

**Explanation of Electricity Bills for  
Residential and Small Business Consumers in  
First Nation Communities**

**Serviced by**

**Hydro One Networks**

Prepared by:

Econalysis Consulting Services

March 30, 2007

## Table of Contents

Executive Summary.....	1
Glossary of Terms.....	6
1 General Electricity Bill Format.....	11
1.1 Background.....	11
1.2 Electricity Bill Basics.....	12
2 Hydro One Networks' Bills for Residential and Small Business Consumers.	18
2.1 Residential Rates.....	18
2.2 Small Business Rates.....	22
3 Illustrative Bills for First Nation and Neighbouring Communities.....	23
3.1 Residential Bill Comparisons.....	25
3.2 Small Business Bill Comparisons.....	29
4 Determination of Applicable Rates.....	32
4.1 Determining Current Billing Arrangements.....	32
4.2 Questions/Resolution of Issues Regarding Billing.....	32
5 Conclusions.....	35

## Appendices

Appendix I

Hydro One Networks Bill

Appendix II

Supporting Data for Charts

## **Executive Summary**

The purpose of this report is to assist households and small businesses located in First Nation communities serviced by Hydro One Networks to understand how their electricity bills are determined; how and why individual bills may vary within a community and why the cost for electricity may differ between a First Nation and nearby non-First Nation communities.

Most Ontario households and small businesses are connected to the provincial grid by their local distributor (such as Hydro One Networks). These local electricity distributors bill consumers for distribution services as well as for the costs associated with generation, transmission and the overall co-ordination of Ontario's electricity system, based on their individual consumption of electricity.

A standard bill format is used by all distributors in Ontario which includes separate line items for:

- *Electricity Charges* - cost of producing the electricity (kWh) actually used by the consumer.
- *Delivery Charges* - cost to build and operate the transmission and distribution facilities which deliver electricity from the generating stations to consumers.
- *Regulatory Charges* - cost of operating and administering the Ontario electricity market.
- *Debt Retirement Charge* - pays down the debt of the former Ontario Hydro (First Nation Bands and Status Aboriginals on reserves are exempt from these charges).

### **Residential**

Other than their level of electricity usage, factors that will result in differences in billing amounts to residential customers of First Nation communities served by Hydro One Networks are a customer's:

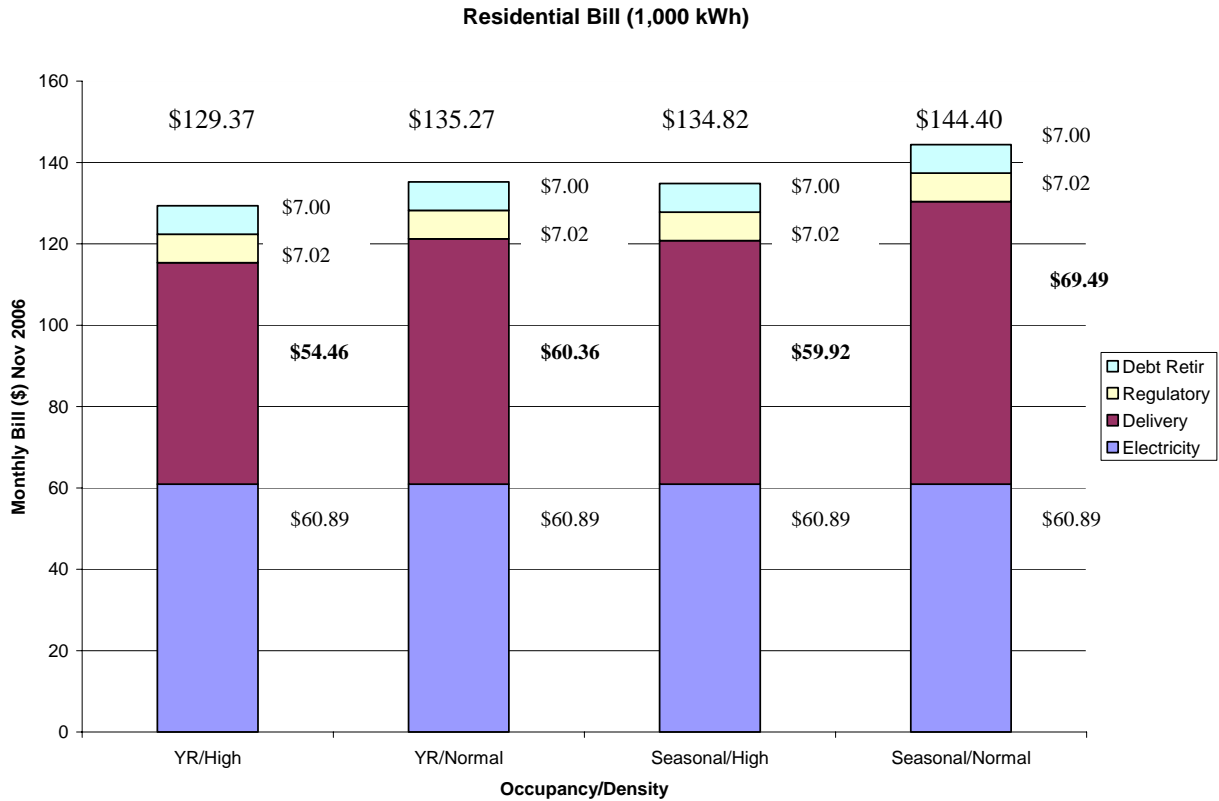
- Occupancy classification for Delivery Charges as either a Residential Year Round or Seasonal customer,
- Density classification for Delivery Charges based on number of local connections per kilometre, and
- Eligibility for exemption from Debt Retirement Charges

All other charges on the Hydro One Networks bill will be at the same rates and vary only by level of consumption. The OEB's Regulated Price Plan is applicable to all residential customers in the province, including those in First Nation communities served by Hydro One Networks. As a result, the Electricity Charges to all residential customers of Hydro One Networks are based on the same rates. Similarly, the Regulatory charges for all residential Hydro One Networks' customers are based on the same rates.

The following chart demonstrates the difference in the total electricity bill for a residential customer consuming 1,000 kWh per month due to variations in the Delivery charge based on occupancy and density classification. A year round residence consuming 1,000 kWh per month in a Normal Density region will pay a slightly higher electricity bill than a year round residence in a High Density region using the same amount of electricity. The higher bill for the Normal Density classification reflects the higher delivery costs per customer of providing service in an area with fewer connections per kilometre of line. Seasonal residences will pay slightly higher rates than Year Round residences and therefore have higher bills for the same level of consumption. Density and occupancy classification information can be found on the customer's bill under the section "Your Service Type Is". A sample bill is located in Appendix I.

Individuals in First Nation communities are exempt from paying Debt Retirement charges if they can submit a valid certificate of Indian status to Hydro One Networks. This also extends to First Nation operated small businesses with the community. The example in the following chart also shows the Debt Retirement Charges of \$7.00 on a residential customer's bill for 1,000 kWh. Households can readily determine whether or

not they are paying Debt Retirement as the charge is shown as a separate line item on the bill.



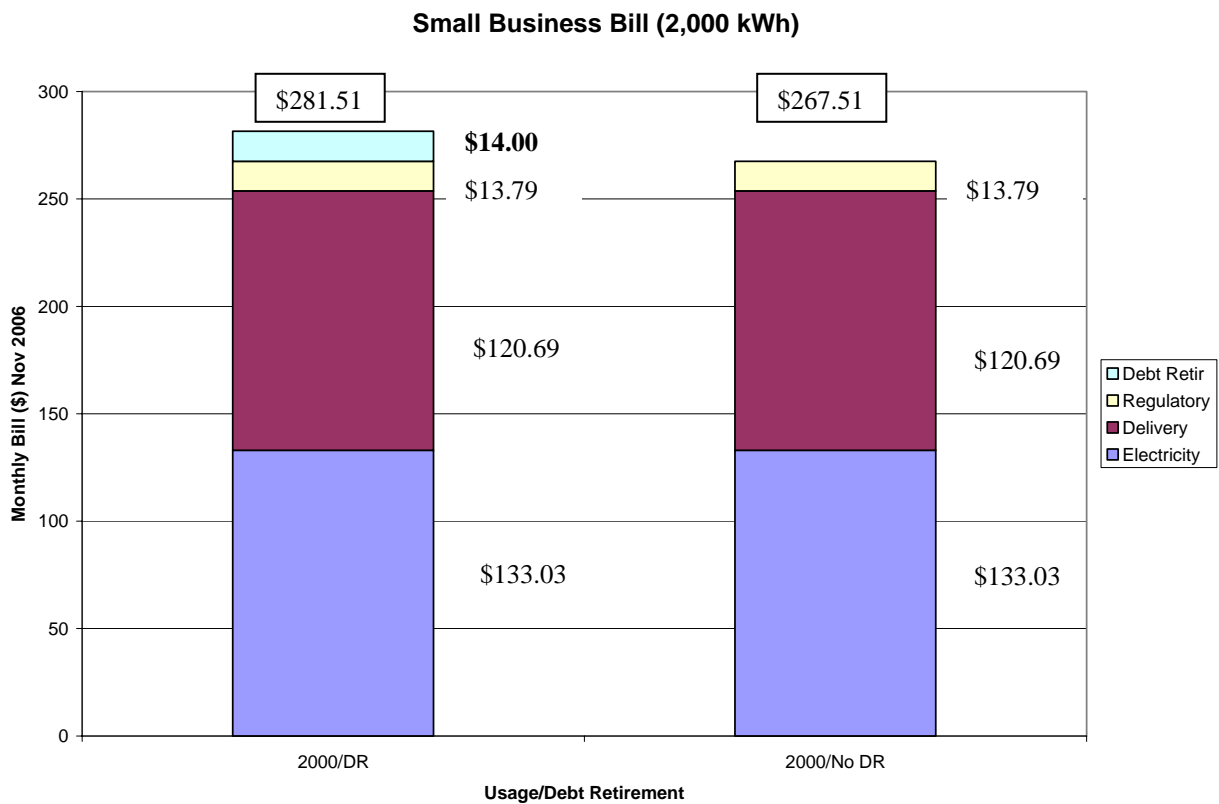
For questions or concerns regarding electricity billings, customers should contact Hydro One Networks. The contact information can be found on the first page of bill and on page 33 of this report. Should the problem not be resolved, the Ontario Energy Board would then be contacted. Their contact information is provided on page 34 of this report.

