



The Ontario Wholesale Electricity Market

Year in Review

May 2002 – April 2003

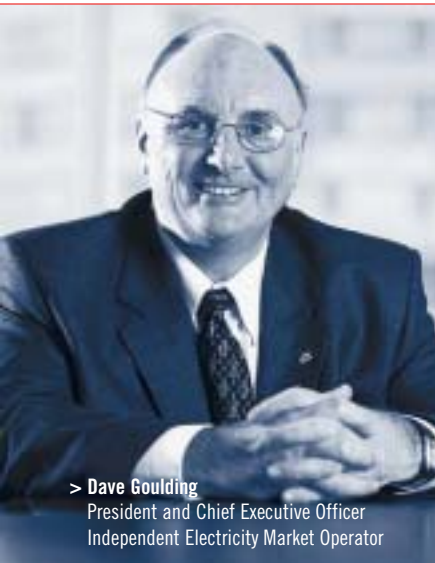
Ontario’s wholesale electricity market is one of the largest and most diverse electricity markets in North America. It comprises generators who produce electricity, transmitters who send it across the province, retailers who buy and sell it, industries and businesses that use it in large quantities, and local distribution companies that deliver it to residential customers. Each market participant has a specific role to play in the market, and each looks to the IMO — as the hub — to direct the flow of electricity across the transmission system and operate the wholesale market effectively. In the market’s first year of operation, wholesale charges totalled more than \$12 billion, with 136,199 settlement statements being issued to market participants.

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The Market Year in Review provides an overview of activity in Ontario’s electricity market in the first year of operation. Additional copies of this report can be ordered by contacting the IMO Help Centre at 1-888-448-7777. It can also be downloaded from our Web site at www.theIMO.com.

NEED TO ADDRESS CHALLENGES AHEAD

Market proves its worth



> **Dave Goulding**
President and Chief Executive Officer
Independent Electricity Market Operator

Anniversaries are a time to reflect back on successes and accomplishments of the past. They are also a time to look at the challenges ahead. The first-year anniversary of the restructured market is no different in that regard.

The market almost immediately proved its value as it faced the most severe test that one could have imagined. Record temperatures brought record demands for electricity. At the same time, generation resource levels were below those that were planned, there were near-record lows in water conditions for hydro-electric generation and a number of environmental limitations impacted the use of available generation.

There were tight times throughout the summer. Yet the lights stayed on, principally because the market worked the way it was supposed to.

A number of large customers in the market reacted to the high prices arising from the tight supply conditions by shifting load from peak periods. In addition, the market price for electricity in Ontario attracted record amounts of generation from other jurisdictions — up to 33 per cent more imports than the previous year.

Despite the many successes of the market in the first year, there were also a number of issues that surfaced over the first 12 months. Not the least of them was the inability of many low-volume retail customers to handle the price volatility that existed over the summer. The widespread customer concern with the price volatility no doubt played a part in the government's decision to establish a fixed price of 4.3 cents per kWh for the majority of customers.

The fixed price decision still leaves more than 50 per cent of the wholesale market intact on the customer side and 100 per cent on the supply side. It also leaves us in a position to address what is needed if a restructured market is going to be assessed as beneficial by all customers — not just those with larger loads.

One of the things needed is an exit plan for 2006 when the fixed price is expected to end. The exit plan needs to factor in mechanisms for dealing with the price volatility that customers faced. Education and training will also help customers more effectively manage their bills in a price-responsive market.

We also need to stay focused on the long-term supply options. Over the next 10 to 15 years, approximately 40 per cent of our current installed capacity will reach the end of its nominal life. Decisions need to be made soon if Ontario is to maintain a reliable, economic electricity system for years to come.

There is a lot at stake and a lot of ground to cover as we move forward. We have had a very successful first year, but that success won't continue on its own.

That is why we put together this report — not simply to celebrate the success of the wholesale market but to help us focus our energies on what is needed in the future.

And the continued involvement of market participants and stakeholders — so crucial to the success of the market — is equally critical to building on that success for the future.

RELIABILITY ENHANCED THROUGH MARKET CONDITIONS

Lights stayed on during challenging first year

Restructured markets have been blamed for load shedding in other jurisdictions. Yet ironically, it was the market that proved to be the key factor in keeping the lights on in Ontario during a challenging first year.

Ontario's restructured market was faced with supply and demand pressures that no market would have desired in its first year of operation. Monthly record amounts of electricity were consumed in 10 of the first 12 months of the market. January's consumption of 14,487,000 MWh shattered a monthly record set in 1994.

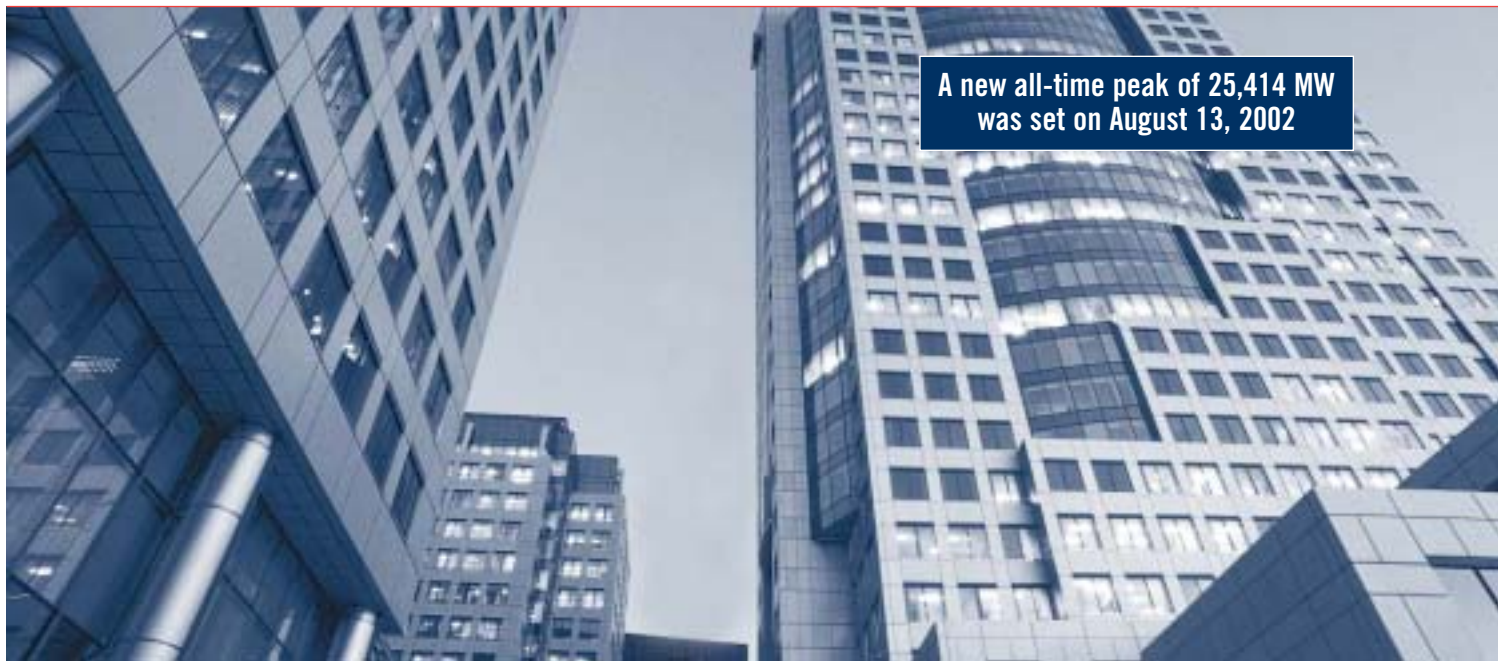
A new all-time peak of 25,414 MW was set on August 13, 2002. This was followed five months later with a new winter peak of 24,158 MW, breaking the previous record set nine years ago.

