

The Electricity EXCHANGE

Electricity Demand Hits All-Time Record

An all-time Ontario electricity demand record was reached late afternoon Monday, June 27, as 26,157 MW of power were consumed across the province. This broke the previous record of 25,414 MW set on August 13, 2002. On Tuesday, June 28, Ontario set an all-time record for total daily energy consumption at 529 GWh, breaking the previous record of 527 GWh set on July 3, 2002.

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We welcome your comments, feedback or suggestions. Please send us an email at: electricity.exchange@ieso.ca

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System Operator**

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INSIDE THIS ISSUE:

TORONTO HYDRO AND HOME DEPOT PARTNER IN \$5.4 MILLION ENERGY CONSERVATION PROGRAM

Toronto Hydro and The Home Depot are collaborating on a three-year, \$5.4 million program designed to provide electricity users in the city with incentives to lower their energy consumption.

Residential, commercial and industrial electricity users will benefit from a variety of incentives to reduce consumption as part of the two companies' plan to achieve a reduction in peak load of up to 30.8 MW — the equivalent of electricity demand for a city the size of Orillia.

These conservation and demand management (CDM) initiatives are the result of the government's plan to create a conservation culture through the reduction of peak demand by 5% by 2007. To enable this effort, Toronto Hydro has committed to reduce energy use in Toronto by 250 MW by pledging \$39.8 million in CDM programs.

The two companies launched their first programs this spring targeting inefficient lighting and disposal of old, window air conditioners. The first program offered 590,000 residential Toronto Hydro customers coupons in their monthly statement entitling them to receive 2-for-1 compact florescent light (CFL) bulbs. With a life rating of up to 10,000 hours for CFLs (or 10 times that of normal incandescent bulbs), the energy saved through this initiative is expected to equal the power needed for 300,000 100-watt bulbs (or 30 MW).

"Keep Cool", the second conservation program, encouraged Torontonians to recycle their old, window AC units at any of the 12 Toronto Home Depot locations. In return, customers were given a \$25 store gift card. The program hopes

to retire 1,000 air conditioners and

reduce energy demand in Toronto by 1.1 MW — enough electricity to power about 200 homes.

David O'Brien, President and CEO of Toronto Hydro Corporation notes that these initiatives are a big milestone for the company. "These initiatives complement other Toronto Hydro projects, such as our smart meter and load control pilot programs, the wind turbine at Exhibition Place, our solar energy installation at our Commissioners Street facility,

and consumer education workshops."

Over the course of the partnership, Toronto Hydro and Home Depot also plan to unveil initiatives aimed specifically at small and large commercial as well as industrial customers.

For more information on these programs, contact Tanya Bruckmueller-Wilson at Toronto Hydro: tbruckmueller-wilson@torontohydro.com



Annette Verschuren, President of The Home Depot of Canada and David O'Brien, President and CEO of Toronto Hydro Corporation launch the innovative partnership that will motivate consumers to use energy more wisely.

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VERIDIAN TO ACQUIRE SCUGOG HYDRO ENERGY CORPORATION AND GRAVENHURST HYDRO ELECTRIC

Veridian has reached agreements to purchase Gravenhurst Hydro Electric and Scugog Hydro Energy Corporation, currently serving about 8,500 customers in the communities of Gravenhurst and Port Perry. Both transactions are subject to approval by the Ontario Energy Board (OEB), with the regulatory approval process expected to be finalized this summer.

The agreement with Gravenhurst Hydro pledges to retain the operations centre where Veridian has noted that new investments in distribution system automation equipment will be made. Michael Angemeer, Veridian's President and CEO, notes that, "We are very committed to high levels of power system reliability, and look forward to bringing the benefits of our 24 hour a day control room operation to the residents of Gravenhurst." On expanding its distribution system to Port Perry, Angemeer notes that, "As a leading electricity distributor in Ontario, we enjoy a scale of operations and geographic proximity to Port Perry that will enable us to deliver unsurpassed service to our new customers."

Veridian Corporation is responsible for distributing electricity to more than 93,000 customers in Ajax, Beaverton, Belleville, Bowmanville, Carrington, Newcastle, Orono, Pickering, Port Hope, Sunderland and Uxbridge.

