Registration

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

Early Registration Fees (before October 26, 2006) Symposium and Tutorials, Tour, and Exhibits		
	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 <u>after</u> October 26, 2006.

Registration Contact: Preeti Raman at praman@eidosglobal.com

Attendance is eligible for Continuing Education Units (CEUs)

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

Symposium Organizing Committee





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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 Centrepointe Theatre & Algonquin College, Ottawa, Ontario, Canada

Attend EPS 2006 to

- > Network with Industry Leaders & Professionals
- > Learn about Facts and Trends
- Learn what Impact it will have on You
- > Learn how to Improve Cost, Efficiency & Reliability
- > **Discover** what the future holds for **Power Industry**



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



Moderator Bob Hanna President, IEEE Canada & President of RPM Engineering

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IEEE Electrical Power Symposium 2006

Issues to be discussed:

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

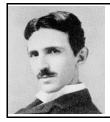
- Visions & Realities
- Canada's Market Climate
- Industry Players & Their Offerings
- Financial & Risk Factors
- Applicable and Emerging Standards

Electricity supply and demand worldwide has rarely been in balance. The surplus in generation capacity is rapidly becoming a thing of the past. Aging of the electricity system (generation, transmission and distribution) components and the slow speed of their renewal or replacement are increasing the problem. Distributed generation is an alternative to the central generation model to secure local supply and diversify the energy mix. The traditional stable, reliable, and controlled electricity network that we depend on will become evermore dynamic and challenging to manage. New circumstances are demanding new ideas -- smarter ideas.

Smart technologies based on advances in network communications, automation, instrumentation & measurement, protection, interconnection, AC/DC conversion, and analysis are essential to the reliability and security 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 the past symposia, EPS 2006 will be covering strategic industry topics presented by leading speakers at exceptional value that only IEEE can deliver.

2006 - 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.

For more detailed information on EPS2006, visit <u>www.ieee.org/EPS2006</u>.

EPS 2006 Programme

Tutorials & Tour / Exhibits, Thursday, Nov. 9, 2006

Algonquin College, Bldg. T, Salon T102, 1385 Woodroffe Ave., Ottawa 8:00 AM to 5:00 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
- Tour to a nearby hydro plant in Almonte

Symposium, Friday, Nov. 10, 2006

The Chambers, Centrepointe Theatre, 101 Centrepointe Drive, Ottawa 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, and automation.

- Nikola Tesla's Contribution to AC Power Systems and Electrical Engineering, an Historical Perspective.
- 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 the latest programme, visit <u>www.ieee.org/EPS2006</u>.

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