Compounding the high demand situation was generation availability that was below expectations. Units experienced forced outages or delays in returning to service, low water levels reduced available hydroelectric generation and environmental restrictions limited fossil-fuelled generation — all during periods of high demand.

The market — and market participants — responded to the tight situation by shifting load to off-peak hours and attracting record amounts of imports from other jurisdictions. Public appeals, for example, encouraged homeowners to cut back on power consumption. Thanks to these efforts, Ontario experienced no cuts in service, and a three per cent voltage reduction was needed on only one occasion.

“Demand response is critical at peak time, when a few percentage points can make the difference between a reliable system and rolling blackouts ... California had to institute rolling blackouts with a shortage of only 300 MW in a system of 50,000 MW, so only a tiny proportion of total demand in that case needed to stop using for four hours to avoid blackouts.”

Sally Hunt : *Making Competition Work in Electricity – 2002*

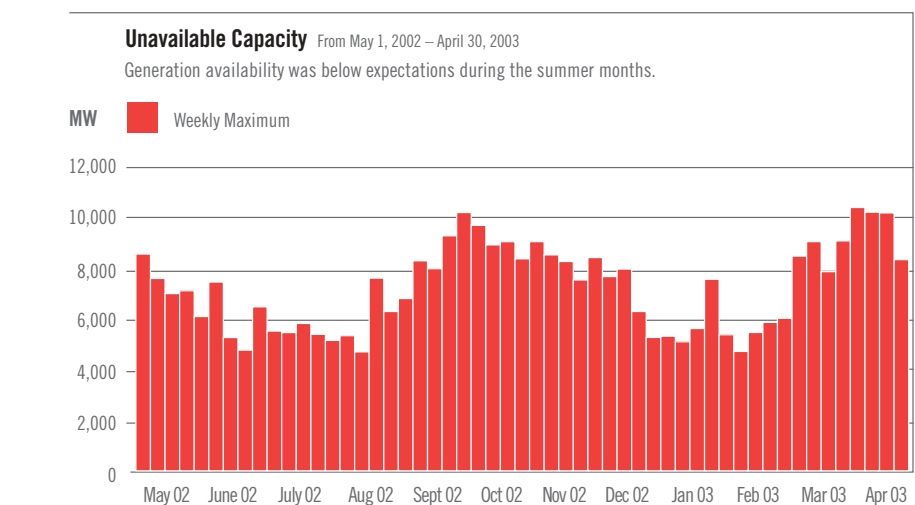
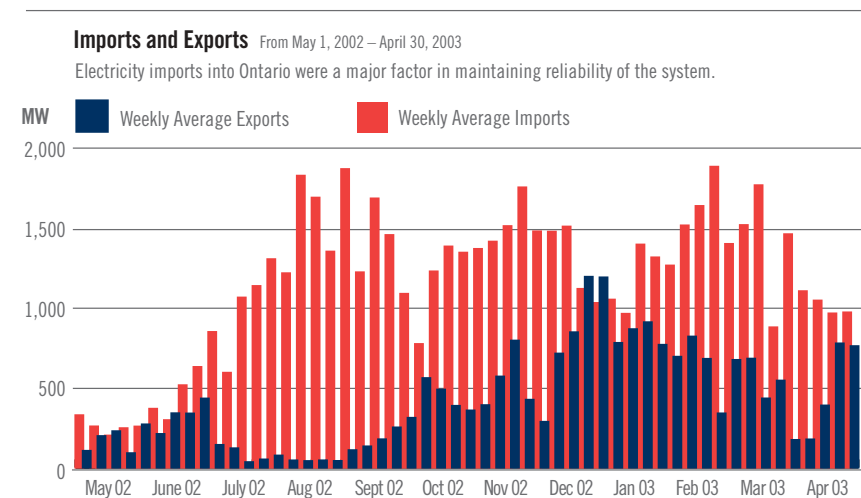
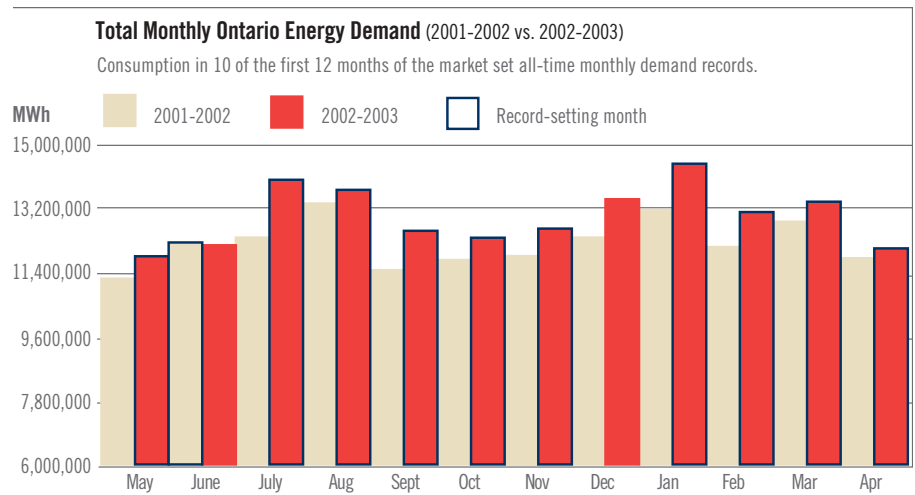
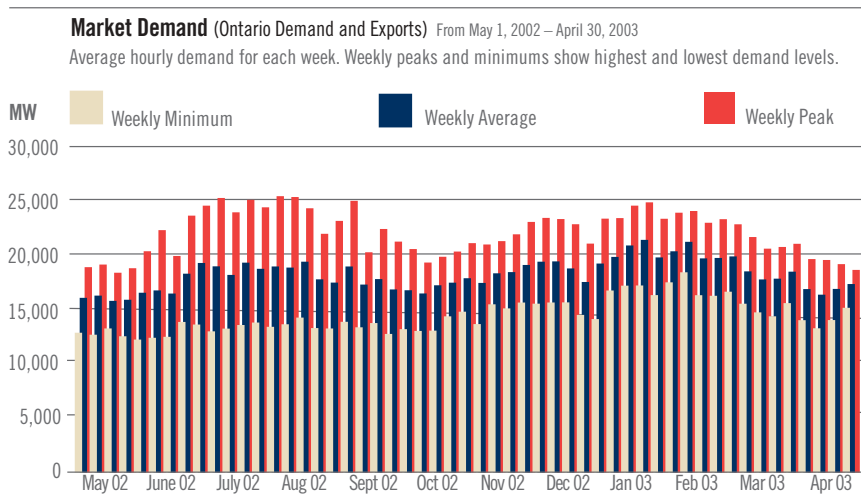