*Small Business*

The OEB’s Regulated Price Plan is also applicable to all Small Business customers in the province, including those in First Nation communities served by Hydro One Networks. As a result, all Small Business customers of Hydro One Networks, such as convenience stores, will pay the same Electricity Charge for the same electricity usage

whether or not they are in a First Nation community. Similarly, the Regulatory charges will be the same for all Small Business Hydro One Networks' customers with the same level of consumption. Small business customers are classified according to density as either Urban or Non-Urban. Urban customers will pay a slightly lower electricity bill than Non-Urban customers due to the higher number of connections per kilometre. All of the First Nation and non-First Nation communities discussed in the report are classified as Non-Urban.

The following chart indicates the debt retirement charge is \$14.00 for a November 2006 bill to a Hydro One Networks' Small Business customer using 2,000 kWh of electricity per month. Individuals or Bands operating small businesses in First Nation communities are exempt from paying Debt Retirement charges if they can submit a valid certificate of Indian status to Hydro One Networks.



Small business customers of Hydro One Networks can readily determine their current service classification (i.e., Density status) by referring to the back page of the bill, under “Your Service Type Is”. Further down in same section, there is a line for Debt Retirement charges which will indicate whether the customer has been billed for this item.

Concerns or questions regarding the appropriateness of the current service classification applied and/or the applicability of debt retirement charges should be first directed to Hydro Networks. Contact information can found on the first page of the bill and on page 33 of this report.

If, after raising the issue/concern with Hydro One Networks, a customer believes there is still a problem then a complaint can be made to the Ontario Energy Board’s Consumer Relations Centre. Contact information for this Centre can be found on page 34 of this report.

## Glossary of Terms

Words italicized in the definitions are cross-references to other definitions in this Glossary.

A

B

C

D

**Debt Retirement Charge**

When Ontario's electricity system was restructured in 1998, the successor companies of the former Ontario Hydro were refinanced and set up as self-sufficient businesses. The excess or stranded debt associated with the former Ontario Hydro was assumed by the Ontario Government. In order to pay down this debt the Ontario Government levies a debt retirement charge which is currently set at 0.7 cents/kWh of electricity consumed.

**Delivery Charge**

This is the charge on a consumer's electricity bill that covers the cost of delivering electricity from generation stations along the *transmission* system to the local *distribution* system and then through to individual homes and businesses.

**Density**

Density refers to the concentration of electricity customers in a geographic area. It is measured in terms of number of customers per kilometre of *distribution* line.

**Designated Consumer**

Consumers who the Ontario Government has deemed eligible for the *Regulated Price Plan*.

**Distribution**

The local delivery of electricity to individual consumers (e.g., households and small businesses) via low voltage lines and

facilities. Distribution systems are generally connected to the and receive delivery of electricity from the *transmission* system.

**Distributor**

The owner/operator of a *distribution* system.

**E**

**Electricity Charge**

The portion of an electricity consumer's bill related to the cost of the electricity consumed.

**F**

**First Nation  
Community**

A community of customers located within the boundaries of a "reserve" as defined in the *Indian Act* (Canada).

**G**

**Generation**

The production of electricity through the transformation of other forms of energy such as that contained in steam, heat, chemical reactions, photons or falling water.

**H**

**Hydro One  
Networks**

The successor company of the former Ontario Hydro which inherited responsibility for the related *transmission* and *distributions* systems. Hydro One Networks owns and operates over 95% of the transmission facilities in the province and is the province's largest distributor, servicing mainly the more rural areas of the province.

**I**

**IESO**

*Independent Electricity System Operator*

**Independent  
Electricity System  
Operator**

The *IESO* was established by the Ontario government in 1998. It is responsible for directing the operation of the province's *generation* and *transmission* system and administers the province's wholesale electricity market so as to balance the supply and demand for electricity on a moment to moment basis.

**J**

## K

**Kilowatt (kW)** One thousand watts. Is a measurement of electric power and represent the flow of electricity necessary to light ten 100-watt light bulbs.

**Kilowatt Hour (kWh)** One thousand watts used for a period of one hour.

## L

**Losses** The electricity lost naturally as heat during the delivery of electricity.

**Loss Factor** The portion (percentage) of electricity lost naturally as heat in the delivery of electricity.

## M

**Metered Use** The use of electricity as measured by the meter located at the consumer's premise. Metered use must be increased by the appropriate *loss factor* in order to determine the amount of electricity delivered to the local *distributor*.

**Monthly Service Charge** A fixed amount that a customer is billed monthly regardless of the level of energy consumption.

## N

## O

**OEB** *Ontario Energy Board*

**Ontario Energy Board (OEB)** The Ontario Energy Board is responsible for regulating the province's natural gas and electricity utilities. In the electricity sector, the Board's responsibilities include licensing all market participants, setting *transmission* and *distribution* rates, approving the fees charged by the *IESO* and *OPA* and setting the rates for the *Regulated Price Plan*. The Board does not regulate competitive services.

**OPA** *Ontario Power Authority*

**Ontario Power** The Ontario Power Authority was established by the Ontario

<b>Authority (OPA)</b>	Government in 2004. It is responsible for ensuring an adequate, long-term supply of electricity for Ontario.
<b>P</b>	
<b>Provincial Grid</b>	The network of <i>transmission</i> and <i>distribution</i> facilities in Ontario that connects <i>generation</i> facilities to individual consumers
<b>Q</b>	
<b>R</b>	
<b>RPP</b>	<i>Regulated Price Plan</i>
<b>Regulated Charges</b>	Represent the costs incurred by the <i>IESO</i> in administering and maintaining the reliability of the province’s electricity system. Also includes the <i>Standard Supply Service Charge</i> levied by distributors to cover the administrative costs of providing electricity (i.e., <i>RPP</i> ) to consumers and <i>Rural or Remote Rate Protection</i> charges.
<b>Regulated Price Plan (RPP)</b>	Actual market prices for electricity fluctuate on an hourly basis. To smooth these prices the <i>Ontario Energy Board</i> created the Regulated Price Plan and sets the prices charged to <i>designated consumers</i> for the electricity that they use. The prices are set based on forecasts of future market prices and periodically adjusted to reflect updated forecasts and to reconcile past differences between forecast and actual market prices.
<b>Retail Rate/Service Classification</b>	In order to simplifying the number of rates that need to be developed, utilities will group together customers with similar usage patterns, who have similar connection requirements and impose similar costs on the system into a “service classification” and develop a common set of rates that will be applicable to all customers in that classification.
<b>RRRP</b>	<i>Rural and Remote Rate Protection</i>

**Rural and Remote Rate Protection** A charge paid by all consumers in the province to help offset the higher cost of distributing electricity in rural and remote areas of the province.

**S**

**SSS Charges** *Standard Service Supply Charges*  
**Standard Service Supply Charge** Covers the administrative cost incurred by *distributors* in providing electricity to consumers who purchase power from the utility under the *Regulated Price Plan*.

**T**

**Transmission** The network of higher voltage lines and stations throughout the province that delivers electricity from generating stations to local *distribution* systems or large industrial customers. In Ontario the system is primarily owned by Hydro One Networks.

**U**

**V**

**Variable Charge** Represents a charge on a customer's bill that will vary with the level of electricity usage.

**W**

**X**

**Y**

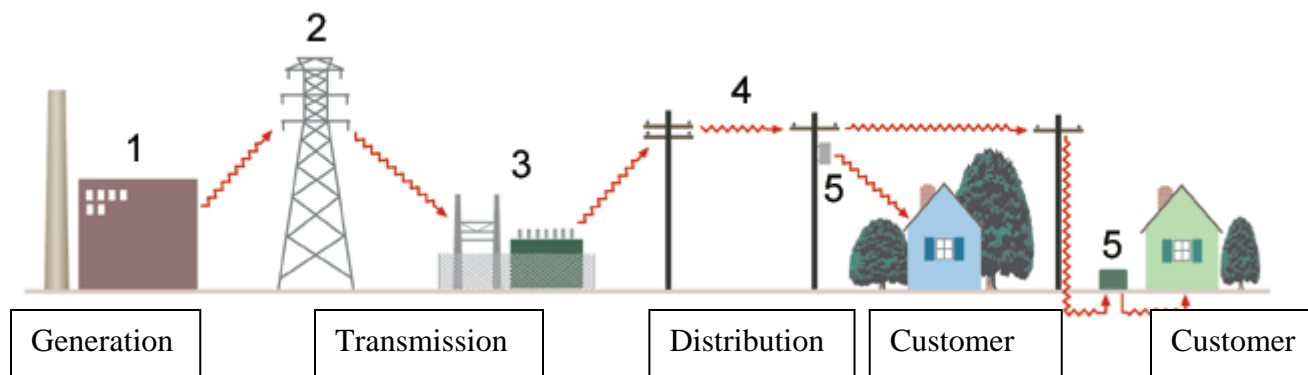
**Z**

## 1 General Electricity Bill Format

### 1.1 Background

Most electricity users in Ontario, including households and small businesses in many First Nation communities, receive their electricity supply from the provincial grid. As illustrated in Figure A, this provincial grid carries the electricity from power generation plants (1) located across the province through a network of transmission (2&3) and distribution lines (4) to the doorsteps of individual consumers (5).

