

**Wholesale market recovers  
from surge in price of hydro**

**Electrical  
prices soar  
on hot day**

**Power market opens with lower rates**

# A Guide to Electricity Charges in Ontario's Competitive Marketplace

*Ontario's electricity market opened on May 1, 2002, moving our province from a monopoly-based electricity system to a competitive electricity market. This means that the price of electricity is now determined in the wholesale market.*

*This guide shows how market charges flow from the wholesale market to the retail market and how these charges may appear on a typical consumer's utility bill.*

*The Independent Electricity Market Operator (IMO), which runs the wholesale market, matches offers from generators to supply power against demand from consumers. Prices in the wholesale market can change every five minutes and vary according to immediate changes in supply and demand.*

*Consumers can now choose to buy their electricity from a retailer at a fixed rate, or through their utility which sells electricity at an average monthly rate based on the wholesale market price. Retailers buy electricity from the market on behalf of their customers and assume the risk if the wholesale market price for energy rises above the prices in their customer contracts. Utilities, on the other hand, pass the wholesale price onto retail customers. By averaging out the wholesale price, utilities smooth out the impact of market highs and lows on energy bills.*


The IMO (the Independent Electricity Market Operator) is a non-profit, regulated corporation that operates the new wholesale electricity market. This market determines the price of electricity, based on supply and demand. The IMO is also responsible for managing the operation of the electric power system in Ontario, and ensuring its reliability.

For more information,  
please visit our Web site:

[www.theIMO.com](http://www.theIMO.com)

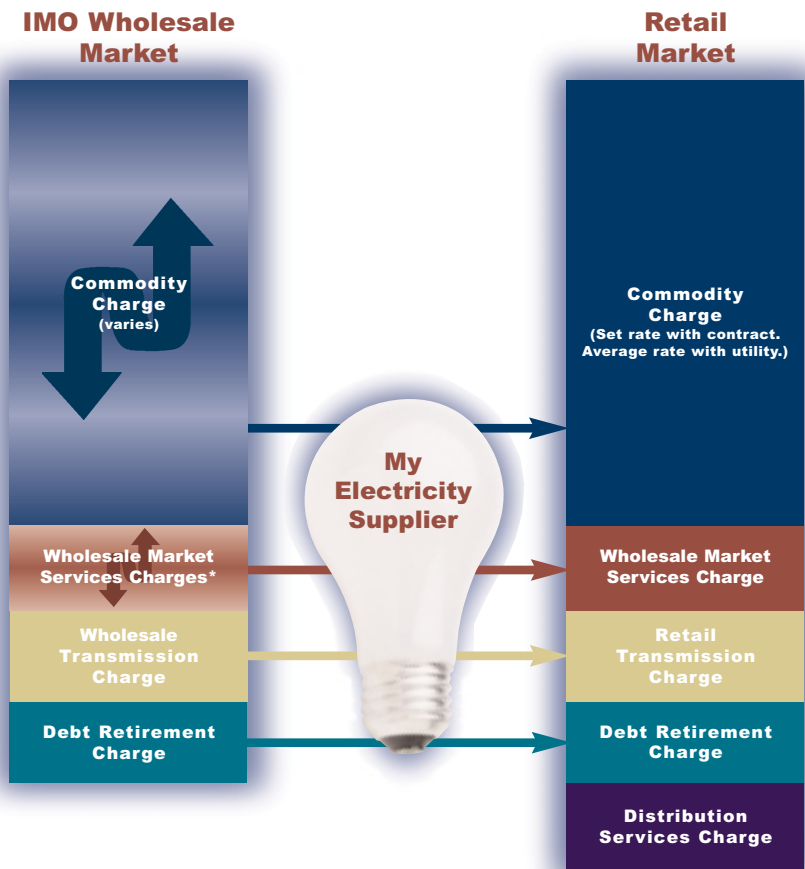


This chart explains the various wholesale market charges and how they pass through to the retail market.

 Indicates varying rates.