More information about Veridian Corporation is available by visiting their web site at: www.veridian.on.ca

ONTARIO'S ELECTRICITY SUPPLY BOOSTED THROUGH SIX NEW POWER PROJECTS

Ontario's reliance on coal-fired power is being reduced with the announcement in April of six new power projects with a combined generating capacity of 2,235 MW.

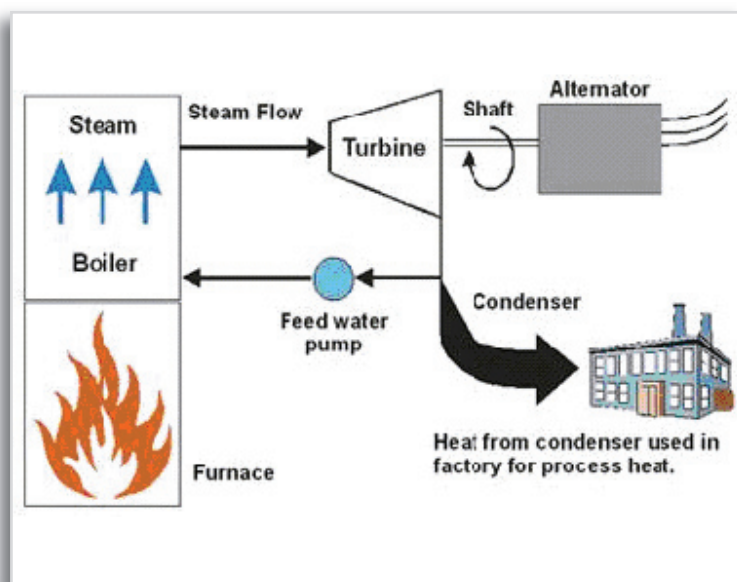
These six projects are the first selected in the Ontario Government's Request for Proposals (RFP) intended to bring on-line 2,500 MW of new clean generation, demand response, and demand-side management projects.

The six winning bids, which include a cogeneration project, a province-wide demand response initiative and four combined-cycle natural gas-fired generating plants, are expected to be in-service by the end of 2007. To date, these projects include:

- *Greenfield Energy Centre* (a partnership between Calpine and Mitsui), 1,005 MW combined cycle gas-fired generation facility, Sarnia-Lambton
- *Greenfield North Power Project*: 280 MW combined cycle gas-fired generation facility, Mississauga
- *Greenfield South Power Project*: 280 MW combined cycle gas-fired generation facility, Mississauga
- *St. Clair Power* (a partnership between Invenergy and Stark Investments), 570 MW combined cycle gas-fired generation facility, Sarnia-Lambton
- *Greater Toronto Airports Authority*, 90 MW cogeneration facility, Mississauga
- *Loblaws Properties*, 10 MW, province-wide demand response initiative

Each of the selected projects are subject to all required environmental assessments and local development approval processes. Outstanding contracts with other selected projects are being addressed and will be announced in the coming weeks.

Dave Goulding, President and CEO of Ontario's IESO, notes that, "Ontario's coal phase-out program represents a significant challenge for the government, the IESO and other industry participants. The additional generation selected through the RFP process can now be factored into the planning underway to meet that objective



A simplified combined-cycle process

while maintaining reliability, and will be a positive step toward meeting electricity needs in the province. We look forward to completion of the RFP process."

The Ontario government has also announced two new Renewables RFPs. The first (Renewables II), calls for up to 1,000 MW of clean, renewable, green power from generation facilities between 20 MW and 200 MW. The other RFP (Renewables III), is expected to be released this summer and calls for 200 MW of renewable energy from facilities with contract capacities under 20 MW.

To find out more about the RFP process, visit the web at www.ontarioelectricityrpf.ca

in the news

HAMILTON MAY BECOME A WIFI CITY

Wireless Internet System in Hamilton to be Tested as Part of Smart Metering Initiative

Imagine being able to access wireless Internet service anywhere in your city. This may happen if Hamilton joins the growing number of North American cities that are transforming their communities into wireless Internet hotspots.

