

Welcome to the May 2009 e-newsletter from Langford & Associates, providing you with product updates and the latest news from Ontario's electricity sector.

---

## May 2009: In this issue..

[Ontario News](#)  
[Product Spotlight](#)  
[SchneiderElectric](#)  
[Triacta](#)  
[ERLPhase](#)  
[Basler](#)  
[Did You Know...](#)

[Tax, Carbon and Cooperation](#)  
[New \(Free\) Services](#)  
[Partners with Cisco](#)  
[Smart Metering Specifications](#)  
[New Family Members](#)  
[New Family Members](#)  
[Grid Security](#)

## What's On

The EDA Upper Canada District Metering Technologies Committee Spring Conference will take place May 20-21 at the Holiday Inn in Oshawa (1011 Bloor St East). For registration information contact Scott Nash at [snash@puc.on.ca](mailto:snash@puc.on.ca)

The ION PowerLogic Annual User's Conference for 2009 will be held on October 23, 2009 at the Toronto Congress Centre. [Click Here](#) for preliminary agenda and registration

## Ontario News

**Harmonized Tax** In the Ontario Budget released on March 26, 2009 the Minister of Finance announced it will replace the Ontario Retail Sales Tax with a single value added tax that will be combined with the existing federal GST. There are two principal effects of harmonization on the energy sector in Ontario. First, electricity, natural gas, coal, gasoline, ethanol, methanol and most other fuels are currently exempt from Retail Sales Tax. By contrast, these energy sources are all treated as fully taxable supplies under the current GST regime and likely will be subject to the 13% HST following harmonization. Second, the Budget materials propose that all businesses that make more than \$10 million in GST/HST taxable sales will be unable to claim input tax credits to recover 8% of the 13% HST paid on a limited range of inputs that would otherwise be creditable. These include energy, along with a mixed bag of telecommunications services (other than internet access or toll-free numbers), road vehicles under 3,000 kg (including parts, services and fuel), food, beverages and entertainment. For full details see [www.gowlings.com](http://www.gowlings.com)

**Carbon Capture-** In late March, the Harper government announced it would inject up to \$140 million into eight private sector projects that have proposed to research, develop, and demonstrate carbon capture and storage (CCS) technologies. The funding will be provided through the \$230 million ecoENERGY Technology initiative that was launched in 2007 to support an increase in Canada's supply of clean energy. The eight proposals were submitted by partnerships led or co-led by ARC Resources, Enhance Energy, Spectra Energy Transmission, TransCanada, TransAlta, Husky, Enbridge, and EPCOR. For full press release see [www.powermag.com](http://www.powermag.com)

**Giving it Away** - Ontario wholesale electricity prices were below zero for roughly a third of the 648 hours between March 24 and April 19, according to the IESO. This means industrial and commercial electricity consumers who purchased power on the spot market got paid for one out of every three hours during the period. Large customers in the United States were also able to import the power at a negative price. Together, these large users of electricity represent 30 per cent to 40 per cent of Ontario's power load. For full article see [www.electricityforum.com](http://www.electricityforum.com)

**Liability** -The federal government has re-introduced legislation to replace the Nuclear Liability Act. Bill C-20, An Act respecting civil liability and compensation for damage in case of a nuclear incident, was given first reading in the House of Commons on March 24, 2009. The proposed legislation is substantially the same as its two predecessors: Bill C-5 and Bill C-63.. Bill C-5 was nearing the end of third reading debate when Parliament was prorogued for the federal election in October, 2008. For full details see [www.gowlings.com](http://www.gowlings.com)

**Broadband Wireless Agreement** - Redline Communications Group Inc. of Markham Ontario, a leading provider of WiMAX and broadband wireless infrastructure products, and Hydro One, have signed an agreement to trial Redline's RedMAX 4C WiMAX solutions to enable communications to smart meters and other advanced electricity distribution technologies. The Redline WiMAX solution is designed to enable remote meter reading as well as outage monitoring and will ultimately help operationalize a number of additional applications, including power distribution automation, power station /security monitoring, smart home applications, and remote work dispatch for field staff. For full press

release see [www.hydroone.com](http://www.hydroone.com)

**The Race is On** -Spurred by New York's target to meet 45% of its electricity needs through renewable resources by 2015, the New York Power Authority (NYPA) last week issued a call for proposals to develop offshore wind projects of up to 120 MW in New York State waters of Lake Erie and Lake Ontario. NYPA's request for expressions of interest to initiate efforts to develop offshore wind projects in the Great Lakes will be followed by a RFP to examine technical issues related to the viability of such projects before the end of the month. For further details see [www.powermag.com](http://www.powermag.com)

