

# COMPARISON OF ELECTRICITY PRICES IN MAJOR NORTH AMERICAN CITIES

Rates in effect April 1, 2011

Amended - November 2011



## **TABLE OF CONTENTS**

INT	TRODUCTION	3
ME	ETHOD	7
HIC	GHLIGHTS	9
Res	sidential Customers	9
Sm	nall-Power Customers	10
Me	edium-Power Customers	11
Lar	rge-Power Customers	14
DE	ETAILED RESULTS	
1	Summary Tables (excluding taxes)	17
2	Summary Tables (including taxes)	23
3	Detailed Tables – Residential	29
4	Detailed Tables – General – Small Power	35
5	Detailed Tables – General – Medium Power	41
6	Detailed Tables – General – Large Power	47
ΑP	PPENDICES	
Α	Rate Adjustments	53
В	Time-of-Use Rates Adjustment Clauses	57
C	Taxes Applicable	63
D	Utilities in the Study	71

## **INTRODUCTION**

Every year, Hydro-Québec compares the monthly electricity bills of Québec customers in the residential, commercial, institutional and industrial sectors with those of customers of the various utilities serving 21 major North American cities.

This report details the principal conclusions of this comparative analysis of prices in effect on April 1, 2011. There are three sections. The first describes the method used to estimate electricity bills. The second examines the highlights of the seven consumption levels analyzed, with the help of charts. Finally, the third section presents the results of the 21 consumption levels for which data were collected and compiled in the form of summary and detailed tables.

The most recent rate adjustments, time-of-use rates, adjustment clauses and applicable taxes, as well as a profile of the utilities in the study, appear in separate appendices.

## **MAJOR NORTH AMERICAN CITIES**

**AVERAGE PRICES FOR RESIDENTIAL CUSTOMERS<sup>1</sup>** (IN ¢/kWh)<sup>2</sup>



<sup>1)</sup> For a monthly consumption of 1,000 kWh; rates in effect April 1, 2011. 2) In Canadian dollars.

## **MAJOR NORTH AMERICAN CITIES**

AVERAGE PRICES FOR LARGE-POWER CUSTOMERS<sup>1</sup> (IN ¢/kWh)<sup>2</sup>



<sup>1)</sup> For a monthly consumption of 3,060,000 kWh and a power demand of 5,000 kW; rates in effect April 1, 2011. 2) In Canadian dollars.

## **METHOD**

In addition to Hydro-Québec, this comparative analysis of electricity prices across North America includes 22 utilities: 12 serving the principal cities in the nine other Canadian provinces, and 10 utilities in as many American states. The results are based, in part, on a survey to which 16 utilities responded, and in part on estimates of bills calculated by Hydro-Québec and confirmed, for the most part, by the utilities concerned.

### PERIOD COVERED

Monthly bills have been calculated based on rates in effect on April 1, 2011. The most recent rate adjustments applied by the utilities in the study between April 1, 2010, and April 1, 2011, are indicated in Appendix A.

......

### **CONSUMPTION LEVELS**

Seven consumption levels were selected for analysis. However, data were collected for 21 consumption levels and those results are presented in the Detailed Tables.

## TAXES

With the exception of the bills presented in Section 2, all the calculations exclude taxes. Appendix C lists taxes applicable on April 1, 2011, by customer category; those which may be partially or fully refundable are also indicated.

......

## **OPTIONAL PROGRAMS**

The bills have been calculated according to base rates. Optional rates or programs offered by some utilities to their residential, commercial, institutional or industrial customers have not been taken into account, since the terms and conditions vary considerably from one utility to the next.

### **GEOGRAPHIC LOCATION**

Electricity distributors sometimes offer different rates in the various cities they serve. As well, taxes may vary from one region to another. This, however, is not the case in Québec, where, with the exception of territories north of the 53rd parallel, taxes and rates are applied uniformly. For the purposes of this study, the bill calculations estimate as closely as possible the actual electricity bills of consumers in each target city, based on rates in effect on April 1, 2011.

### **TIME-OF-USE RATES**

The rates offered by some utilities vary depending on the season and/or time of day when energy is consumed. In the United States, for example, a number of utilities set a higher price in summer, when demand for air-conditioning is stronger. In Québec, on the other hand, demand increases in winter because of heating requirements. Thus, for some utilities, April 1 may fall within a period in the year when the price is high, whereas for others it falls in a period when the price is low. An annual average price has therefore been calculated in the case of utilities with time-of-use rates, which are listed in Appendix B.

## **ADJUSTMENT CLAUSES**

The rates of some distributors include adjustment clauses that allow them to adjust their customers' electricity bills according to changes in different variables. Since these adjustments may be applied monthly, or over a longer period, the electricity bills issued by a given distributor may have varied between April 1, 2010, and April 1, 2011, even though base rates remained the same. Appendix B lists the adjustment clauses taken into account when calculating bills.

......

### **EXCHANGE RATE**

The exchange rate used to convert bills in U.S. dollars into Canadian dollars is \$1.0385 (CA\$1 = US\$1.0385), the rate in effect at noon on April 1, 2011. The Canadian dollar had thus appreciated by 5% relative to the U.S. dollar since April 1, 2010.