Hamilton Utilities Corporation (HUC) has announced a pilot project to install WiFi (Wireless Fidelity) signal towers at a series of locations across the city to be connected with existing ultra high-speed FibreWired networks owned by HUC.

"This could be a significant advancement in telecommunications for our community and is possible because with FibreWired, our affiliate company, the City of Hamilton has one of the most extensive municipal fibre optic networks in Ontario," said Art Leitch, President & CEO, Hamilton Utilities Corporation.

Hamilton Utilities Corporation will be testing the WiFi network in response to the provincial government's plan for installing smart meters for all large urban municipalities by December 31, 2007. Smart meters measure how much electricity customers use each hour of the day. HUC's local electricity distribution affiliate, Hamilton Hydro, will require a city-wide, two-way communications network with the smart meters in order to retrieve usage data on an hourly basis and provide return signals to manage electricity demand.

"Hamilton Hydro will need telecommunications solutions to support the smart metering initiative for electricity. However, we also read water meters



L-to-R: Max Cananzi, COO, Horizon Utilities Corporation, Art Leitch, President and CEO, Hamilton Utilities Corporation, and Ian Collins, President, FibreWired Network-Hamilton.

for the City so we plan to test wireless communications for both electricity and water meters. FibreWired has both the expertise and the existing fibre optic infrastructure to have WiFi substantially in place within a year. It makes sense for Hamilton Utilities Corporation to take on the project and make Hamilton a WiFi City," said Leitch.

The successful pilot would lead to a larger deployment that, once in place, will see WiFi available to everyone for purposes in addition to smart metering. For example, people will be able to sit on a park bench anywhere in the City of Hamilton and use a laptop computer to access their Internet provider. Even for

those who do not subscribe to an Internet service, they will be able to connect wireless to myhamilton.ca, the Internet provider for community and government services.

This combined FibreWired network and WiFi system will make it possible for residents, visitors and providers of municipal and emergency services personnel to go anywhere in the City of Hamilton and have a wireless Internet connection.

More information on this project is available by contacting: Art Leitch, President & CEO Hamilton Utilities Corporation, Network-Hamilton, 905.317.4780.



Imagine being able to access wireless internet service anywhere in your city.

MARKET SURVEILLANCE PANEL MONITORING REPORT RELEASED TO OEB

The Market Surveillance Panel (MSP) released their monitoring report on the Ontario wholesale electricity market on June 9, spanning the period November 2004 through April 2005. The report confirmed that "the IESO-administered market continued to function well" during this period, with no instance of gaming or abuse found and all anomalous events explained satisfactorily.

The report did state that although the demand-supply balance improved during this period, increases in demand were more than offset by new supply sources. Prices, however, in the period under review were on average 11.4 per cent higher than one year ago. Factors contributing to higher prices mainly included the higher cost of coal and natural gas, in addition to large numbers of outages during certain months.

The Panel also noted in the report that it is pleased with the improvements made by the IESO in both the forecasting processes and the results achieved. "The IESO has been responsive to the concerns we (the Panel) have expressed and has worked with the MAU to revise their forecast methodology in particular instances the Panel identified."

The Market Surveillance Panel monitors, investigates and reports on the activities and behaviour in the IESO-administered markets in Ontario's electricity sector. Under the Electricity Restructuring Act, 2004 (Bill 100), the MSP was transferred to the Ontario Energy Board in order to consolidate the Board's oversight and regulatory mandate in Ontario's electricity sector. The IESO and the Ontario Energy Board established a Protocol under which the IESO's Market Assessment Unit (MAU) will continue to assist the MSP. This Protocol also ensures that the MSP continues to advise the IESO on various matters arising from the market rules and other issues relating to the market.

The complete report is available on the OEB web site at: www.oeb.gov.on.ca/documents/msp/msp_report%20final_090605.pdf

"CONSERVING HOMES" LOW-INCOME CONSERVATION PILOT IN BRANTFORD



Brantford Power and Share the Warmth are responding to the impact of rising energy costs for low-income consumers by making 100 homes in Brantford more energy efficient.

