhibit Area – Networking Break

3:30 PM CASE STUDY: CHATHAM-KENT HYDRO

## Increasing Reliability and Efficiency of Distribution Systems by Interfacing Smart Meter Data With GIS

Chatham-Kent Hydro is on the leading edge of the movement toward a smart grid and is taking steps to increase the reliability and efficiency of its overall distribution system. Hear about the utility's background in smart grid development and their plans to move forward.

- Building the backbone for the smart grid
- Benefits of interfacing smart meter data with GIS
- Plans to expand the Peaksaver program to empower customers

**Dan Charron,**  
*Director of Engineering and Technical Services,*  
**Chatham-Kent Hydro**

4:15 PM WRAP-UP PEER-TO-PEER DISCUSSION

## How Can Smart Grid Transform the Utility Industry In Canada?

Drawing on the information presented over the past two days, join a group of your peers to discuss how smart grid can transform the industry in Canada, including:

- How should "Smart Grid" really be defined?
- Smart grid functionality and costs
- Benefits from the application of this information



**Moderator: Grant Gilchrist, P. Eng.**  
*Consulting Engineer, Data Communications*  
**EnerNex Corporation**

5:00 PM Conference Adjourns

### Our Venue:

## Four Points by Sheraton Toronto Airport

**Four Points by Sheraton Toronto Airport**  
6257 Airport Road, Mississauga, ON L4V 1E4  
Global Reservations: 1-800-368-7764  
Direct: (905) 678-1400



Four Points by Sheraton Toronto Airport is located nearby Toronto's Pearson Airport Terminal 3. With a free airport shuttle, newly renovated bedrooms including the Four Comfort Bed and free high-speed wireless internet access, this is a convenient location for both travelers and locals. Local conference attendees can avoid the bumper to bumper grind of downtown with this chosen prime airport location having easy access to all major highways 427, 401, 409 and 407 and daily free parking.

Call Four Points Sheraton Toronto Airport by September 18th to receive our conference rate of **\$125/night**.

### Staying at the hotel has **ADVANTAGES** for you!

- ① The entire conference will take place inside the Four Points by Sheraton Toronto Airport. You will be just steps away from all the sessions and networking action!
- ② Specially arranged evening SOCIAL ACTIVITIES to facilitate peer-to-peer interaction and networking will be taking place in the hotel.
- ③ Save money, with the special room block mention "**Smart Grid Summit by Strategy Institute**" you will pay only **\$125/night** for a standard room in this luxurious hotel.
- ④ First class amenities! Experience Four Points by Sheraton Toronto Airport facilities.
- ⑤ Bring your spouse and enjoy a mini vacation while attending the conference.

To register call: 1-866-298-9343 • E-mail: [registrations@strategyinstitute.com](mailto:registrations@strategyinstitute.com)