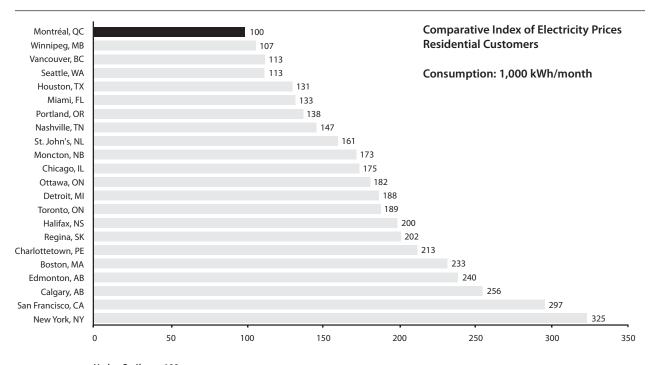
## **HIGHLIGHTS**

The Distribution Tariff sets out Hydro-Québec's rates, as approved by the Régie de l'énergie (the Québec energy board) in Decision D-2011-036. Two types of rates are in effect: domestic rates, for residential customers, and general rates, for commercial, institutional and industrial customers. The last three customer categories are grouped according to their minimum billing demand: small power, medium power and large power. For comparison purposes, the electricity bills of the utilities in the study have been analyzed according to these customer categories.

### **RESIDENTIAL CUSTOMERS**

The rate applicable to Hydro-Québec's residential customers is among the most advantageous in North America. For customers whose monthly consumption is 1,000 kWh, Montréal is once again in *first* place. Figure 1 illustrates the results of this comparison.

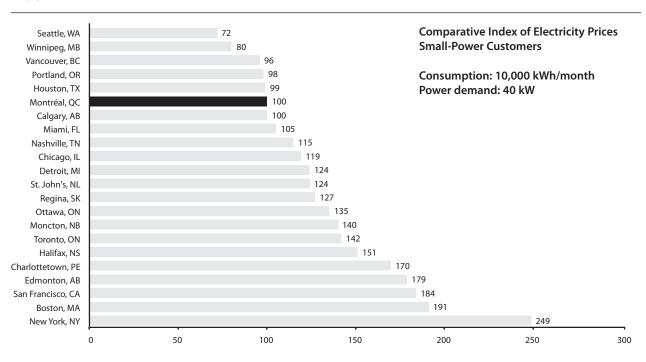
## FIGURE 1



## SMALL-POWER CUSTOMERS (LESS THAN 100 kW)

The comparison of bills for small-power customers is based on a monthly consumption of 10,000 kWh and a power demand of 40 kW. Montréal is in *sixth* place, up from eighth place last year. Figure 2 shows the comparative index of electricity prices.

## FIGURE 2



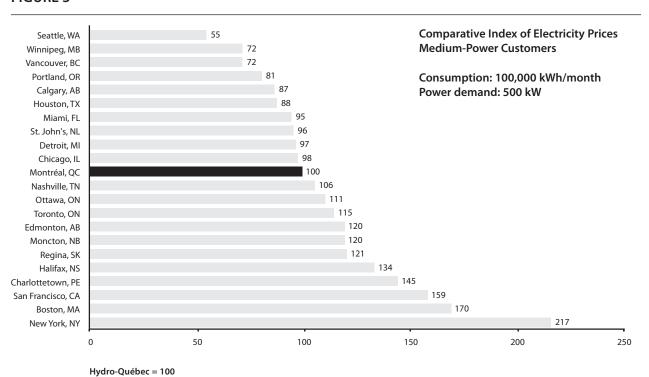
## MEDIUM-POWER CUSTOMERS (100 TO 5,000 kW)

Three consumption levels were analyzed for medium-power customers. In all three cases, the bills of Hydro-Québec's customers have remained below the average observed in the other major North American cities. Figures 3, 4 and 5 show the comparative index of electricity prices for these consumption profiles.

For medium-power customers with a monthly consumption of 100,000 kWh and a power demand of 500 kW, Montréal holds *eleventh* place.

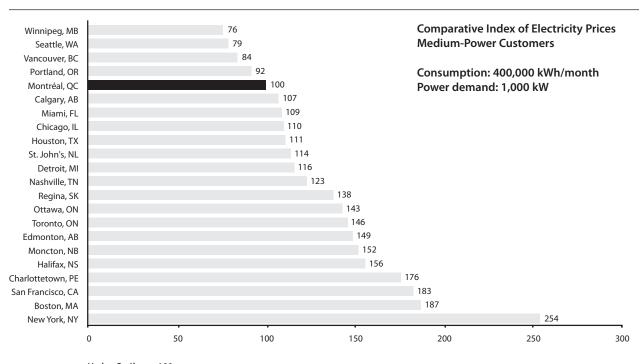
Monthly bill (excluding taxes) Rates in effect April 1, 2011