The agreement commits Brantford Power to contribute \$100,000 toward energy-saving measures at no cost to low-income households. "The intention is to assist the most vulnerable electricity consumers who are hit the hardest by higher rates," says John Loucks, Director of Engineering and Planning at Brantford Power.

"Conserving Homes" is part of Brantford Power's \$1.3 million power conservation and demand management (CDM) plan filed with the Ontario Energy Board (OEB) last year. The OEB lauded Brantford Power for its innovative program - the first of its kind in Ontario. The Ontario Ministry of Energy contributed to the design of Brantford Power's pilot program, and it is hoped that additional utilities will consider low-income conservation programs.

Share the Warmth, the agency responsible for overseeing the project, will identify the first 100 eligible participants and assist Brantford Power in arranging energy assessments to determine what upgrades are needed. Upgrades could

include installing programmable thermostats and compact fluorescent lighting to replacing appliances. Once the upgrades are in place, up to two additional home visits will be made within the year to educate tenants on energy conservation. Edward de Gale, Executive Director of Share the Warmth, says "The program will help lower the disproportionate energy burden that falls on low-income households."

Future roll-out options will be assessed based on the program's success on reducing energy costs for participants and inducing behavioural changes. An evaluation report on the program is scheduled for completion by December 2005.

To find out more about the program, visit the following sites:

www.brantfordpower.on.ca

www.sharethewarmth.org

www.lowincomeenergy.ca

GUELPH HYDRO AWARDED RENEWABLE ENERGY CONTRACT FOR METHANE GAS GENERATING PLANT

In response to the Ontario Government's renewable energy supply RFP process, Guelph Hydro's generation subsidiary — *Ecotricity Guelph* — has been awarded a contract that will see landfill gas methane used to generate power for the city's consumers. It is expected that the plant will generate 2.5 MW from the landfill's methane reserves, or 1% of the total demand on the local Guelph system.



"Generating electricity from sources such as landfill gas are important steps to take, not just for Guelph, but for the whole province," says Jim MacKenzie, President and CEO of Guelph Hydro Inc. "Every step we take like this reduces our dependence on traditional generating sources such as coal. We are turning the methane gas, once considered a liability, into a real asset."

Under agreement with the City of Guelph, landfill will be purchased from the city in order to operate the renewable energy plant. The plant will be fuelled by the landfill gas methane collected from the Eastview Landfill site and supplied to three engine generators.

The site will operate year-round, 24 hours a day, with electricity expected to be generated for the lifespan of the available gas — up to 20 years. At an estimated cost of \$5.9 million, production of electricity is expected by early summer.

Further information on the project is available by contacting Jim MacKenzie, CEO, Guelph Hydro Inc. at 519.837.4702.

2004-2005 WHOLESALE MARKET REVIEW NOW AVAILABLE

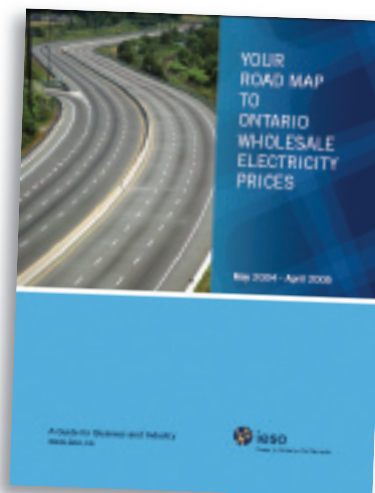
Price, supply and demand highlights from the past market year are now available from the IESO.

"Your Road Map to Ontario Wholesale Electricity Prices," provides an overview of market activity from the third full year of market operations (May 1, 2004 to April 30, 2005.)

New data in this year's review includes: monthly averages of day-time and night-time prices, price setting by fuel-type and the average price for each hour in a weekday. The review also contains information tailored for businesses that pay the wholesale price through their local distribution company to help them better manage their electricity costs.

An electronic copy of the report is available on the IESO Web site on the market summaries

page at www.ieso.ca/imoweb/marketdata/marketSummary.asp. Hard copies may be ordered by contacting IESO Customer Relations at 1.888.448.7777.