**Canada/U.S. Cooperation** The Canadian Electricity Association recently presented a paper on the electricity cooperation between the United States and Canada. This integration is stronger between Canada and the United States than any other trading nations in the world. The three areas highlighted for cooperation are transmission, generation technology development, and regulatory efficiency initiatives. For a full picture of current cooperation and the necessary work needed as both countries move towards environmental and energy targets see [www.canelect.ca](http://www.canelect.ca)

**Variable Generation** - Reliably integrating larger amounts of wind, solar, and other variable generation into the bulk power system will require changes to the way the system is planned and operated, stated the NERC in the special report "Accommodating High Levels of Variable Generation," released in April. The report highlights transmission additions and reinforcements, better forecasting of variable generation output, and access to flexible grid resources (including customer participation in targeted demand management, plug-in hybrid electric vehicles, and large-scale electricity storage) as key contributors to reliably integrating variable resources into the system. For full document see [www.nerc.com](http://www.nerc.com)

**Benchmarks**-As part of its reliability benchmarking program, NERC recently issued a letter providing feedback to the industry on reliability performance in 2008. While no trends were cause for alarm, the numbers clearly show the industry still has work to do to ensure reliability in 2009. In 2008, 14 Category 3 disturbances and one Category 4 system disturbance occurred, marking some improvement over prior years. Vegetation management remains a concern. For full details see [www.nerc.com](http://www.nerc.com)

**New Department** - In April, Colin Andersen, CEO of the OPA, announced the formation of a new department within the Legal, Aboriginal and Regulatory Affairs division of the OPA. Brian Hay, formerly OPA's Director of Corporate Communications, will become Director of First Nations and Métis Relations. Colin Andersen stated: "The formation of this new department is in response to the recommendations of First Nations' and Métis' organizations and recognizes the important role that the First Nations & Métis peoples have in the planning and development of renewable generation, transmission and conservation within Ontario's electricity system." For full story see [www.powerauthority.on.ca](http://www.powerauthority.on.ca)

**Making Steps** - GO Transit's first wind turbine was launched at Lisgar GO Station to showcase its green initiatives for Earth Day. It's the first wind turbine for a transit agency in the Greater Toronto Hamilton Area. Located in Mississauga, this 31.1 metre high wind turbine can generate 50 kilowatts of power and could produce up to 80 per cent of the station's power needs. On display were two of GO Transit's environmentally responsible transportation options - a 78-seat double decker bus and a 45-foot hybrid bus, both equipped with bike racks. Starting April 25, customers will see bike racks on all GO buses. For full story see [www.electricityforum.com](http://www.electricityforum.com)

**Energy Policy** - On March 31, the Democrats unveiled a 648-page discussion draft of the "American Clean Energy and Security Act of 2009," a bill touted as a "comprehensive approach to America's energy policy" because it seeks to establish, among other things, a carbon emissions reduction goal, a cap-and-trade program, and a federal renewable energy standard. The draft legislation is broken down into four titles: "Clean Energy," "Energy Efficiency," "Global Warming," and "Transitioning." According to the draft summary, the Clean Energy title pushes renewables, carbon capture and sequestration (CCS) technologies, low-carbon fuels, and smart grid technologies. The Energy Efficiency title seeks to increase efficiency across all sectors. The Global Warming title looks to place limits on emissions of greenhouse gases, and the Transitioning title issues protections for consumers and industry while promoting green jobs. For full story see [www.powermag.com](http://www.powermag.com)

### Product Spotlight... - New (Free) Services

In an on-going effort to drive down energy costs and improve efficiency, Schneider Canada has introduced several new services including motor and drive audits and power factor correction analysis. The Energy Action Audit is a one-day on-site walk through of a facility that provides a benchmark of the energy performance of major energy equipment. A report identifying major energy management and savings opportunities is provided as the audit deliverable. It provides a benchmark and a vision of the energy performance in the facility, applies a step by step approach allowing for a combination of quick wins and short and long term plans and is conducted by an experienced team of energy consultants. The energy action audit is provided no charge (free) and there are no obligations or contracts associated with the service. For further information <http://www.langford-assoc.com/products/Schneider.html> contact [sales@langford-assoc.com](mailto:sales@langford-assoc.com)