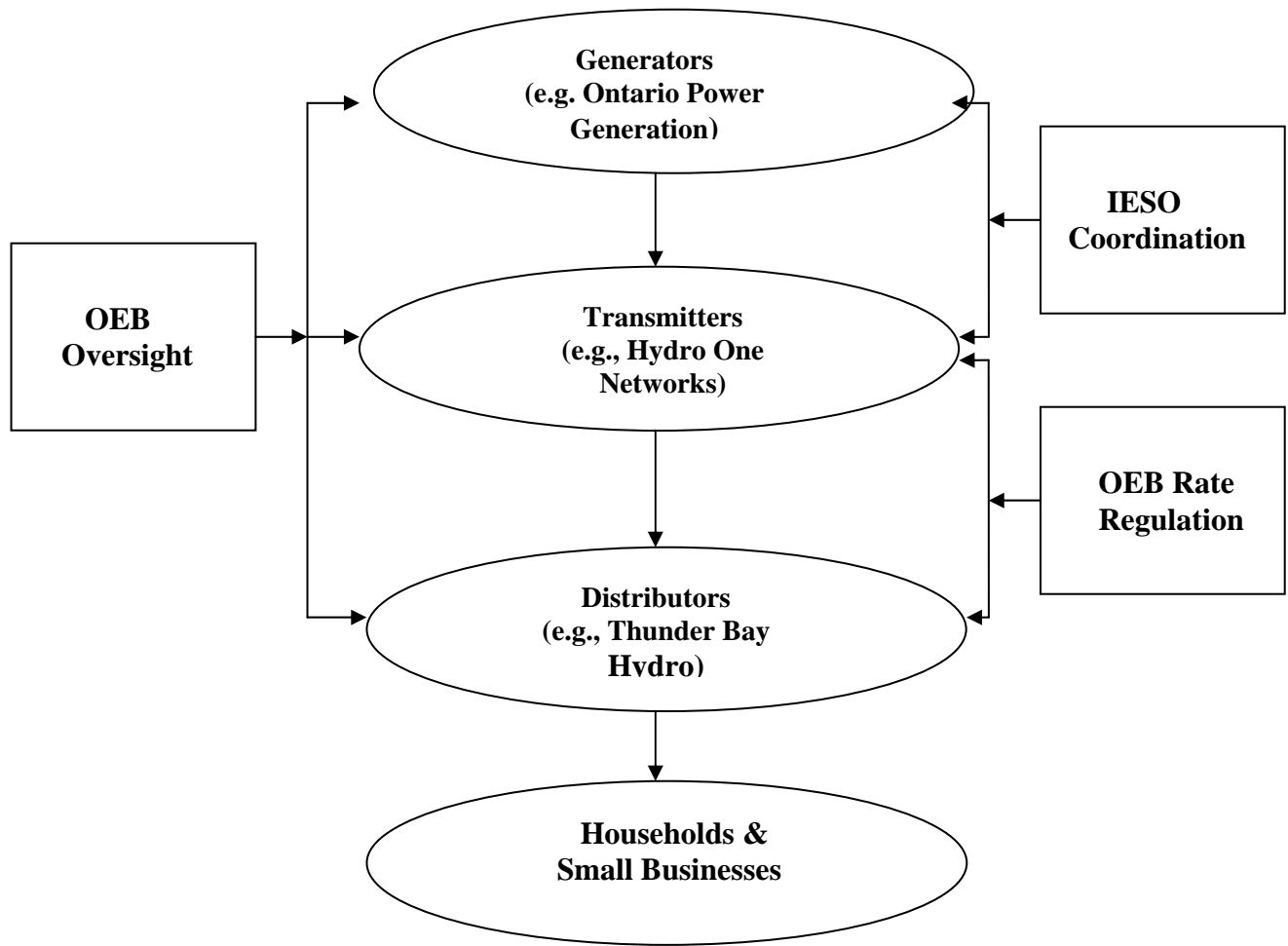
**Figure A – Electricity System Schematic**



The Independent Electricity System Operator (IESO) ensures that there is a steady and reliable supply of electricity on a day to day basis to the local distribution networks. Local electricity distributors such as Hydro One Networks are responsible for operating these local networks and ultimately delivering electricity to individual households and small businesses.

The Ontario Energy Board (OEB) is responsible for licensing the various players in the electricity supply sector including generators, transmitters and distributors of electricity. The OEB is also responsible for regulating the rates for transmission and distribution services. Figure B illustrates the overall organization of Ontario's electricity supply sector.

**Figure B – Industry Organization**



## **1.2 Electricity Bill Basics**

Local electricity distributors are responsible for billing their customers for all charges related to supply electricity, including:

- a) An Electricity Charge,
- b) A Delivery Charge,
- c) A Regulatory Charge, and
- d) A Debt Retirement Charge.

Figure C contains an extract from a typical Hydro One Networks bill showing the determination of the total electricity charges for a household, including those in a First Nation community. Appendix I contains a complete Hydro One Networks bill. A similar format is used for small businesses. As can be seen, the bill is broken down into the four components identified above. Each of these line items is described in more detail below.

**Figure C**  
**Extract from Typical Hydro One Networks Bill**

**How we calculated your charges**

<b>Balance forward</b>	Amount of your last bill	\$115.00
	Amount we received on October 30, 2006 - thank you	\$115.00 CR
	<b>Balance forward</b>	<b>\$ 0.00</b>
<hr/>		
<b>Your new charges</b>	Your service type is Residential - High Density	
	<b>Electricity used this billing period</b>	
	We estimated your meter J254247 on November 1, 2006	002970
	We read your meter on October 2, 2006	- 002870
	Difference in meter readings	000100
	Metered usage in kilowatt-hours (100 x 10) = 1,000 kWh	
	Adjusted usage in kilowatt-hours (1,000 x 1.092*) = 1,092 kWh	
	<hr/>	
	Electricity: 1,000 kWh @ 5.5000 ¢	\$55.00
	92 kWh @ 6.4000 ¢	\$5.89
	Delivery	\$54.46
	Regulatory Charges	\$7.02
	Debt retirement charge	\$7.00
	GST (87086-5821-RT0001)	\$7.76
	<b>Total of your electricity charges</b>	<b>\$137.13</b>

Source: Hydro One Networks

***Electricity Charge***

The electricity charge refers to the cost of the electricity actually used by consumers. For residential and small business customers, usage is measured in kilowatt hours (kWh). Actual market prices for electricity vary hourly and can be both uncertain and volatile due changes in both electricity demand and supply. To smooth this pricing, the Ontario Energy Board has created the Regulated Price Plan (RPP) which is applicable to residential and small business consumers.

For the Regulated Price Plan, the OEB sets two prices for electricity consumed: a lower (first tier) price and a higher (second tier) price, depending upon how much electricity is used in a month. For residential consumers the second tier threshold varies by season: 600 kWh per month in the summer (May – October) and 1,000 kWh in the winter (November – April). The higher winter value allows for more electricity at a lower price when more electricity is typically needed for heating, lighting and indoor activities. For non-residential (e.g. small business) consumers, the second tier price threshold is 750 kWh/month for all seasons. Figure D sets out the monthly RPP prices for May 2006 through April 2007. The prices may be updated every six months.

**Figure D**

<b>All Residential Consumers</b>		
Summer (May 1/06 – Oct 31/06)	Up to 600 kWh	5.8 cents/kWh
	More than 600 kWh	6.7 cents/kWh
Winter (Nov 1/06 – April 30/07)	Up to 1,000 kWh	5.5 cents/kWh
	More than 1,000 kWh	6.4 cents/kWh
<b>Non-Residential Consumers (&lt;250,000 kWh/annum &amp; Selected Users)</b>		
All seasons (effective Nov 1/06)	Up to 750 kWh	5.5 cents/kWh*
	More than 750 kWh	6.4 cents/kWh*
*Winter prices are shown on the Sample Bill (Figure C)		
**Prices may be adjusted May 1, 2007.		

Electricity bills are based on metered use at the point where the electricity is delivered to the consumer's premise. However, when electricity is transmitted over distances and passes through lines and transformers a portion of the electricity is lost as heat. For certain charges, a customer's metered usage is increased to reflect the losses that occur on the local utility's distribution system. In the case of Hydro One Networks, the adjustment factor is 9.2%.

## ***Delivery Charge***

The delivery charge represents the cost of delivering the electricity from the generating station to a consumer's actual home or business. It includes two components:

### *Transmission*

The same transmission charges are applicable to all distributors in Ontario. These transmission charges are passed through to all consumers in a distributor's service area and the related charges are set so as to simply recover the costs billed to the distributor for transmission.

### *Distribution*

In the case of distribution services, the rates charged will vary by distributor and depend on the cost of building, maintaining and operating the local distribution system. A portion of the charge is fixed and does not change from month to month, while the rest is based on the kWh used. These charges are generally reset on an annual basis and OEB approval is required for any changes in such charges.

## ***Regulatory Charges***

These charges include the cost of services required to operate and manage the electricity system and consist of the following items:

- **IESO Charges** - The IESO's costs to administer Ontario's competitive electricity market and direct the operation of the province's transmission system. The charge for these services is regulated by the Ontario Energy Board and, for 2006, was 0.52 cents/kWh.
- **RRRP Charges** - The cost of Rural and Remote Rate Protection, which all consumers in the province pay to help offset the higher cost of distributing electricity

to consumers in rural and remote areas of Ontario. This charge is also regulated by the Ontario Energy Board and currently set at 0.1 cents/kWh.