A new all-time peak of 25,414 MW was set on August 13, 2002

RELIABILITY ENHANCED

Highlights

Demand for electricity increased 5.5 per cent in the first market year. The wholesale market played a key role in attracting enough supply to meet this growth in demand.



MARKET PRICES

Responding to the Market

The average commodity price for electricity over the entire year was **\$62.18/MWh**.^{*} This price is a reflection of the extreme weather conditions, the rising cost of fuel and lower than anticipated generation capability. In comparing power costs in Ontario against prices in neighbouring jurisdictions, the independent Market Surveillance Panel found the average hourly price in Ontario during the first nine months of the market was in keeping with other competitive wholesale markets.

A certain level of price volatility is a necessary component of the market. High prices send clear signals to the market that more supply or demand management is needed, and prompt immediate response. The next imperative for the market is to develop vehicles to help market participants to better anticipate and hedge prices, so that they can respond more effectively.

Rebates issued for the first nine months

The first nine months of the Market Power Mitigation Agreement rebate program resulted in \$191 million being credited to 98 large customers in the IMO-administered market. For 82 market participants that normally have to pay the IMO every month, this rebate was large enough to result in their April invoice being a net credit to them. For many others, the rebate credit resulted in a substantial reduction to their invoice amount.

An additional \$415 million was also paid to Local Distribution Companies, which pass on rebates to customers not on a fixed price and to retailers in their service territory that have contracts with an assignment clause.

Following the freeze of the retail price of electricity, the Ontario government announced that consumers using more than 250,000 kWh a year will continue to pay the wholesale price of electricity. Going forward, these large-volume users are eligible for a rebate under the Business Protection Plan. This rebate is fixed at 50 per cent of the amount by which the average weighted spot price exceeds \$38/MWh and will be paid out quarterly.

AVERAGE WHOLESALE PRICE OF ELECTRICITY*

MAY 1, 2002 – APRIL 30, 2003

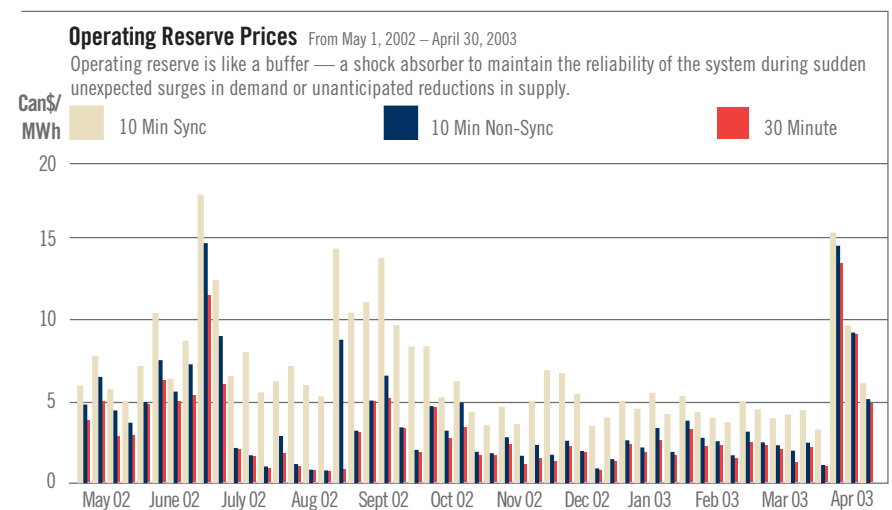
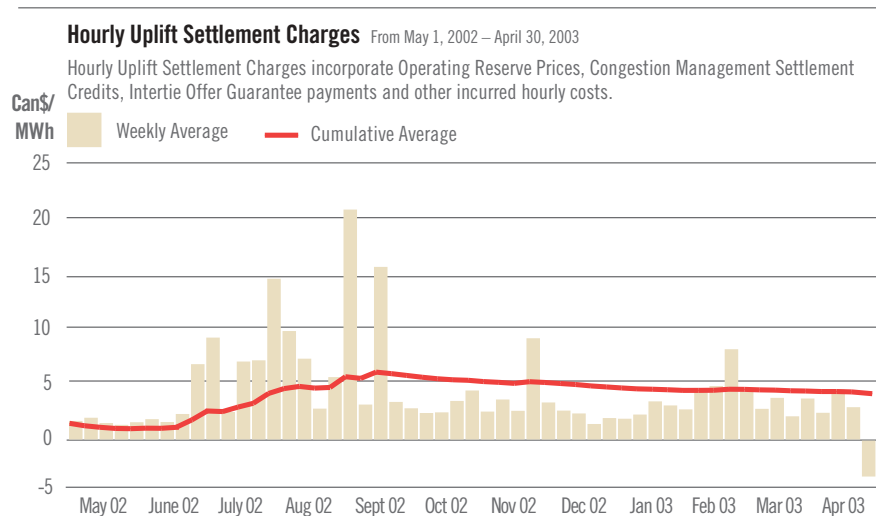
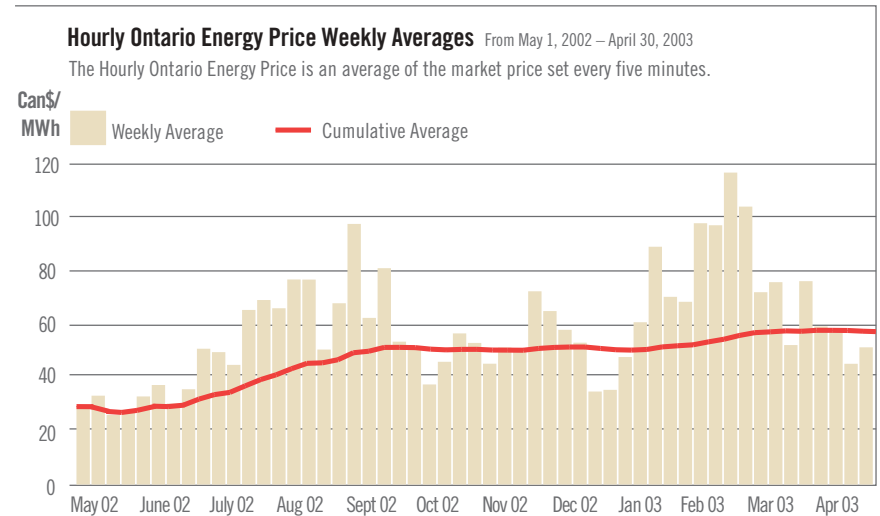
Yearly Average Commodity Charge: [*]	+	\$62.18/MWh
→ Estimated Market Power Mitigation Rebate	−	\$12.40/MWh
Average Commodity Price of Electricity with Rebate	=	\$49.78/MWh
Yearly Average Wholesale Market Services Charge: [*]	+	\$6.98/MWh
This charge includes the following items:		
<ul style="list-style-type: none"> – Physical Limitations, Losses and Intertie Offer Guarantees – IMO Administration Service – Energy Reliability – Rural or Remote Electricity Rate Protection 		
Yearly Average Transmission Charge:	+	\$8.58/MWh
This charge covers the cost incurred by transmitters to construct and maintain the high-voltage transmission lines needed to transport electricity from generators to utilities and consumers.		
Debt Retirement Charge:	+	\$7.00/MWh
This is a charge to pay down old Ontario Hydro debt and is collected for the Ontario government.		
Yearly Average Wholesale Price of Electricity[†]	=	<u>\$72.34/MWh</u> ✓