OEB REACHES DECISION ON IESO'S 2005 FEES CASE

The Ontario Energy Board (OEB) released its decision on the IESO's 2005 Fees Case submission on May 24, approving its revenue requirements of \$152.4 million and leaving unchanged the fee since market opening at \$0.959/MWh.

"This decision is a favourable one for the IESO as it allows us to continue our programs as defined in the 2005-2007 business plan," said Kim Warren, the IESO's Manager of Regulatory Affairs.

In its decision, the OEB also:

- Endorsed the IESO's flexibility to manage the Market Evolution Program initiatives
- Approved the IESO's proposed budget of \$2.4 million in operating expenditure for the Day-Ahead Market consultation
- Agreed with the IESO's commitment to proceed with Resource Adequacy Market expenditures (following agreement with the Ontario Power Authority)
- Supported the IESO's proposed \$300,000 expenditure on the Market Pricing Initiative

The OEB has also directed the IESO to file its proposed stakeholdering process, currently under review, for approval prior to implementation.

The full decision is available on the web at: www.oeb.gov.on.ca/documents/press_release_ieso_decision_240505.pdf

IESO BOARD APPOINTS FOUR NEW TECHNICAL PANEL MEMBERS

Peter Alpajaro, Wayne Clark, Mike Penstone and Raymond Tracey were appointed by the Board of Directors to sit on the IESO's Technical Panel for a three-year term, beginning June 3, 2005.

Representing generators, Peter Alpajaro currently serves as the Acting Head of Power Sales at Bruce Power. Replacing Randy Heaton, Mr. Alpajaro has worked in the electricity industry since 1992 as a shift supervisor, operations engineer and system engineer with Atomic Energy of Canada, Ontario Hydro and Ontario Power Generation.

Wayne Clark of SanZoe Consulting, replaces Larry Murphy on the Technical Panel as the representative for industrial consumers. Mr. Clark has been active in the electricity distribution system since 1976, working in engineering, operations, strategy, planning, business transformation and systems integration for numerous clients including Hydro One, Toronto Hydro and AMPCO.

Transmitters are now represented by Mike Penstone, Manager of Standards and Policies at Hydro One Networks. Replacing Andy Poray, Mr. Penstone assesses the impacts of proposed codes

and regulations, negotiates facilities agreements with interconnected transmitters, and develops asset strategies to address risks or opportunities related to Hydro One's assets.

Raymond Tracey is President and CEO of Essex Power and replaces Jim Richardson as the distributor representative on the Technical Panel. As CEO, Mr. Tracey is responsible for the provision of safe and reliable power to 27,000 residents and businesses in Amherstburg, LaSalle, Leamington and Tecumseh.

Representing various market participant sectors, the Technical Panel proposes and reviews amendments to the Market Rules and advises the IESO Board of Directors on specific technical issues related to the operation of the IESO-administered markets.

Further information on the Technical Panel is available on the web at: www.ieso.ca/imoweb/governance/TechPanelMembers.asp

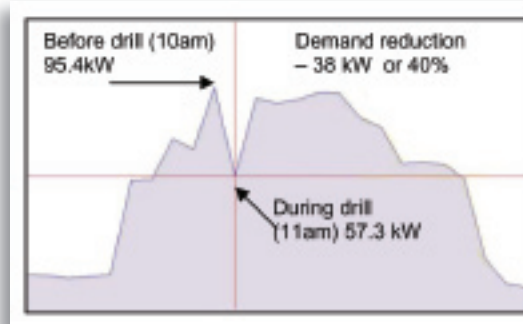
MILTON HYDRO ENERGY DRILL REDUCES ELECTRICITY USE BY MORE THAN 40%

A report card released on June 15 following a test run on Milton Hydro's Energy Drill Program at Robert Baldwin Public School showed a reduction in electricity use by more than 40% during the drill.

By reducing consumption by 38 kW, enough power was saved to light about 630 (60W) light bulbs.