- \* Charges for Wholesale Market Services consist of:
- Physical Limitations and Losses (variable)
  - Energy Reliability (variable)
  - IMO Administration (fixed)
  - Rural or Remote Electricity Rate Protection (fixed)

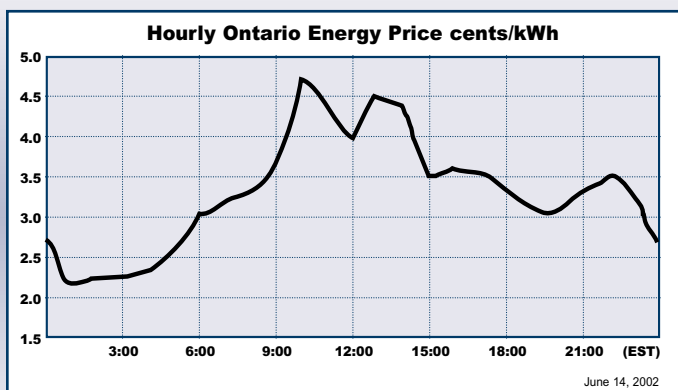
GST also applies at the Wholesale and Retail levels.



## Commodity Charge

### Wholesale

The wholesale market price for electricity is based on supply and demand. Suppliers submit offers to sell electricity and wholesale buyers submit bids to buy electricity. The IMO then uses these offers and bids to match electricity supply with demand, and establishes the Hourly Ontario Energy Price, or HOEP.



This chart shows the fluctuation in the market price for one day in June. You can see that the price increases during the day, and is lower at night, which corresponds with the pattern of demand for electricity across the province. You can view the Hourly Ontario Energy Price on the IMO Web site under Today's Market at [www.theIMO.com](http://www.theIMO.com) where the price for the day is graphed on an hourly basis.

### Retail

If your electricity is provided by your local utility, your commodity charge will be subject to market price fluctuations. Electricity consumers who have meters that can measure specific hourly quantities will be charged the hourly price, but most consumers will pay a monthly average price reflecting prices in the wholesale market.

Equal billing may be available to you to smooth the charges out over the year. As a result, there will be periodic adjustments to your bill to reflect your consumption as well as the difference between actual market prices and the price you were charged.

Some utilities will charge a reference price estimated at 4.3 cents per kilowatt-hour, which has been set by the Ontario Energy Board. As with equal billing, there will be periodic adjustments to your bill if actual market prices differ from the reference price. The adjustments may be rebates or surcharges, depending on your usage and the actual market price.

If you sign a contract with a licensed electricity retailer, the amount you pay per kilowatt-hour for the electricity commodity is stipulated in the contract. It is not subject to market fluctuations. In most cases, the contract is only for the "commodity", that is, the electricity itself. For example, if you sign a contract for 5.8 cents per kilowatt-hour, this only covers the commodity portion of your bill.

# Wholesale Market Services Charges

## Wholesale

These charges cover the cost of services that are essential for operating the electricity system and running the market.

### Physical Limitations and Losses

Physical limitations of the transmission system impose costs that are charged to wholesale customers for the electricity. For example, when electricity flows across transmission lines, the resistance in the lines causes them to heat up, consuming power in the same way as a filament in a toaster. This is referred to as line losses. The IMO collects other costs incurred in operating the power grid, such as when it must take actions to avoid overloads on the transmission system. Power imports that cost more than the hourly market price are also covered in this charge. This charge allows the IMO to recover these highly variable costs.

### IMO Administration Service

The IMO charges administrative costs to operate the new wholesale electricity market and manage the electric power system in Ontario. The rate, set by the Ontario Energy Board, is less than one-tenth of a cent per kilowatt-hour for 2002.

### Energy Reliability

This category includes operating reserve (stand-by power, required in case of an unexpected reduction in power supplied from a generator) and black start capability (a generator's ability to help restore the province's power system in case of emergency.) This rate varies by the hour.

### Rural or Remote Electricity Rate Protection

Wholesale Market Services Charges also include the Rural or Remote Electricity Rate Protection charge which is used to partly offset the higher cost of providing electricity in rural and remote areas. The rate is fixed at one-tenth of a cent per kilowatt-hour and is established by regulation.