^{*} Weighted based on Ontario Demand
[†] Does not include local distribution charges

MARKET PRICES

Highlights

HOURLY ONTARIO ENERGY PRICE (CAN\$/MWh) MONTHLY WEIGHTED AVERAGE			
May 2002 30.09	June 2002 37.10	July 2002 62.02	August 2002 69.41
September 2002 83.11	October 2002 50.86	November 2002 51.19	December 2002 59.26
January 2003 62.29	February 2003 88.59	March 2003 84.79	April 2003 61.61





IMPROVING THE MARKET

Lessons learned in the first year

The first year of the Ontario wholesale market was characterized by a smooth transition to live operations as well as challenging conditions that tested the design of the market and the capabilities of participants.

After much preparation, this real-life experience was critical in helping the IMO and others identify areas for improvement and develop solutions that strengthen the market.

Market enhancements during the first year of live operations focused on promoting greater confidence, transparency and stability. These refinements were designed to be implemented in consultation with market participants, and to support the longer-term efforts of the Market Evolution Program. Some of these improvements include:

Protecting the Market from Abuse

In July, a new market rule was passed to prevent market participants from taking advantage of Intertie Offer Guarantees by wheeling electricity through the Ontario market. In the first few months of the market, there was an opportunity for traders to sell energy into the Ontario market when import prices were high and then buy back the same amount of energy at a lower Ontario price and sell it in another jurisdiction. The IMO Board issued an urgent amendment to the rules that govern the market to ensure that only the net quantity of imports is eligible for Intertie Offer Guarantees.

Promoting Greater Transparency

Understanding the dynamics of the market is an important component of effective competition. After extensive consultation, the IMO announced that it would release generator outage information aggregated by fuel type and unit-specific output information. This decision followed a request by the Independent Power Producers' Society of Ontario for an increased level of transparency. It argued that such information would provide market participants with a clearer view of the market, allowing them to better understand price movements.

The publication of this data will be phased in over a period of time. This summer, each day's outage information, aggregated by fuel-type, will be available on the IMO Web site the following business day.

Strengthening Pricing Signals

Over the last year, market participants expressed a need for the market to send clearer pricing signals so that they can better anticipate real-time prices.

Of significant concern has been the differences between pre-dispatch prices and final real-time prices. Pre-dispatch prices are not a forecast of the real-time price, and are determined using different assumptions and information. A stronger correlation between the two prices, however, will help market participants make better business decisions about power consumption and production. For example, if price-responsive loads (large consumers who can curtail consumption at times of high prices) can better predict when prices will be high, they are more likely to cut back their energy use during periods of tight supply.

A trial project was launched that has already helped improve the convergence between the two prices. The bidding window was extended to allow market participants to revise existing offers and bids, or send in new ones, up to two hours before the dispatch hour. This change has provided market participants with added flexibility and has helped bring pre-dispatch and real-time prices closer. The extension is being presented to the IMO Board of Directors to adopt as part of the market rules. The IMO is also exploring other initiatives such as reducing the rate of inertia transaction failures, and incorporating out-of-market sources into operating reserve.

IMPROVING THE MARKET – HIGHLIGHTS

18-Month Outlook Interim Updates

In between quarterly issues of the 18-Month Outlook, which provide an assessment of the reliability of the Ontario electricity system, the IMO began publishing 18-Month Outlook Interim Updates. These monthly updates provide market participants with the most recent information about resource availability and reserve margins to help them in their operational decision-making processes.

Changes Arising from Bill 210

A number of changes to the market rules, design and processes were required to support the implementation of Bill 210, which set the price of electricity for low-volume and designated consumers at \$43/MWh. In particular, an urgent amendment to the market rules was adopted to reduce prudential requirements for Local Distribution Companies when credit-rating agencies put them on negative watch as a result of the impact of the Bill.

Modernizing Market Infrastructure

After 25 years of service, the Data Acquisition and Computer System (DACS), which helped manage the reliable operation of the power system, was retired. The DACS replacement project was one of the most complex systems changes since market opening, and will generate savings of almost \$500,000 a month.

Increasing Reserve Requirements

Based on experience from the first few months of the market, the 10-minute reserve requirement was increased by an additional 200 MW for 6:00 a.m. to 8:00 p.m. each day. This move increased the market's ability to maintain sufficient reserves.

Emergency Demand Response Program

In the summer of 2002, the Emergency Demand Response Program was launched to encourage the large-volume consumers that the IMO may call upon to reduce energy consumption to agree to voluntary power interruptions in times of emergency supply conditions. This program provided the province with added insurance against power outages during demand peaks over the summer.

CREATING OPPORTUNITY

Expanding the market

Competition in the electricity industry opened the door to opportunity.

By moving away from a century-old system of centralized control, the electricity sector was able to become more entrepreneurial, responsive and better positioned to address the challenges of the 21st century.

The first, immediate outcome from opening the market was the injection of new players. Two hundred and thirty-nine participants were active in the market at its launch. Another eight joined the market in the following 12 months. Anyone with the interest and ability to participate in the market can.

