Registration

To ensure a seat please register on-line at www.ieee.org/EPS2006

Early Registration Fees (before October 20, 2006) Symposium and Tutorial		
	Member IEEE , IEE , PEO , OCRI , OTI	Non-Member
Standard	\$220	\$270
Retired	\$130	\$180
Job-seekers	\$130	\$180
Students	\$90	\$140

Late registration fees (see website) apply after October 20, 2006.

Registration Contact: Preeti Raman at praman@eidosglobal.com

Attendance is eligible for Continuing Education Units (CEUs)

Supporters, Exhibitors & Sponsors









Natural Resources

Ressources naturelles









For support, exhibit, and sponsorship opportunities, please contact Barry deYoung at barry.deyoung@ieee.org

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6th Annual **Electrical Power Symposium 2006**

From Tesla's AC Power System to **Distributed Generation and Smart Grids**



November 9-10, 2006 Algonquin College & Ben Franklin Place, Ottawa, Ontario, Canada

Why to attend:

- **Network with Industry Leaders and Professionals**
- **Learn about the Latest Innovations and Trends**
- Learn how to reduce cost, improve efficiency and enhance reliability
- Discover what the future holds for the Power Industry



Key Note Speaker Colin L. Clark Executive VP & CTO. Brookfield **Power Corporation**



Moderator **Bob Hanna** President. IEEE Canada & President of RPM Engineering

Hydro

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EPS 2006 Programme

Nov. 9th Tutorials & Tour / Exhibits

8:00 AM to 4:00 PM

Breakfast, break refreshments, lunch, and digest included.

- Communication Systems for DG, Stations and Distribution Networks
- Protection and Control Issues with Distributed Generation
- Evolution of Fault Passage Detection and Power Restoration
- Smart Grid Technologies, Converter Fed Microgrids: Challenges and Solutions

Nov. 10th Symposium

8:00 AM to 5:00 PM

Breakfast, break refreshments, lunch, and digest included.

Keynote Presentation by Colin L. Clark, P. Eng., Executive Vice President & Chief Technical Officer Brookfield Power Corporation.

The Evolution of the Generation, Transmission, and Distribution Systems; new challenges to the Central Station model and traditional distribution network; modern technologies in power systems: communications, real-time applications, protection, GPS-based phasor measurements, smart metering, automation.

- Nikola Tesla's Contribution to AC Power Systems and Electrical Engineering.
- Defining the Smart Grid
- Canadian & International Smart Grid Initiatives.
- Smart Power System Management: Advances in wide area measurement, monitoring, and protection, power flow and voltage control, power network analysis, competition/wheeling, security, survivability.
- Distributed Generation Technology Status: DG and Interconnection technology.
- Distributed Generation Financial Drivers and Barriers: comparison of incentives, Lender's and Owner's perspectives
- Various Perspective of DG Connection to the Grid: Operating Issues, Interconnection Standards, Deep vs. Shallow Entry.
- Morning and Afternoon Plenary Sessions, and Exhibits.

For latest program, visit www.ieee.org/EPS2006

Addressing:

- Distributed Generation Technologies
- Technical management of Distributed Generation Power Systems
- Developments in Smart Grids
- Drivers & Barriers

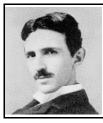
- Visions & Realities
- Canada's Market Climate
- Industry Players & Their Offerings
- Financial & Risk Considerations
- Applicable and Emerging Standards

EPS2006 Background:

Projected electricity supply and demand balance worldwide has rarely been in balance. Aging of the electricity system (generation, transmission and distribution) components is challenging the speed of their renewal or replacement. Distributed generation is increasingly challenging the central generation model to secure local supply and diversify the energy mix. The current stable, reliable, and controlled electricity network we depend on is changing and will become evermore dynamic and challenging to traditional management. New circumstances are demanding new ideas -- smarter ideas.

Smart technologies based on advances in network communication, instrumentation and measurement, interconnection, and automation, plus analysis, and AC/DC conversion are pivotal to the security and reliability of the new grid. Interestingly, Nikola Tesla, whose 150th birth anniversary we are marking this year, not only pioneered the AC power system; he also pioneered a number of other technologies that are relevant today. With a glimpse back at the development of the AC power system, EPS2006 provides a look forward to the Smart Grid and the future of power system.

As with each of the past symposia, we strive and take pride in covering strategic industry topics presented by leading speakers at exceptional value that only a non-profit professional organisation such as the IEEE can deliver.



This year 2006 marks the 150th anniversary of Nikola Tesla's birth: Nikola Tesla (1856-1943) was one of the most fascinating inventors of the 19th/20th century. He invented the rotating electromagnetic field and developed the alternating current system for transmission of electricity over large distances, radio transmission, remote control, neon and fluorescent lighting, and many other inventions that greatly influenced the world as we know it today, connected with electric power and communications.

EPS2006 Symposium

Date: November 10, 2006 Venue: <u>Chamber, Ben Franklin Place,</u> 101 Centrepointe Drive, <u>Ottawa</u>

EPS2006 Tutorial and Field Visit

Date: November 9, 2006
Venue: Algonquin College, School of
Advanced Technology, Salon T102, 1385
Woodroffe Ave.. Ottawa

For more information please visit the www.ieee.org/EPS2006

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