## Retail

### Wholesale Market Services Charge

In the retail market, the various market charges, including the government-mandated Rural or Remote Electricity Rate Protection charge, are collected through a rate of 0.62 cents per kilowatt-hour. Because some components of this charge are variable, the Ontario Energy Board will monitor these charges and may, on occasion, adjust the rate. Any differences between the actual costs and the regulated rate will be reflected in bill adjustments.

## Transmission Charge

### Wholesale

This charge to utilities and some large consumers covers the cost incurred by transmission companies to construct and maintain the high-voltage transmission lines needed to transport electricity from generating stations to utilities or consumers. The rate for this service is approved by the Ontario Energy Board.

### Retail

Local utilities collect these wholesale transmission charges from their retail customers.

## Debt Retirement Charge

### Wholesale

This is a charge of 0.7 cents per kilowatt-hour, set by the Ontario government to pay down Ontario Hydro debt. This charge is collected on behalf of the Ontario government.

### Retail

This charge is passed on directly to the end user/customer.

## How will these charges appear on my electricity bill?

<b>MY UTILITY, INC.</b> <b>1 Energy Place</b> <b>Anytown, Ontario</b>	Customer Account Number 1234567		
	Due Date July 15, 2002	Amount Due \$110.00	
A. Customer 123 Main Street Anytown, Ontario			
	<b>Rate</b>	<b>Usage **</b>	<b>Charges</b>
<b>Commodity Charge</b>	.043	1030	\$44.29
<b>Distribution Charges</b>			
Distribution Charges	.0111	1000	\$11.10
Administration Charges			\$24.75
<b>Wholesale Market Services *</b>	.0062	1030	\$ 6.39
<b>Transmission Charges *</b>	.009	1030	\$ 9.27
<b>Debt Retirement Charge</b>	.007	1000	\$ 7.00
	<b>Total:</b>		\$102.80
	<b>GST:</b>		7.20
	<b>Amount Payable:</b>		\$110.00
** In this example, the usage factor for the commodity, wholesale market and transmission charges is adjusted to reflect the cost of electricity losses in the distribution system.			

In the new Ontario electricity market, utilities are required to itemize or “unbundle” the various charges for electricity services. Most of these charges were in effect before market opening. Now consumers can see all the specific charges that make up their final electricity bill.

The commodity charge is just one component of the electricity bill and will typically account for roughly half of the total cost. Even customers with contracts to purchase electricity from a retailer are required to pay the wholesale market services, transmission and debt retirement charges. The local utility also levies a distribution services charge which includes the costs of delivering electricity from the local utility to the end user as well as providing services such as meter reading, billing and account maintenance.

\* On some bills, Wholesale Market Services and Transmission Charges may be combined into a “Non-Competitive Electricity” Charge.

## Facts & Questions

### Electricity: A Unique Commodity

- Electricity cannot be stored; it must be produced at the same time it is consumed.
- Production and consumption must always be matched in order to maintain reliability and power quality standards.
- There is always a need for enough stand-by power (called operating reserve) to re-establish the production/consumption balance in case of an unexpected reduction in power supplied by a generator.
- Electricity is delivered across the province via 29,000 kilometres of high-voltage transmission lines. Transformers link the high-voltage transmission lines to the low-voltage distribution lines that deliver power to utilities and consumers. The delivery must be closely co-ordinated and monitored to ensure that no overloads occur.

### I've heard about a rebate if Ontario Power Generation's revenues exceed a certain amount. Will everyone receive a portion of this rebate?

Ontario Power Generation (OPG) is one of the five successor companies to Ontario Hydro. It is the company that generates electricity and competes with other generating companies in the new marketplace. Because OPG controls the largest portion of the Ontario energy supply, some limitations have been placed on OPG's revenues for the initial period of the new market. If OPG's spot market revenues exceed the limits, the excess

will be returned to electricity customers in the form of rebates. Since electricity consumers who have signed contracts with licensed electricity retailers have effectively transferred the risk of high spot market prices to the retailer, most contracts allow the retailer to keep the rebate, and not pass it on to the consumer. If your local utility is supplying your electricity, you will automatically receive your portion of this rebate.