The Energy Drill Program is modeled after fire drills and trains designated "Energy Marshals" for reducing demand during periods of constrained supply, high prices and smog alerts. Through the program, institutional, educational and commercial buildings with peak demand greater than 50 kW are able to effectively respond manually in near real-time to reduce electricity consumption.

More information on this and other Demand Side Management programs from Milton Hydro are available at: www.miltonhydro.com/downloads/Milton%20Hydro%202004%20DSM%20Plan%20FINAL.pdf



EVENTS CALENDAR

July – September 2005

More information on these and other events is available at: www.ieso.ca/imoweb/events/calendar.asp

All events are in Toronto unless otherwise noted.

07/08

Market Pricing Working Group Meeting

07/15

Wholesale Consumer and LDC Deadline for 18-Month Outlook Submission

07/20

Forecasts and Assessments Sub-Committee Meeting

07/27

Market Operations Standing Committee Meeting

08/01

Generator and Transmitter Deadline for 18-Month Outlook Submissions

08/05

Market Pricing Working Group Meeting

08/26

Revenue Metering Sub-Committee Meeting

09/14

Baseline 14.0 Released

ROUND TWO OF TRANSITIONAL DEMAND RESPONSE PROGRAM BRINGS IN SERIES OF NEW INITIATIVES

New participants in the Transitional Demand Response Program (TDRP) are offering innovative initiatives for reducing demand based on pre-dispatch price signals.

Round two of the TDRP has attracted a number of new projects totaling 19 MW. Combined with round one applications, this brings the total to 75 MW of potential demand response in the program to date.

Round two applicants' projects include:

- A water purification plant used to back-up natural gas generators, resulting in a load reduction of up to 3.5 MW.
- Several aggregation projects of demand response from multiple industrial and commercial customers of up to 5 MW. Registered facilities would be contacted via a notification service (email or pager) to reduce load for lighting, cooling, refrigeration and pumps.
- Proposals to cycle roof top air conditioners in response to price. Units would be cycled-off around the province to achieve the

maximum 5 MW for each response period.

- Proposals to focus on load shifting at water treatment plants and facility cooling systems to off-peak hours.
- Manual shut-offs of pulp and paper machinery and auxiliary equipment in response to price for a total of up to 5 MW in demand response.

The TDRP program aims to "kick start" demand response in Ontario by compensating participants in the TDRP (both wholesale and retail) for reducing demand based on pre-dispatch price signals. Since the program's activation last October, the TDRP has attracted 15 successful participants with 22 projects resulting in over 75 MW of potential demand response.

To find out more about the TDRP, visit the web at: www.ieso.ca/imoweb/consult/econDRPP.asp

CHATHAM-KENT ENERGY TO PURCHASE MIDDLESEX POWER

Chatham-Kent Energy has reached an agreement to purchase Middlesex Power, currently serving the Strathroy-Caradoc region.

Following Middlesex's recent announcement of their intent to sell their assets, Chatham-Kent formalized their plans to invest \$7.5 million in the purchase of the utility, based in Middlesex County. With a current customer base of 33,000, the purchase of the utility adds 6,700 new customers to Chatham-Kent's base, as well as 10 new employees.

"We have developed a win-win relationship with Middlesex Power over the years. The purchase of the business is the next logical step for both parties," says Ray Payne, CEO of Chatham-Kent Energy. "This is a very sound investment for us, one which we expect to see fair returns. Over the long term, this purchase will give Chatham-Kent Energy a larger customer base to have an influence in the energy decisions in Ontario."

Expansions, which are part of Chatham-Kent's long-term growth strategy, fit in with the Ontario Energy Board's plan of encouraging similar

transactions between municipal utilities as

a way of enhancing efficiencies in the industry including line maintenance, engineering, station maintenance, inventory control, billings and back-up customer service support.

While many hydro users in the region are concerned that the purchase could result in higher energy costs, Jim Hogan, Chatham-Kent's Chief Financial Officer notes that, "in the long run, this investment should reduce costs for all customers by allowing the utility to spread its administrative costs over a larger customer base."

For more information, visit: www.chatham-kent.ca/partners/ck+energy/homepage.htm