As well as being more inclusive, the market is more transparent. Never before has information about system status and demand requirements been so accessible to so many. By reducing the barriers to information, Ontario can more readily attract investment and additional participants. This level of transparency will increase as the market matures and all players develop a better understanding of what information should be public or confidential.

Ontario is thirsty for electricity. Demand within the province is expected to increase one per cent each year for the next decade, while the bulk of its generation facilities are aging. New investment in generation is needed, with new partnerships established to seek innovative solutions to meet Ontario's electricity requirements.

Two generation projects came on-line in the first year of the market. TransAlta Corporation commissioned its Sarnia Cogeneration Plant in March 2003. This 575 MW facility provides power into the grid and steam to local industry in the area. The following month, Brascan Corporation opened a new 45 MW hydroelectric facility on the Michipicoten River near Wawa. The Dunford Generating Station is integrated with Brascan's 15 other hydroelectric facilities in northern Ontario.

Two other facilities are also under construction and are estimated to be in service by spring 2004. ATCO's Brighton Beach gas facility will be capable of producing 578 MW, while Imperial Oil is installing a gas-fired facility to produce a potential 98 MW to serve its local requirements.

More is needed. Proposals to generate up to 9,000 MW of power have been sent to the IMO. These include the Portlands Energy Centre (550 MW) put forward by Ontario Power Generation, and the Portlands project (180 MW) proposed by Toronto Hydro and Boralex — both of which would help meet the needs of the Toronto area's burgeoning population.

Demand-side management has the potential to make as great an impact as new generation. The market works to ensure that demand and supply are balanced. This balance can be obtained by reducing demand. In this way, the market encourages changing consumption patterns and the use of new, more efficient technologies.

Some large-volume energy users participate in the market as dispatchable loads. This means they provide the IMO with the maximum prices they are willing to pay for electricity. Depending on the outcome of the real-time price, the IMO instructs these customers whether or not to consume electricity. Since these customers have agreed to be dispatchable by the IMO, they can also offer to cut consumption should an urgent need for additional energy occur. In return, these companies receive operating reserve payments from the IMO whenever their offers to be on stand-by are accepted.

In the next market year, six more companies are expected to join the market as dispatchable loads. As the market matures, the challenge is to attract greater numbers of large-volume consumers to the market and increase the amount of operating reserve being offered.

“Most markets that have undergone restructuring have experienced an increase in capital investment for new power generation and improvements to the transmission and distribution system. This new investment has improved system reliability while increasing efficiencies and lowering delivery costs.” — CanAccord Capital, *“The New Ontario Electricity Market,” January 31, 2002*



JOINING THE MARKET: THREE PERSPECTIVES

LONDON HYDRO

At the Ready...

London Hydro saw the challenge of opening the wholesale electricity market as a prime opportunity to improve the way it does business. As a Local Distribution Company, London Hydro had the dual responsibility of preparing to participate in the market as well

as preparing its customers — London residents — for the changes that were about to take place.

In the months leading up to market launch, the company completely revamped its customer information systems. By automating the flow of information throughout the company, London Hydro was able to streamline customer service and create the new billing processes that were required in the move to competition.

They were also committed to customer education — explaining the changes taking place and how they affect consumers through public forums and direct mailings. They staffed up their call centre to respond to the anticipated sharp increase in customer inquiries. They also developed an on-line calculator that allows London residents to find the commodity price based on local consumption patterns for any billing period. This level of outreach was critical during the hot weather and high prices of the summer.

The subsequent freeze of the retail price of energy created another challenge for utilities, as they had to provide the IMO with information about the difference between the prices they paid for electricity from the market and the monies they received from their customers who paid the fixed rate. Given its proactive approach, once again, London Hydro was well positioned to respond. Their investment in information technology allows them to process the Market Power Mitigation Agreement rebate automatically, calculating it for each customer on an hourly basis.

DOFASCO

A Long-Term View...

In the highly competitive steel industry, cost reduction is always a priority. As one of Ontario’s largest industrial electricity customers, Dofasco pays close attention to electricity costs. Dofasco uses a combination of financial hedging vehicles and demand response programs to manage its costs. It purchases electricity at the spot market rate, as well as rates established through bilateral supply agreements. Dofasco is able to shift or shed some of its load in response to electricity market conditions. Dofasco and other market participants are working closely with the IMO to develop new demand response programs for the market.

From the start, Dofasco has been advocating a more liquid hedging market to enable cost-effective risk mitigation for market participants. The high prices of the summer have only served to reinforce this need. Despite the uncertainty, Dofasco has remained supportive of a competitive market provided that the conditions are put in place to ensure its viability — seeing it as a long-term investment. As the market matures, creating greater liquidity and offering more options to market



participants, customers such as Dofasco will be better positioned to mitigate against price risk.

Says Dofasco's Gord Forstner "From our standpoint, it's been a huge leap of faith to stay in the market. But we stay in it, based on the belief that this will be a viable market and it will be a more sustainable solution for our needs and for Ontario's needs."



NORTHLAND POWER

New Avenues...

As the operator of three gas/wood-waste facilities, Northland Power has seen an immediate benefit from participating in the market. While it sells the majority of its generation through contracts with the Ontario Electricity Financial Corporation, its surplus power in excess of these contracts is now sold directly through the wholesale spot market.

"The market has provided us with a new avenue to sell our surplus generation and related ancillary products. It's more competitive and transparent than the old Ontario Interim Market, which we previously used for surplus power sales," says Jim Cipolla of Northland Power.