### Schneider Electric Partners with Cisco

January, Cisco Systems Inc. announced the Cisco EnergyWise technology that measures, reports and reduces the energy consumption of Internet Protocol (IP) devices such as phones, laptops and access points. Schneider Electric is working with Cisco as part of EnergyWise for building utility management, with SolarWinds providing network monitoring, and Verdiem monitoring PC power in order to extend EnergyWise as a platform for power management across IT and the building systems of an organization by early 2010. Schneider is currently looking at several integrations with CISCO that will help customers perform energy management over the Network. Schneider also plans to work on integrating third

party products and solutions with EnergyWise. They expect to help CISCO integrate a wide variety of IP-enabled devices and develop solutions to manage energy across the platform. For full press release see [newsroom.cisco.com](http://newsroom.cisco.com)

### Triacta - Smart Metering Specifications

Triacta, leading developer and manufacturer of smart meters, has released its latest specifications for consulting engineers. One for jobs requiring Measurement Canada sealing, the other is for non-sealed applications. Differences of note from other manufacturers include communications that are push architecture based, that do not require static IP addresses or modifications (access, pinholes, etc) to customer's existing firewall; and meters must be manufactured in accredited ISO 9001:2000 facility. For further details see [www.triacta.com](http://www.triacta.com)

### ERLPhase -4000 Series

ERLPhase is introducing the 4000 series of Protective Relays and Recorders. The series is built on a contemporary new fully type-tested substation hardened platform, - powered by a new processor 'future ready' for the next generation of applications, embedded with IEC 61850 station bus communications, and enhanced with user configurable DNP mapping. The first in the 4000 series will be the L-PRO 4000 Transmission Line Protection Relay which will be available from May 2009. This will be followed by the B-PRO 4000 Bus Protection Relay and TESLA 4000 Power System Recorder in July 2009. For further information see [www.erlphase.com](http://www.erlphase.com)

### Basler - New Members of BE1-11 Family

Basler announced the newest members of its BE1-11 relay family at the Georgia Tech Relay Conference in Atlanta. The BE1-11g generator protection system, the BE1-11i intertie protection system and the BE1-11f feeder protection system combine Basler's numeric product line with a larger and sharper LCD display, a fully drawout half rack case, modern communications, and expansive functionality to provide a family of application-oriented products. The BE1-11f is a feeder protection system that includes user-configurable protective functions to meet basic and extended protection requirements for any feeder circuit. Additional protective functions have been added to the family, plus enhancements in recording size, number of records and programmability. Basler's BESTCOMSPlus configuration software and BESTLogicPlus add logic capabilities allowing users to apply BE1-11 relays in a much wider variety of applications than previously available. For further information see [www.basler.com](http://www.basler.com)

### Did you know...

**Security Breach** - Experts assert that the U.S. grid—already proven by federal agencies to be vulnerable to cyber attacks—has been compromised by spies who tried to map the system and left bugs that could be used to disrupt networks at a time of war or crisis. The Wall Street Journal, which broke the news in early April, cited current and former national security officials as it reported that the spies came from China, Russia, and other countries. It said that the intruders did not want to damage the grid or other key infrastructure. A former Department of Homeland Security (DHS) official told the newspaper, "There are intrusions, and they are growing. There were a lot last year." The DHS estimated that more than 60,000 cybersecurity breaches had been reported in fiscal 2008, according to the newspaper. A majority were by individuals, but about a fifth were by governments. For full article see [www.powermag.com](http://www.powermag.com)

In a related story, the chief security officer at NERC is concerned that too many of the group's smart grid stakeholders are inadequately prepared for cyber-security. NERC recently completed a six-month self-certification compliance survey for critical cyber asset identification. It revealed that only 31% of grid owners had identified what NERC defines as critical assets and even fewer — 23% — had identified the critical cyber assets which could be used to manipulate them, said NERC VP and Chief Security Officer Michael Assante in a letter to approximately 1,500 bulk power industry stakeholders.

In response to the Wall Street Journal article, in a follow-up letter released by NERC, it says the firm doesn't know of any specific incidents that directly impacted reliability in North America. For full story see [www.electricityforum.com](http://www.electricityforum.com)

This monthly e-newsletter offers company news, application notes and product launches from Langford & Associates.

[Send Feedback](#) | [Unsubscribe](#)

All brand and product names are trademarks of their respective companies or organizations.  
Copyright 2009 Langford & Associates  
All Rights Reserved