- SSS Charges - The Standard Service Supply Charges which cover the administrative costs incurred by electricity distributors in providing electricity to consumers who do not contract for electricity with an electricity retailer. The charge is currently set by the OEB at 25 cents per month.
- OPA Charges - The cost of service provided by the Ontario Power Authority (OPA) which was established in 2004 to manage issues with respect to electricity supply, demand and infrastructure in the Province. Starting in 2007, funding for the OPA will be provided through a fee that will be levied on all Ontario electricity consumers. This charge is subject to approval by the OEB.

### ***Debt Retirement Charge***

When Ontario's electricity system was restructured in 1998, the successor companies of the former Ontario Hydro were refinanced and set up as self-sufficient businesses. The stranded debt associated with the former Ontario Hydro was assumed by the Ontario Government. In order to pay down this debt the Ontario Government levies a debt retirement charge which is currently set at 0.7 cents/kWh of electricity consumed. The local distributors are responsible for collecting the debt retirement charges from the consumers they service and forwarding the payments to the provincial government.

Certain electricity users are exempt from paying debt retirement charges, including an Indian or Indian Band, as defined in the Indian Act (Canada), with respect to electricity consumed on a reserve. In order to qualify for this exemption, the party claiming the exemption must submit a valid certificate of Indian status, issued by the Government of Canada, to its local distributor.

**Summary**

Figure E summarizes the various charges that appear on the bill for a residential or small business Regulated Price Plan consumer.

**Figure E**

<b>Standard Electricity Bill Components for Regulated Price Plan Customers</b>	
<b>Bill Component</b>	<b>Basis</b>
<p><b>Electricity Charge</b></p> <ul style="list-style-type: none"> <li>• Common price structure for all consumers in the same customer class based on kWh usage</li> </ul>	<ul style="list-style-type: none"> <li>• Regulated Price Plan set by Ontario Energy Board</li> <li>• Applied to metered use adjusted for losses</li> </ul>
<p><b>Delivery Charge</b></p> <ul style="list-style-type: none"> <li>• Transmission component based on province-wide transmission rates and varies by usage</li> <li>• Distribution component varies by local distributor.</li> </ul>	<ul style="list-style-type: none"> <li>• Both components set by OEB</li> <li>• Local transmission charge will vary based on local load characteristics and loss factor adjustment.</li> <li>• Distribution component based on local utility costs and applied to metered use.</li> </ul>
<p><b>Regulatory Charges</b></p> <ul style="list-style-type: none"> <li>• Fixed monthly Standard Service Supply Charge</li> <li>• Variable Charges for Wholesale Market Services and RRRP</li> </ul>	<ul style="list-style-type: none"> <li>• Prices set by OEB</li> <li>• Variable charges based on metered use adjusted for losses.</li> </ul>
<p><b>Debt Retirement Charge</b></p> <ul style="list-style-type: none"> <li>• Price per kWh</li> </ul>	<ul style="list-style-type: none"> <li>• Price set by Ontario Ministry of Finance.</li> <li>• Charge applied to metered use</li> </ul>

## **2 Hydro One Networks' Bills for Residential and Small Business Consumers**

Many of the First Nation communities who receive electricity service from the provincial grid (as opposed to Remote Communities with local generation) are served by Hydro One Networks' distribution business. Hydro One Networks has various retail rate classes for its customers reflecting its diverse customer and geographic base.

### **2.1 Residential Rates**

Residential customers are classified according to their occupancy status (Year Round versus Seasonal) and also according to the density of customers in the local area (Urban versus High versus Normal). The classification can be found on the customer's electricity bill.

#### *Year Round versus Seasonal*

In the case of Hydro One Networks' Residential customers, a distinction is made between Year-Round customers and Seasonal customers. To qualify as a Residential Year-Round customer all of the following criteria must be met:

- a) Occupants must state that the location is their principle residence for purposes of the *Income Tax Act* (if applicable).
- b) The occupant must live in this residence for at least 8 months of the year.
- c) The address of this residence must appear on the occupant's electric bill, driver's licence, credit card invoice, etc.
- d) Occupants who are eligible to vote in Provincial or Federal elections must be enumerated for this purpose at the address of this residence.

Any residential service not meeting these criteria is classified as Seasonal. This includes cottages, chalets and camps.

## *Density Differentiation*

Hydro One Networks' Residential Year-Round and Seasonal rates also vary by density (number of customers per kilometre of distribution line) in order to recognize that the average cost to serve individual customers is higher when there are fewer customers per kilometre of line. The criteria used by Hydro One Networks to establish a consumer's density classification are as follows:

- Urban Density: Areas containing 3,000 or more customers with a line density of at least 60 customers per kilometre.
- High Density: Areas containing 100 or more customers with a line density of at least 15 customers per kilometre.
- Normal Density: Areas that are neither Urban nor High Density.

Figure F sets out the electricity charges applicable to Hydro One Networks' Residential Year-Round and Seasonal customers, by Density Classification, effective November 1, 2006. As highlighted in the Figure, it is only the Delivery portion of the rates that varies. For all other components of the bill the rates are the same and customers' bills will only vary according to their consumption.

**Figure F**

<b>Hydro One Networks' Residential Rates: November 1, 2006</b>					
<b>Item</b>	<b>Urban Year Round</b>	<b>High Density</b>		<b>Normal Density</b>	
		<b>Year Round</b>	<b>Seasonal</b>	<b>Year Round</b>	<b>Seasonal</b>
<b>Electricity</b>					
<u>Regulated Price Plan</u>					
<ul style="list-style-type: none"> <li>• Volume charge – cents / kWh (adjusted usage)</li> <li>- First 1,000 kWh per month</li> <li>- Additional kWh</li> </ul>	5.50 cents	5.50 cents	5.50 cents	5.50 cents	5.50 cents
	6.40 cents	6.40 cents	6.40 cents	6.40 cents	6.40 cents
<b>Delivery</b>					
<u>Transmission</u>					
<ul style="list-style-type: none"> <li>• Volume Charge - cents/kWh (adjusted usage)</li> </ul>	0.94 cents	0.94 cents	0.81 cents	0.94 cents	0.81 cents
<u>Distribution</u>					
<ul style="list-style-type: none"> <li>• Fixed Charge (\$/month)</li> <li>• Volume Charge – cents/kWh (metered use)</li> </ul>	\$13.60	\$18.30	\$18.77	\$28.30**	\$35.54
	2.07 cents	2.59 cents	3.23 cents	2.18 cents	2.51 cents
<b>Regulatory Charges</b>					
<ul style="list-style-type: none"> <li>• Fixed Charge (\$/month)</li> <li>• Volume Charge – cents / kWh (adjusted usage)</li> </ul>	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25
	0.62 cents	0.62 cents	0.62 cents	0.62 cents	0.62 cents
<b>Debt Retirement Charge</b>					
<ul style="list-style-type: none"> <li>• Volume Charge - cents / kWh (metered use)</li> </ul>	0.7 cents	0.7 cents	0.7 cents	0.7 cents	0.7 cents

\*\*Note: The \$28.30 fixed charge for Normal Density Year Round Residential customers includes a \$28.50 credit for Rural and Remote Rate Protection.

The bills for Hydro One Networks residential customers can vary from one consumer to another depending upon:

- 1) Whether the consumer qualifies or not for Residential Year-Round rates. The distribution charges for Residential Seasonal customers are higher and will lead to higher bills for customers that do not meet the Year-Round criteria,
- 2) What Density classification the consumer is assigned to, and
- 3) Whether the consumer is exempt from paying the Debt Retirement charge.

The impact of these various factors on a typical residential bill is examined in Section 3.0.

## 2.2 Small Business Rates

Small business customers using less than 50 kW are billed entirely on the basis of energy usage just like Residential customers. Figure G sets out Hydro One Networks' rates for small business customers.

**Figure G**

<b>Hydro One Networks' Small Business Rates: November 1, 2006</b>			
<b>Item</b>	<b>Urban Density</b>	<b>Non-Urban Density</b>	
		<b>Single Phase</b>	<b>Three Phase</b>
<b>Electricity</b>			
<u>Regulated Price Plan</u>			
• Volume charge – cents / kWh (adjusted usage)			
- First 750 kWh per month	5.50 cents	5.50 cents	5.50 cents
- Additional kWh	6.40 cents	6.40 cents	6.40 cents
<b>Delivery</b>			
<u>Transmission</u>			
• Volume Charge - cents/kWh (adjusted usage)	0.85 cents	0.86 cents	0.85 cents
<u>Distribution</u>			
• Fixed Charge (\$/month)	\$15.06	\$36.11	\$45.91
Volume Charge – cents/kWh (metered use)	2.79 cents	3.29 cents	3.13 cents
<b>Regulatory Charges</b>			
• Fixed Charge (\$/month)	\$0.25	\$0.25	\$0.25
Volume Charge – cents / kWh (adjusted usage)	0.62 cents	0.62 cents	0.62 cents
<b>Debt Retirement Charge</b>			
Volume Charge - cents / kWh (metered use)	0.7 cents	0.7 cents	0.7 cents

Again the only area where the rates differ is with respect to the delivery charges where the rates vary between Urban areas (as previously defined) and non-Urban areas. The non-Urban rates also vary for Single Phase and Three Phase service. Three Phase service is generally required to operate heavier compressors, motor and HVAC systems.

The impact of these factors on the typical bill to a small business customer is examined further in Section 3.0.

### **3 Illustrative Bills for First Nation and Neighbouring Communities**

The purpose of this section is to explain and illustrate the potential variation in electricity bills between:

- Individual consumers in First Nation communities served by Hydro One Networks, and
- Consumers in First Nation communities and nearby non-First Nation communities.