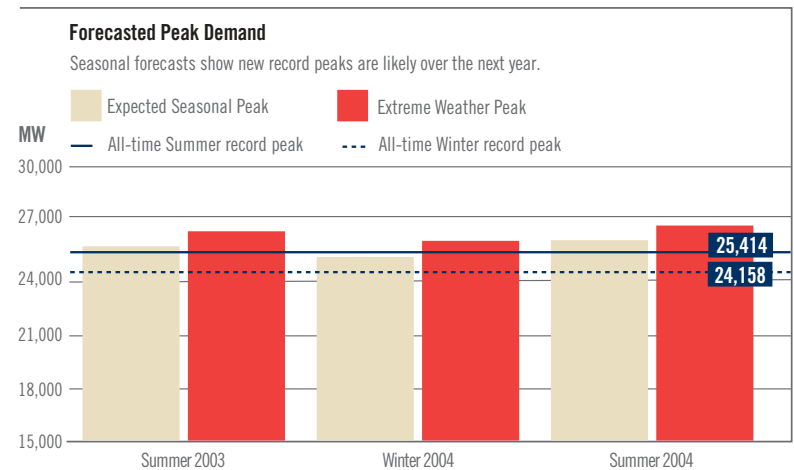
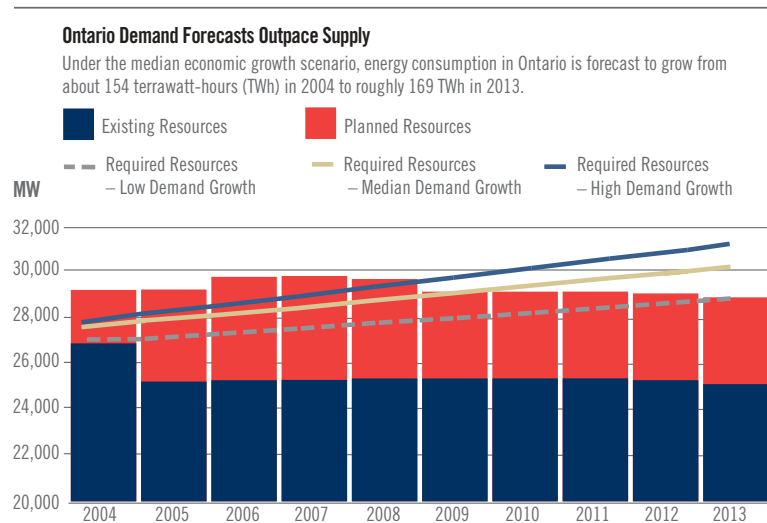
Looking forward, the company is particularly supportive of the development of a day-ahead market and the decision to expand reporting of real-time outage and output information. In its view, these two initiatives go hand-in-hand. With a day-ahead market, Northland will be able to better plan its operations while more timely and better market information will give it a stronger basis on which to make operational and marketing decisions.

Currently, only one of Northland's facilities is dispatchable. It is now exploring whether to license its other facilities as dispatchable generators to take advantage of market opportunities that may be available.

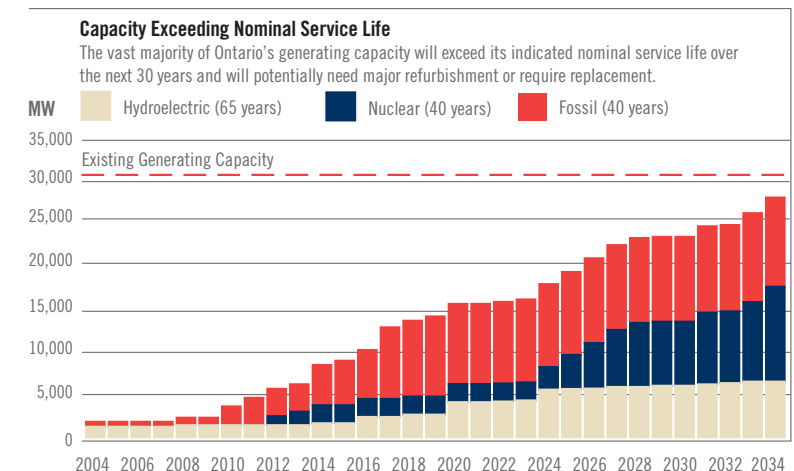
CREATING OPPORTUNITY

Highlights

Ontario's long-term supply requirements create opportunities for new generation and demand-side management initiatives.



MARKET PARTICIPANTS THAT HAVE JOINED SINCE MARKET OPENING	
Cargill Energy Trading Canada Inc.	Norampac Inc.- Trenton Division
Energry-Koch Trading Canada, ULC	Rainy River Energy Corporation
Morgan Stanley Capital Group Inc.	Sifto Canada Inc.
New York Power Authority	TransAlta Energy Marketing (US) Inc. (not active)





THE ROAD AHEAD

Evolution of the market continues

The provincial government's decision to establish a fixed price for low-volume and other designated customers effectively cut the restructured electricity market in half and left many questioning its future.

Within weeks of the November 11th announcement, Energy Minister John Baird launched a consultation process on what to do with the rest of the market. Market participants, large users and other interested stakeholders responded, with the Ministry receiving more than 190 responses and written submissions. The majority of the respondents came out in support of the restructured price-responsive market, with very few of them advocating a return to the old regulated, monopoly world.

The result was a reaffirmation of the market, with large customers (annual consumption of 250,000 kWh a year or more) staying in the market, as well as changes to the Market Power Mitigation Agreement that will see more frequent and clearly defined rebate payments.

Many of the submissions to the consultation process put forward recommendations to enhance the market so that it can provide greater benefits to customers.

Ontario is not unique in facing challenges post-market opening. Most jurisdictions that have opened competitive markets continue to refine these markets, regardless of early successes. Ontario's market cannot remain static.

Market Evolution Program

One key initiative underway is the IMO's Market Evolution Program (MEP). The MEP is examining change on a number of fronts aimed at the high priority issues that have arisen over the first year, including improved price stability for all customers. Stakeholder consultation has been, and continues to be, an integral part of the program.

Ontario is not unique in facing challenges post-market opening. Most jurisdictions that have opened competitive markets continue to refine these markets regardless of early successes. Ontario's market cannot remain static.

Resource Adequacy

Some of the initiatives currently in development include:

Arranging replacement energy during outages — The IMO currently authorizes maintenance outages only if there is enough remaining supply available. As a result, most outages are scheduled in spring and fall, when demand is typically lower. This program would provide generators more flexibility in scheduling these outages by allowing them to arrange for replacement energy. By being able to more easily schedule planned outages to upgrade and maintain equipment, generators will be able to reduce the number of emergency outages caused by mechanical breakdowns.

Hour-Ahead Dispatchable Loads — This initiative provides non-dispatchable loads with a greater level of certainty when deciding whether to reduce consumption during periods of high prices. These large-volume consumers do not take dispatch instructions from the IMO to curtail consumption, but they do aim to achieve savings by reducing their consumption when higher energy prices would make their production costs uneconomic. Under this program, these companies will submit offers to the market to cut back on consumption at certain price levels. If they do reduce consumption only to find that the real-time price has dropped below these price levels, they will be compensated.

Day-Ahead Market

Already utilized in other jurisdictions, a day-ahead market provides buyers and suppliers an opportunity to lock in supply at a price 24 hours in advance, allowing for better planning and reducing some of the price volatility issues of the past 12 months. A day-ahead commitment market, with the real-time market evolving to a balancing market, is a key element in achieving a more effective and reliable market.

Generators and consumers will know whether they need to supply electricity or cut back consumption for particular times of the next day and can plan their operations accordingly. A day-ahead market would also encourage non-dispatchable loads to actively participate in the market as it will take much of the guesswork out of deciding when it would be to their benefit to cut back on production.

The IMO, in consultation with market participants, has determined that the preferred path is to pursue a comprehensive day-ahead market similar to those used in neighbouring jurisdictions such as New York and New England. A high-level design for the market is currently in development, with implementation anticipated in late 2004/early 2005.

Other initiatives have also been announced, including the provincial government's Electricity Conservation and Supply Task Force to recommend actions to meet the long-term needs of Ontario's growing economy. The Electricity Distributors' Association's "Beyond 210" project is examining the successful design and operation of electricity markets in other jurisdictions in order to apply those learnings to Ontario. The EDA is developing recommendations to deal with the challenges and issues facing Ontario's electricity market, including the role of distributors in the market.

> For more information:

A wide range of materials about the Market Evolution Program is available on the IMO Web site at <http://www.theIMO.com/imoweb/consult/marketDev.asp>

Interested parties can also contact the MEP support line at **905-403-6931** or e-mail imo.consultation@theIMO.com

IMO Services and Contacts



Help Centre

The IMO's Help Centre responds to questions from market participants and others about the operation of the wholesale market and the role of the IMO. Market Relations Consultants work with market participants to address their concerns and champion their needs.

Tel: 905-403-6900
Fax: 905-403-6921

Toll Free: 1-888-448-7777
E-mail: helpcentre@theIMO.com

The IMO offers market participants a variety of services and as well as opportunities to become involved in the development of the market.

Training

Market participants and other interested groups can take advantage of the IMO's extensive training program that covers all aspects of the market. Face-to-face courses such as Physical Markets, Interjurisdictional Energy Trading, Commercial Reconciliation, Physical Bilateral Contracts and Transmission Rights are offered throughout the year. A series of online courses and Webcasts are also available on the IMO Web site under **Marketplace Training**.

If you are interested in having any of these courses delivered at your own location, please contact marketplacetraining@theimo.com or 905-855-4142.

Consultation

The IMO has adopted an extensive consultation process to involve participants and industry stakeholders in assessing the impact of changes to the market. The Market Advisory Council is a key part of the consultation process and is supported by standing committees that address specific issues in Market Operations, Information Technology and Regulatory Affairs. More information about the IMO's consultation program is available on the IMO Web site under **Consultation**.

IMO Publications

The IMO publishes a wide variety of information about the market. Here is a brief overview of just some of its publications. Copies of these can be obtained by visiting www.theIMO.com.

Leading the Way: Evolving Ontario's Electricity Market

The IMO's 2002 Annual Report outlines the IMO's key priorities, such as maintaining reliability, protecting the integrity of the market, and evolving the wholesale marketplace. The report is posted along with the organization's financial statements and corporate performance results on the **Corporate Information** pages of the Web site.

Market Summaries

Each Friday at 4:00 p.m., the IMO issues its weekly report on market activity. Included in these summaries are: average hourly prices; imports and exports; reserve prices; and market demand information. Monthly summaries, which are released by the 15th of each month, or the next business day, provide more detailed information such as five-minute pricing information, transmission rights, weather averages and compliance updates. In May 2003, the IMO began posting Daily Market Summaries each business day. These documents are available from the **Market Summaries** pages.

A convenient graph of hourly prices for the current and previous day is available on the **Today's Market** page on the IMO Web site. This graph also provides an estimate of future hourly prices for the remainder of the day and for the next day. More detailed market information, including operating reserve and intertie prices, can be found on the **Market Data** pages.

18-Month and 10-Year Outlooks

Each quarter, the IMO issues its assessment of the reliability of the electricity system over the next 18 months. These forecasts provide an overview of supply availability and demand projections. Ten-Year Outlooks provide a longer-range forecast and can be used by market participants and potential market participants to identify opportunities for future investment. Visit the **Forecasts** page for more information. The IMO also offers Webcast presentations following the release of each outlook.

Market Surveillance Panel Reports

The Market Surveillance Panel, which monitors, investigates and reports on market behaviour in Ontario's competitive electricity market, issues routine reports to the Chair of the IMO Board on its activities. These reports can be found in the **Surveillance** section of the IMO Web site.

Market Rules and Manuals

The IMO Market Rules are updated every three months to reflect market rule amendments and changes to the accompanying manuals. The rules and manuals are posted on the **Rules and Manuals** page. A Baseline calendar on this page also shows when new changes will come into force and how interested parties can submit comments on the changes. Proposed and Urgent Market Rule Amendments are also accessible from this page.

Quick Takes

These backgrounders provide overviews of issues of particular interest to the market. Quick Takes are published periodically and cover topics such as the Intertie Offer Guarantee and Administrative Pricing. These are available on the **Marketplace Training** page of the Web.

Market Participants

Active as of April 30, 2003

ABB Inc.
Abitibi-Consolidated Company of Canada
Air Liquide Canada Inc.
Air Products Canada Limited
Alcan Inc. - Kingston Works
American Water Services Canada Corporation
Aquila Canada Corporation
Asphodel-Norwood Distribution Inc.
Atikokan Hydro Inc.
Atlantic Packaging Products Limited
Atlas Specialty Steels - A Division of Slater Stainless Corporation
Atomic Energy of Canada Limited
Aurora Hydro Connections Limited
Barrick Gold Corporation - Holt McDermott Mine
Barrie Hydro Distribution Inc.
Bayer Inc.
Beaver Power Corporation
Bluewater Power Distribution Corporation
Bowater Canadian Forest Products Inc.
BP Canada Energy Company
Brake Parts Canada Inc.
Brant County Power Inc.
Brantford Power
Brascan Energy Marketing Inc.
Bruce Power Inc.
Burlington Hydro Inc.
Cambridge and North Dumfries Hydro Inc.
Canadian Niagara Power Company Limited
Canadian Niagara Power Inc.
Cardinal Power of Canada L.P.
Cargill Energy Trading Canada Inc.
Carmeuse Lime (Spragge) Limited
Cascades Fine Papers Group Thunder Bay Inc.
CASCO Inc. - Cardinal
Cat Lake Power Utility

Centre Wellington Hydro Limited
Chapleau Public Utilities Corporation
Chatham-Kent Hydro Inc.
Clean Power Operating Trust
Clinton Power Corporation
Cochrane Power Corporation
COLLUS Power Corporation
Comsatec Inc.
Conectiv Energy Supply Inc.
Constellation Power Source Inc.
Coral Energy Canada Inc.
Cytec Canada Inc.
Direct Energy Marketing Limited
Dofasco Inc.
Domtar Inc.
Dow Chemical Canada Inc.
DTE Energy Trading Inc.
Duke Energy Marketing Limited Partnership
Dupont Canada Inc.
Dutton Hydro Limited
Dynegy Power Marketing Inc.
E. L. K. Energy Inc.
Enbridge Pipelines Inc.
EnCana Corporation
Enersource Hydro Mississauga Inc.
Entergy-Koch Trading Canada, ULC
Enwin Powerlines Limited
Enwin Utilities Limited
EPCOR Merchant and Capital L.P.
Erie Thames Powerlines Corporation
Espanola Regional Hydro Distribution Corporation
Essex Powerlines Corporation
ESSROC Canada Inc.
Exelon Generation Company LLC
Exolon ESK Company of Canada Limited