For purposes of comparison, 11 First Nation communities serviced by Hydro One Networks were randomly selected by geographic area. The sample communities selected and the Hydro One Networks Residential rates applicable in each are set out in Figure H. Figure H also identifies a neighbouring non-First Nation community. In each case, the neighbouring community is also served by Hydro One Networks and the Figure identifies the applicable residential rates. In all cases, for both the First Nation community and the neighbouring non-First Nation community, it is the Non-Urban rates that are applicable to small business customers.

**Figure H**  
**Selected First Nation and Neighbouring Communities**

First Nation	Applicable Residential Rates In FN Community		Neighbouring Community	Residential Rates in Neighbouring Community	
	Year Round	Seasonal		Year Round	Seasonal
Alderville	High Density Normal Density	High Density	Alnwick Township	High and Normal Density	High and Normal Density
Aroland	High Density Normal Density	N/A	Nakina	High and Normal Density	Normal Density
Eagle Lake	High Density Normal Density	N/A	Dryden	High and Normal Density	Normal Density
Henvey Inlet	High Density Normal Density	High Density Normal Density	Bigwood	High and Normal Density	High and Normal Density
Lake Helen	High Density Normal Density	N/A	Nipigon	Normal Density	Normal Density
Matachewan	High Density Normal Density	High Density Normal Density	Matachewan	High and Normal Density	High and Normal Density
Pic Mobert	High Density Normal Density	N/A	White River	Normal Density	Normal Density
Munsee-Delaware	Normal Density	N/A	Delaware	High and Normal Density	N/A
Seine River	Normal Density	N/A	Mine Centre	Normal Density	Normal Density
Wabauskang	Normal Density	N/A	Ear Falls	High and Normal Density	High and Normal Density
Wikwemikong	High Density Normal Density	High Density Normal Density	Assiginack Township	High and Normal Density	High and Normal Density

Source of Applicable Rates: Hydro One Networks

### 3.1 Residential Bill Comparisons

Apart from usage level, the key factors that will impact on bill for a typical Residential customer in the First Nation and neighbouring communities are:

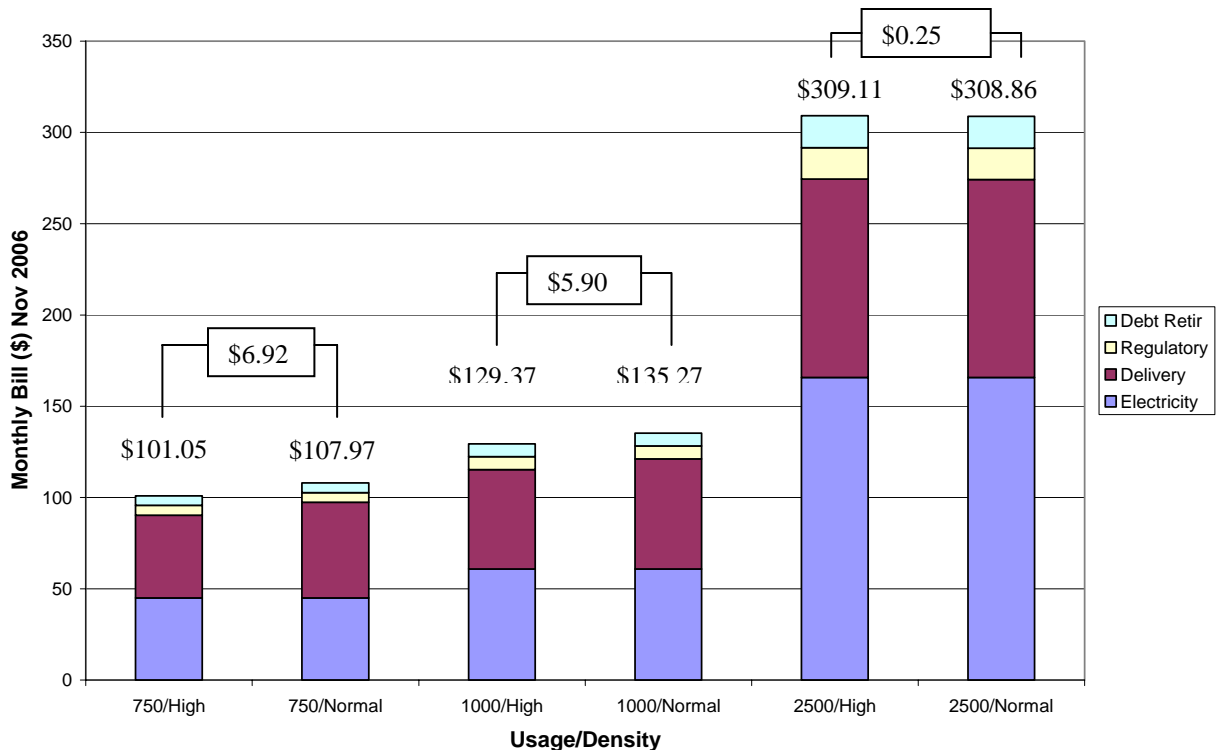
- a) The density classification of the customer's service area,
- b) The occupancy classification (Year-Round vs Seasonal) of the residence, and
- c) The applicability of Debt Retirement Charges

#### a) Normal versus High Density Rates

The following chart sets out the total monthly bill (by major component) for a Residential Year-Round customer subject to debt retirement charges based on range of monthly consumption levels of 750 kWh, 1,000 kWh and 2,500 kWh and upon whether the customer is classified as being in a High Density or a Normal Density area. The Chart also indicates the difference in the bills for each consumption level.

**Chart A**

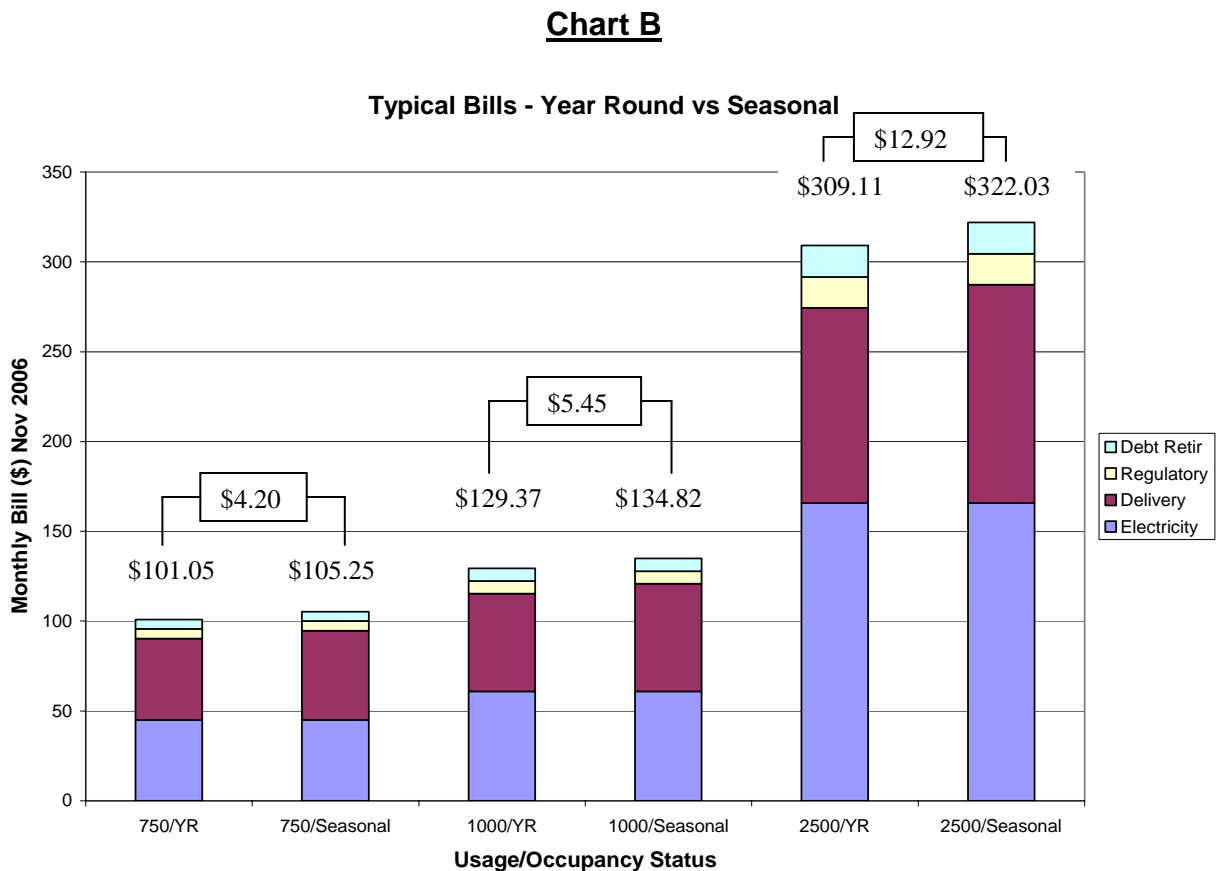
**Typical Bills - High vs Normal Density**



The difference in the total monthly bill for service in Normal Density areas as opposed to High Density areas varies depending upon how much electricity is consumed. At 750 kWh per month, the difference is roughly 7% whereas the bills are virtually the same when usage levels reach 2500 kWh per month. This is because while Normal Density customers pay a higher monthly fixed charge for distribution than High Density customers, their variable (or kWh) charges for distribution are slightly lower (see Figure F). The actual data used to construct Chart A and subsequent Charts is set out in Appendix II.

**b) Year-Round versus Seasonal**

The following chart illustrates the impact on a High Density Residential customer’s bill of being categorized as a Year-Round (YR) versus Seasonal customer based on range of monthly consumption levels (i.e. 750 kWh, 1,000 kWh and 2,500 kWh).

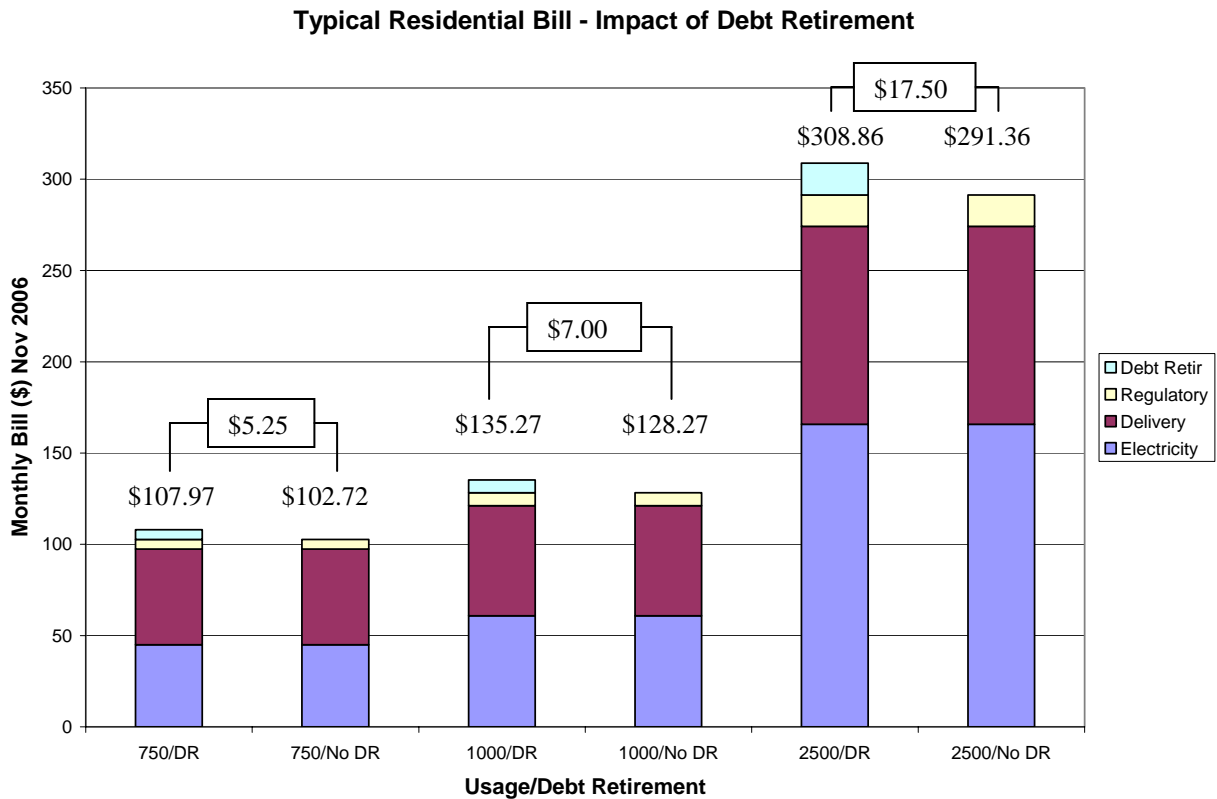


The difference in the monthly bill for a Residential Year-Round Customer and a Residential Seasonal Customer varies slightly in percentage terms depending upon monthly usage but is roughly 4%.

**c) Debt Retirement Charges**

As explained earlier, certain parties are exempt from paying a portion or all of the debt retirement charges. Chart C illustrates the impact on a Normal Density Residential Year Round customer’s total monthly bill of the requirement to pay debt retirement charges.

**Chart C**



An exemption from the Debt Retirement charge would reduce the monthly bill for a Normal Density Year-Round Residential customer by roughly 5 - 6% (\$7 / month at 1,000 kWh).

#### **d) Neighbouring Communities**

All of the First Nation communities and neighbouring communities have year-round residential customers. In most cases the residential year-round density classifications applicable in the neighbouring communities are the same as those in the First Nation community. The only exceptions are:

- Munsee-Delaware and Wabauskang – where year-round residential customers are all billed under the Normal Density classification while some of the year-round residential customers in neighbouring Delaware and Ear Falls qualify for the High Density classification and pay lower rates.
- Pic Mobert and Lake Helen – where year-round customers are billed under both the Normal and High Density classifications. In contrast, in the neighbouring communities of White River and Nipigon all year-round residential customers have a Normal Density classification and pay higher rates than the High Density customers in the two First Nation communities.

Only four of the First Nation communities (Alderville, Henvey Inlet, Matachewan, and Wikwemikong) actually have seasonal residential customers. In contrast, all (but one) of the neighbouring communities have seasonal customers. In three of the four First Nation Communities with seasonal residential rates, the same density classifications are also applicable to customers in the neighbouring community. The one exception is Alderville where seasonal customers qualify for the High Density classification whereas in neighbouring Alnwick seasonal customers only qualify for the Normal Density classification and pay higher rates.

None of the local neighbouring communities identified in this report qualify for either a reduction or exemption to the provincial debt retirement charge. As result, households in these communities will be responsible for paying the debt retirement charge. In contrast, most of the households in the First Nation communities should be eligible for exemption from the debt retirement charge due to their on-reserve Indian status. This

would lead to such First Nation consumers having slightly lower bills than their counterparts in neighbouring communities as identified previously in Chart C.

### **3.2 Small Business Bill Comparisons**

Apart from usage level, the key factors that could impact on billings for Small Business customers in the First Nation and neighbouring communities are:

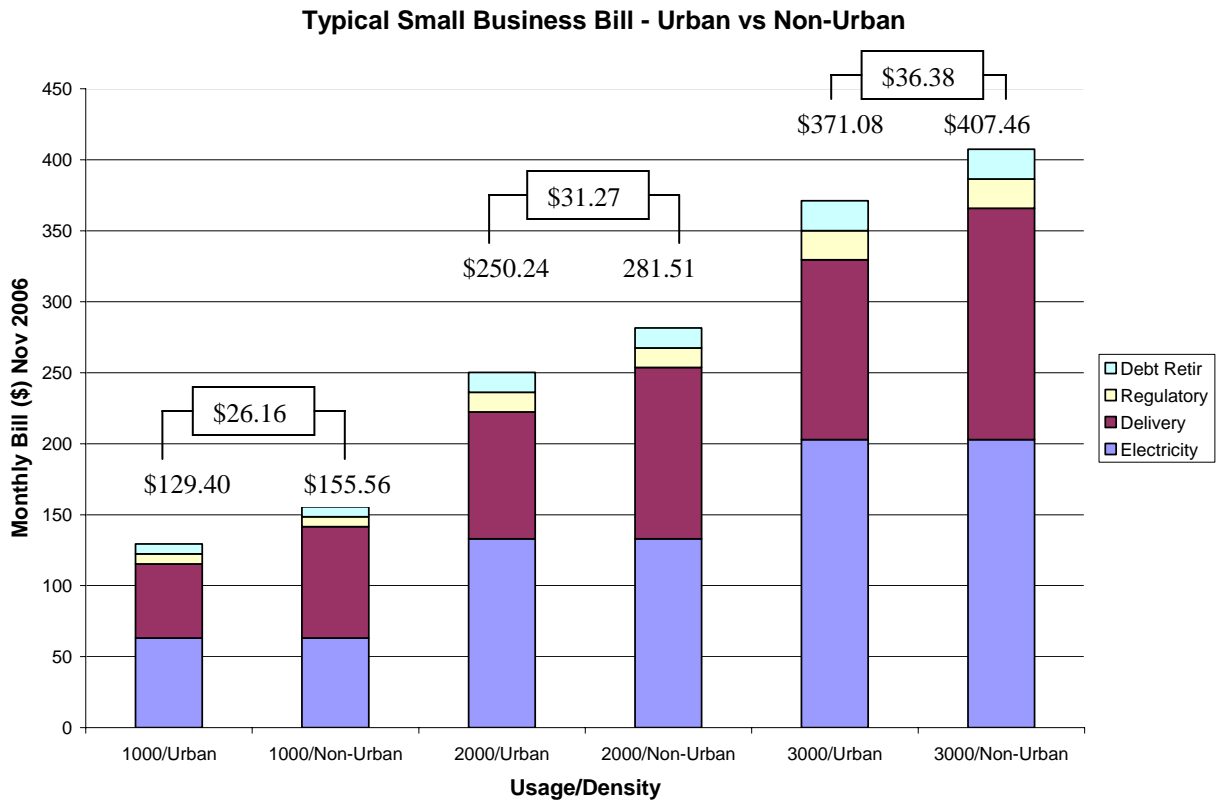
- The density classification of the customer's service area, and
- The applicability of Debt Retirement Charges

The following sections illustrate the impact on a small business customer's bill of each of these factors.

#### **a) Density Classification**

None of the sample First Nation communities meet the requirements for an Urban Density classification. This is also the case for the neighbouring non-First Nation communities. As a result, Density classification does not contribute to differences in the bills seen by small businesses in the various First Nation or neighbouring non-First Nation communities. However, for information purposes, the following chart sets out the impact of an Urban versus a non-Urban classification on the monthly electricity bill for small business customers.