Falconbridge Limited - Ontario Divisions
Festival Hydro Inc.
Five Nations Energy Inc.
Ford Motor Company of Canada
Ford Motor Company of Canada - Essex Site
Ford Motor Company of Canada - St. Thomas Site
Ford Motor Company of Canada - Windsor Site
Fort Albany Power Corporation
Fort Frances Power Corporation
General Motors of Canada Limited
Georgia-Pacific Canada Inc.
Gerdau AmeriSteel Corporation
Gerdau Courtice Steel Inc.
Goldcorp Inc. Red Lake Mine
Goodyear Canada - Napanee Plant
G-P Flakeboard Company
Grand Valley Energy Inc.
Gravenhurst Hydro Electric Inc.
Great Lakes Power Limited - Distribution Division
Great Lakes Power Limited - Generation Division
Great Lakes Power Limited - Transmission Division
Greater Sudbury Hydro Inc.
Grimsby Power Inc.
Guelph Hydro Electric Systems Inc.
Haldimand County Hydro Inc.
Haley Industries Limited
Halton Hills Hydro Inc.
Hamilton Hydro Inc.
Hamilton Specialty Bar - A Division of Slater Steel Inc.
Hearst Power Distribution Company Limited
HQ Energy Marketing Inc.
Hydro Hawkesbury Inc.
Hydro One Brampton Networks Inc.
Hydro One Networks Inc.
Hydro Ottawa

Hydro Vaughan Distribution Inc.
IBM Canada Limited
Imperial Oil Limited
Inco Limited - Ontario Division
Innisfil Hydro Distribution Systems Limited
Iroquois Falls Power Corporation
Ivaco Rolling Mills
Kashechewan Power Corporation
Kenora Hydro Electric Corporation Limited
Kimberly-Clark Inc. - Terrace Bay Mill
Kingston Cogen Limited Partnership
Kingston Electricity Distribution Limited
Kinross Gold Corporation
Kirkland Lake Gold Inc.
Kirkland Lake Power Corporation
Kitchener-Wilmot Hydro Inc.
KoSa Canada Company
Lafarge Cement Operations Canada Inc.
Lake Superior Power
Lakefield Distribution Inc.
Lakefront Utilities Inc.
Lakeland Power Distribution Limited
London Hydro Inc.
Long Sault Joint Venture
Manitoba Hydro Electric Board
Marathon Pulp Inc.
Markham Hydro Distribution Inc.
McMaster University
Meridian Technologies Inc.
Middlesex Power Distribution Corporation
Midland Power Utility Corporation
Milton Hydro Distribution Inc.
Mirant Americas Energy Marketing L.P.
Mississagi Power Trust
Morgan Stanley Capital Group Inc.
National Research Council Canada
New York Power Authority
Newbury Power Inc.
Newmarket Hydro Limited
Newmont Canada Limited
Nexen Inc.
Niagara Falls Hydro Inc.
Niagara-on-the-Lake Hydro Inc.
Nitrochem Corporation
Norampac Inc.- Red Rock Division
Norampac Inc. - Trenton Division
Noranda Inc. - GECCO Division

Noranda Inc. - Mattabi Division
Norfolk Power Distribution Inc.
North American Palladium Limited - Lac Des Iles Mines Limited
North Bay Hydro
Northern Ontario Wires Inc.
NorthPoint Energy Solutions Inc.
Notre Development Corporation
NOVA Chemicals (Canada) Limited
NRG Power Marketing Inc.
O.N.Tel Inc.
Oakville Hydro Electricity Distribution Inc.
Ontario Electricity Financial Corporation
Ontario Power Generation Inc.
Orangeville Hydro Limited
Orillia Power Distribution Corporation
Oshawa PUC Networks Inc.
Oxy Vinyls Canada Inc.
PanAbrasive Inc.
Parry Sound Power Corporation
Peninsula West Utilities Limited
Peterborough Distribution Inc.
PG & E Energy Trading - Power L.P.
Placer Dome (CLA) Limited
Port Colborne Hydro Inc.
Powerex Corporation
Praxair Canada Inc.
Premstar Energy Canada Limited
PUC Distribution Inc.
Rainy River Energy Corporation
Richmond Hill Hydro Inc.
Rideau St. Lawrence Distribution Inc.
River Gold Mines Limited
Saint-Gobain Ceramic Materials Canada Inc.
Scugog Hydro Energy Corporation
Select Energy New York Inc.
Selectpower Inc.
Sempra Energy Trading Corporation
Shell Canada Products
Sifto Canada Inc.
Sioux Lookout Hydro Inc.
Smurfit-Stone Container Canada Inc.
Split Rock Energy LLC
Spruce Falls Inc.
St. Catharines Hydro Utility Services Inc.
St. Marys Cement Inc. - A Division of Votarantim Cementos
St. Marys Paper Ltd.
St. Thomas Energy Inc.

Stelco Inc.
Sterling Pulp Chemicals Limited
Sun-Canadian Pipe Line Company Limited
Sunoco Inc.
Tay Hydro Electric Distribution Company Inc.
Tembec Pulp Group - Kraft Pulp Division- Smooth Rock Falls
Terra International (Canada) Inc.
Terrace Bay Superior Wires Inc.
The Detroit Edison Company
Thunder Bay Hydro Electricity Distribution Inc.
Tillsonburg Hydro Inc.
Timminco Limited
Toronto Hydro Energy Services Inc.
Toronto Hydro-Electric System Limited
Tractebel Canada Inc. - West Windsor Power
TransAlta CoGeneration Limited Partnership
TransAlta Energy Corporation
TransAlta Energy Marketing Corporation
TransCanada Energy Limited
TransCanada Power Marketing Limited
Twin Falls Limited Partnership
TXU Energy Trading Canada Limited
UBS Warburg Energy (Canada) Limited
Valerie Falls Limited Partnership
Veridian Connections Inc.
Voyageur Panel Limited
W&E International (Canada) Corporation
Wasaga Distribution Inc.
Washington Mills Electro Minerals Corporation
Washington Mills Limited
Waterloo North Hydro Inc.
Welland Hydro Electric System Corporation
Wellington Electric Distribution Company Inc.
Wellington North Power Inc.
Wescast Industries Inc.
West Coast Huron Energy
West Nipissing Energy Services Limited
West Perth Power Inc.
Westario Power Inc.
Weyerhaeuser Company
Whitby Cogeneration L.P.
Whitby Hydro Electric Corporation
Williams Energy Marketing & Trading Canada Inc.
Williams Operating Corporation
Winston Lake Division - Inmet Mining Corporation
Woodstock Hydro Services Inc.

The IMO is leading the way in evolving Ontario's electricity market for the benefit of all customers. Our job is to meet Ontario's power needs by operating a competitive wholesale market that enhances reliability and promotes further development of the electricity sector.

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