## Chart D

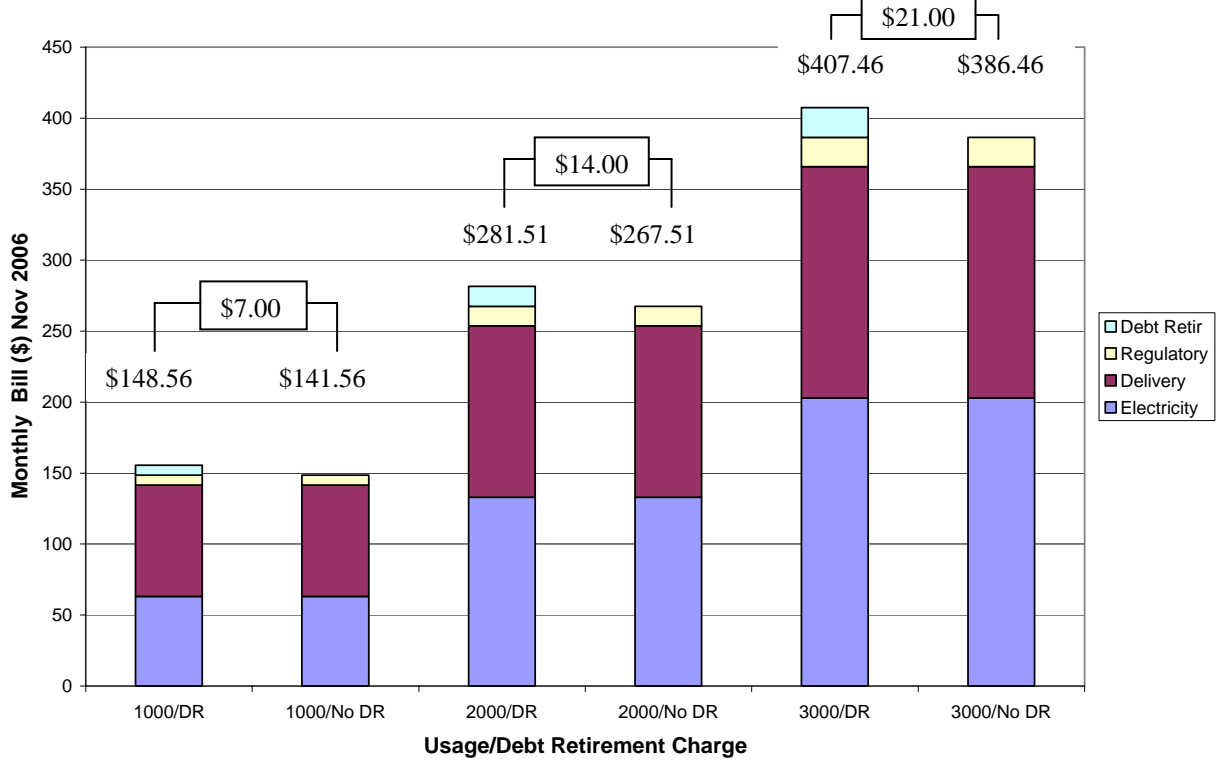


### **b) Debt Retirement Charges**

Most of the small business customers in First Nation communities should qualify for exemption from paying Debt Retirement Charges due to their on-reserve Indian status. Chart E illustrates the impact of such an exemption on the total monthly bill for a Single Phase Small Business customer. In contrast, none of the local neighbouring communities identified in this report qualify for either a reduction or exemption to the provincial debt retirement charge. As a result, small businesses in these communities will be responsible for paying the debt retirement charge. This will lead to many small businesses in First Nation communities having slightly lower bills than their counterparts in neighbouring communities.

## Chart E

### Typical Small Business - Impact of Debt Retirement



## **4 Determination of Applicable Rates**

This section deals with how Hydro One Networks' customers can determine the rate class currently applicable to them and how they can pursue any concerns they may have about how their electricity bills are determined.

### **4.1 Determining Current Billing Arrangements**

The information required to determine the rate classification being applied by Hydro One Networks and whether or not Debt Retirement Charges are being levied can be found on the bill (see Appendix I):

- a) **Service Classification:** On the back of the bill, under heading "Your New Charges" the first line indicates the service classification used to bill the customer. This includes both whether the customer is classified as Year-Round or Seasonal and the Density classification the consumer has been assigned to. In the example given the consumer is a Residential Year-Round High Density customer.
- b) **Debt Retirement Charges:** Under the same section ("Your New Charges") the second last entry indicates if a debt retirement charge has been included in the bill.

A similar bill format is used by Hydro One Networks for Small Business customers.

### **4.2 Questions/Resolution of Issues Regarding Billing**

Customers having questions regarding their Service Classification, their exemption status with respect to Debt Retirement charges or other billing related matters should first contact their local electricity distributor.

- a) *Contact Hydro One Networks*

In the case of Hydro One Networks such contact can be made in one of three ways:

- Phone: 1-888-664-9376  
(Monday to Friday, 7:30 am to 8:00 pm EST)
- E-Mail: [CustomerCommunications@HydroOneNetworks.com](mailto:CustomerCommunications@HydroOneNetworks.com)
- Mailing Address: Hydro One Networks Inc.  
185 Clegg Road  
Markham, Ontario  
L6G 1B7

When contacting Hydro One Networks, customers should have their account numbers (as found at the top of the first page of their bill) available for reference, be prepared to explain their question or concern and, if there is a problem, how they would like it resolved. Also, for purposes of follow-up, customers should keep a record of:

- When Hydro One Networks was contacted,
- Who the customer spoke to and any explanation received (if contact was in person),
- Copies of any correspondence sent/received (if contact was by regular or electronic mail)

If customers find that, in dealing with Hydro One Networks, they are unable to resolve their concerns then they should contact the Ontario Energy Board.

*b) Contact the Ontario Energy Board*

Hydro One Networks' rates as well as how they are applied to customers are regulated by the Ontario Energy Board. One of the roles of the Board is to ensure that electricity distributors such as Hydro One Networks comply with all applicable laws, regulations and codes over which the Board has jurisdiction, including the application of the rates approved by the Board. If after raising the issue with Hydro One Networks, a customer's billing complaint/problem has not been resolved, it can be submitted to the Ontario Energy Board. The Board will determine if there is breach by Hydro One

Networks of its obligations. Also, if required, the Board will act as a mediator between the customer and the company.

At the Ontario Energy Board, complaints are handled by the OEB Consumer Relations Centre. They can be contacted in one of the following ways:

- Phone: 1-877-632-2727 (toll free within Canada)  
(Monday to Friday, 8:30 am to 5:00 pm)
- E-Mail: [complaints@oeb.gov.on.ca](mailto:complaints@oeb.gov.on.ca)
- Mailing Address: Consumer Relations Centre  
Ontario Energy Board  
P.O. Box 2319  
2300 Yonge Street  
Toronto, Ontario  
M4P 1E4

As noted earlier, the Board expects customers to first try and resolve their complaint directly with their distributor, in this case Hydro One Networks. As a result, when communicating with the OEB, customers should be prepared to:

- Describe the issue and the basis for their complaint,
- Describe the efforts were made to resolve the issue with Hydro One Networks, including persons contacted, and
- Outline any resolution proposed by Hydro One Networks and the outcome sought by the customer.

## 5 Conclusions

Most grid-connected First Nation communities receive their electricity from Hydro One Networks' distribution system. The same is also the case for immediately neighbouring non-First Nation communities.


For residential and small business customers in these communities, electricity bills will vary based on:

- Consumption – the charges for all four bill components (Electricity Charge, Delivery Charge, Regulatory Charge and Debt Retirement Charge) are based on usage and will increase as the kWhs used increases.
- Density – Customer density varies across First Nation and non-First Nation communities (and sometimes even within the communities). Communities with lower customer density (i.e., Normal Density) will experience higher electricity bills.
- Occupancy Status – For residential customers, those classified as Year-Round will experience lower bills.
- Eligibility for Debt Retirement Charge Exemption – Individuals or Bands consuming electricity in First Nation communities are exempt from paying Debt Retirement charges if they produce a valid certificate of Indian status.

Otherwise, based on this information, the electricity bills to these customers will be the same.

# Appendix I – Hydro One Networks Bill

## Front of Bill



Service address: CUSTOMER NAME  
CUSTOMER NAME 2  
ADDRESS FIELD, ADDRESS NOTES

Your account number: 12345-67890 Bill Group 3

Billing date: November 21, 2006 Page 1 of 2

**Customer service**

Hydro One Networks Inc.  
PO Box 5700  
Markham, Ontario L3R 1C8

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

For billing and service inquiries, call  
1-888-664-9376  
Monday to Friday  
7:30 am - 8:00 pm  
Eastern Time

For 24 hour power outages or emergency service, call  
1-800-434-1235

Standard Service supplied by Hydro One

### Here's what you owe

Balance forward	\$0.00
Your new charges	\$137.13
<b>Total amount you owe</b>	<b>\$137.13</b>

**After December 12, 2006**, a late payment charge of 1.5% monthly (19.56% per annum) will be applied.

For energy efficiency tips to manage your bill visit [www.PowerSaver.ca](http://www.PowerSaver.ca).



**Compare the electricity you are using**

	Number of days	Average electricity you used per day (kWh)	Type of read
<b>Oct 2, 2006 - Nov 1, 2006</b>	<b>32</b>	<b>35</b>	<b>Estimate</b>
Sep 1, 2006 - Oct 2, 2006	31	34	Actual
Aug 1, 2006 - Sep 1, 2006	31	40	Estimate
Jul 3, 2006 - Aug 1, 2006	28	42	Estimate
Jun 1, 2006 - Jul 3, 2006	32	40	Actual
May 1, 2006 - Jun 1, 2006	30	38	Estimate
<b>Oct 4, 2005 - Nov 1, 2005</b>	<b>31</b>	<b>35</b>	<b>Estimate</b>

Printed on recycled paper. © Hydro One, 03-01



Please return this slip with your payment.

Your account number: **12345-67890**

**Total amount you owe \$137.13**

Amount enclosed \$

T1 (D)  
XX 3J0

MR JOHN DOE  
2050 WILDFLOWER ROAD  
MARKHAM ON X1Y 2Z3

HYDRO ONE NETWORKS INC.  
PO BOX 4102 STN A  
TORONTO ON M5W 3L3

20200069020000202694

Residential - Monthly  
Presentation  
03 09 2007

## Back of Bill



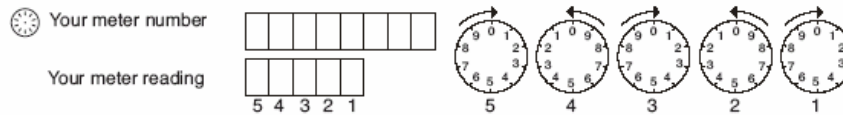
Service address: CUSTOMER NAME  
CUSTOMER NAME 2  
ADDRESS FIELD, ADDRESS NOTES

Your account number: 12345-67890

Page 2 of 2

### How we calculated your charges

<b>Balance forward</b>	Amount of your last bill	\$115.00
	Amount we received on October 30, 2006 - thank you	\$115.00CR
	<b>Balance forward</b>	<b>\$ 0.00</b>
<hr/>		
<b>Your new charges</b>	Your service type is Residential - High Density	
	<b>Electricity used this billing period</b>	
	We estimated your meter J254247 on November 1, 2006	002970
	We read your meter on October 2, 2006	- 002870
	Difference in meter readings	000100
	Metered usage in kilowatt-hours (100 x 10) = 1,000 kWh	
	Adjusted usage in kilowatt-hours (1,000 x 1.092*) = 1,092 kWh	
	<hr/>	
	Electricity: 1,000 kWh @ 5.5000 ¢	\$55.00
	92 kWh @ 6.4000 ¢	\$5.89
	Delivery	\$54.46
	Regulatory Charges	\$7.02
	Debt retirement charge	\$7.00
	GST (87086-5821-RT0001)	\$7.76
	<b>Total of your electricity charges</b>	<b>\$137.13</b>



**Electricity:** This is the cost of the electricity supplied to you during this billing period and is the part of the bill that is subject to competition. The electricity consumed is multiplied by the adjustment factor\*. Hydro One collects this money and pays this amount directly to our suppliers.

\*When electricity is delivered over a power line, it is normal for a small amount of power to be consumed or lost as heat. Equipment, such as wires and transformers, consumes power before it gets to your home or business. The adjustment factor accounts for these losses.

**Delivery:** These are the costs of delivering electricity from generating stations across the Province to Hydro One than to your home or business. This includes the costs to build and maintain the transmission and distribution lines, towers and poles and operate provincial and local electricity systems. A portion of these charges are fixed and do not change from month to month. The rest are variable and increase or decrease depending on the amount of electricity that you use.

**Regulatory Charges:** Regulatory charges are the costs of administering the wholesale electricity system and maintaining the reliability of the provincial grid.

**Debt Retirement Charge:** The debt retirement charge pays down the debt of the former Ontario Hydro.

NOTE: For a detailed explanation of electricity terms, please visit [www.HydroOneNetworks.com](http://www.HydroOneNetworks.com) or [www.oeb.gov.on.ca](http://www.oeb.gov.on.ca).

Residential - Monthly  
Presentation  
03 09 2007

**Appendix II**  
**Supporting Data for Charts**

**Chart A**

<b>Hydro One Networks Monthly Bills</b>						
<b>Residential Year-Round Customers – High vs. Normal Density</b>						
<b>Usage</b>	<b>750 kWh per Month</b>		<b>1000 kWh per Month</b>		<b>2500 kWh per Month</b>	
<b>Density</b>	<b>High</b>	<b>Normal</b>	<b>High</b>	<b>Normal</b>	<b>High</b>	<b>Normal</b>
<b>Bill Component</b>						
<b>Electricity</b>	\$45.05	\$45.05	\$60.89	\$60.89	\$165.72	\$165.72
<b>Delivery</b>	\$45.32	\$52.35	\$54.46	\$60.36	\$108.71	\$108.46
<b>Regulatory Charges</b>	\$5.33	\$5.33	\$7.02	\$7.02	\$17.18	\$17.18
<b>Debt Retirement</b>	\$5.25	\$5.25	\$7.00	\$7.00	\$17.50	\$17.50
<b>Total</b>	\$101.05	\$107.97	\$129.37	\$135.27	\$309.11	\$308.86

Notes: 1) Electricity Charges are based on RPP rates for the period November 2006 to May 2007.

2) The Delivery, Regulatory and Other Charges are based on those in effect November 2006.

**Chart B**

<b>Hydro One Networks Monthly Bills</b>						
<b>High Density Residential Customers: Year-Round vs. Seasonal</b>						
<b>Usage</b>	<b>750 kWh per Month</b>		<b>1000 kWh per Month</b>		<b>2500 kWh per Month</b>	
<b>Classification</b>	<b>Year Round</b>	<b>Seasonal</b>	<b>Year Round</b>	<b>Seasonal</b>	<b>Year Round</b>	<b>Seasonal</b>
<b>Bill Component</b>						
<b>Electricity</b>	\$45.05	\$45.05	\$60.89	\$60.89	\$165.72	\$165.72
<b>Delivery</b>	\$45.32	\$49.63	\$54.46	\$59.92	\$108.71	\$121.63
<b>Regulatory Charges</b>	\$5.33	\$5.33	\$7.02	\$7.02	\$17.18	\$17.18
<b>Debt Retirement</b>	\$5.25	\$5.25	\$7.00	\$7.00	\$17.50	\$17.50
<b>Total</b>	\$101.05	\$105.25	\$129.37	\$134.82	\$309.11	\$322.03

Notes: 1) Electricity Charges are based on RPP rates for the period November 2006 to May 2007.

2) The Delivery, Regulatory and Other Charges are based on those in effect November 2006.

**Chart C**

<b>Hydro One Networks Monthly Bills</b> <b>Normal Density Residential Year-Round Customers</b> <b>Impact of Debt Retirement Charges</b>						
<b>Usage</b>	<b>750 kWh per Month</b>		<b>1000 kWh per Month</b>		<b>2500 kWh per Month</b>	
<b>Debt Retirement</b>	<b>Applicable</b>	<b>Exempt</b>	<b>Applicable</b>	<b>Exempt</b>	<b>Applicable</b>	<b>Exempt</b>
<b>Bill Component</b>						
<b>Electricity</b>	\$45.05	\$45.05	\$60.89	\$60.89	\$165.72	\$165.72
<b>Delivery</b>	\$52.35	\$52.35	\$60.36	\$60.36	\$108.46	\$108.46
<b>Regulatory Charges</b>	\$5.33	\$5.33	\$7.02	\$7.02	\$17.18	\$17.18
<b>Debt Retirement</b>	\$5.25	-	\$7.00	-	\$17.50	-
<b>Total</b>	\$107.97	\$102.72	\$135.27	\$128.27	\$308.86	\$291.36

Notes: 1) Electricity Charges are based on RPP rates for the period November 2006 to May 2007.

2) The Delivery, Regulatory and Other Charges are based on those in effect November 2006.

**Chart D**

<b>Hydro One Networks Monthly Bill</b>						
<b>Small Business – Urban vs Non-Urban Density</b>						
<b>Usage</b>	<b>1000 kWh per Month</b>		<b>2000 kWh per Month</b>		<b>3000 kWh per Month</b>	
<b>Density</b>	<b>Urban</b>	<b>Non-Urban</b>	<b>Urban</b>	<b>Non-Urban</b>	<b>Urban</b>	<b>Non-Urban</b>
<b>Bill Component</b>						
<b>Electricity</b>	\$63.14	\$63.14	\$133.03	\$133.03	\$202.91	\$202.91
<b>Delivery</b>	\$52.24	\$78.40	\$89.42	\$120.69	\$126.61	\$162.98
<b>Regulatory Charges</b>	\$7.02	\$7.02	\$13.79	\$13.79	\$20.56	\$20.56
<b>Debt Retirement</b>	\$7.00	\$7.00	\$14.00	\$14.00	\$21.00	\$21.00
<b>Total</b>	\$129.40	\$155.56	\$250.24	\$281.51	\$371.08	\$407.46

Notes: 1) Electricity Charges are based on RPP rates for the period November 2006 to May 2007.

2) The Delivery, Regulatory and Other Charges are based on those in effect November 2006.

## Chart E

<b>Hydro One Networks Monthly Bills</b>						
<b>Small Business: Impact of Debt Retirement Charges</b>						
<b>Usage</b>	<b>1000 kWh per Month</b>		<b>2000 kWh per Month</b>		<b>3000 kWh per Month</b>	
<b>Debt Retirement</b>	<b>Applicable</b>	<b>Exempt</b>	<b>Applicable</b>	<b>Exempt</b>	<b>Applicable</b>	<b>Exempt</b>
<b>Bill Component</b>						
<b>Electricity</b>	\$63.14	\$63.14	\$133.03	\$133.03	\$202.91	\$202.91
<b>Delivery</b>	\$78.40	\$78.40	\$120.69	\$120.69	\$162.98	\$162.98
<b>Regulatory Charges</b>	\$7.02	\$7.02	\$13.79	\$13.79	\$20.56	\$20.56
<b>Debt Retirement</b>	\$7.00	-	\$14.00	-	\$21.00-	-
<b>Total</b>	\$148.56	\$141.56	\$281.51	\$267.51	\$407.46	\$386.46

Notes: 1) Electricity Charges are based on RPP rates for the period November 2006 to May 2007.

2) The Delivery, Regulatory and Other Charges are based on those in effect November 2006.