## FIGURE 3



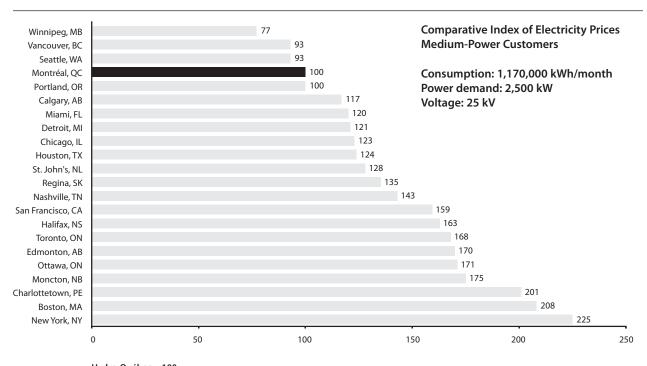
For customers with a monthly consumption of 400,000 kWh and a power demand of 1,000 kW, Montréal is in *fifth* place.

## FIGURE 4



In the case of customers with a monthly consumption of 1,170,000 kWh and a power demand of 2,500 kW, Montréal ranks *fourth*.

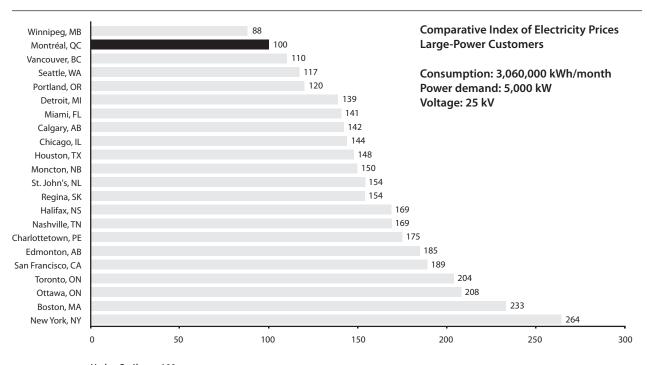
## FIGURE 5



## LARGE-POWER CUSTOMERS (5,000 kW OR MORE)

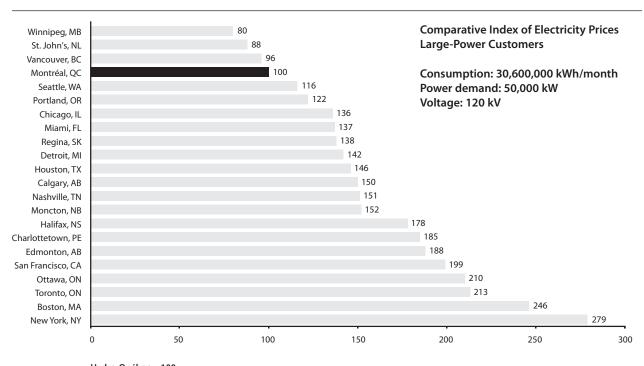
Figure 6 illustrates the comparative index of electricity prices for large-power customers with a monthly consumption of 3,060,000 kWh and a power demand of 5,000 kW. Montréal is in *second* place.

## FIGURE 6



For industrial customers with a power demand of 50,000 kW and a load factor of 85%, Montréal is in *fourth* place.

## FIGURE 7



# DETAILED RESULTS SUMMARY TABLES (EXCLUDING TAXES)

Monthly Bills

Average Prices

Comparative Inde

**MONTHLY BILLS ON APRIL 1, 2011** 

(in CA\$)

## Summary Table (excluding taxes)

RESIDENT	TIAL SERVICE	GENERAL SERVICE					
		Small Power					arge ower
Power demand Consumption Load factor	1,000 kWh	40 kW 10,000 kWh 35%	500 kW 100,000 kWh 28%	1,000 kW 400,000 kWh 56%	2,500 kW¹ 1,170,000 kWh 65%	5,000 kW <sup>1</sup> 3,060,000 kWh 85%	50,000 kW <sup>2</sup> 30,600,000 kWh 85%
Canadian Cities							
Montréal, QC	68.21	890.33	11,115.00	28,867.00	70,898.25	146,398.50	1,384,785.00
Calgary, AB	174.69	892.88	9,644.62	30,984.72	82,820.37	208,476.40	2,079,345.96
Charlottetown, PE	145.07	1,517.67	16,074.47	50,719.47	142,551.47	255,794.00	2,557,940.00
Edmonton, AB <sup>3</sup>	164.04	1,590.50	13,336.00	43,026.14	120,370.55	270,348.73	2,596,708.17
Halifax, NS	136.23	1,342.82	14,896.00	44,906.00	115,336.44	247,074.42	2,470,763.95
Moncton, NB	118.23	1,245.63	13,393.23	43,903.23	124,305.23	220,150.83	2,099,500.00
Ottawa, ON	124.37	1,203.36	12,337.62	41,403.87	121,526.72	304,127.30	2,909,466.79
Regina, SK	137.92	1,134.34	13,434.69	39,958.44	95,772.09	224,813.70	1,909,561.76
St. John's, NL <sup>4</sup>	109.86	1,101.92	10,675.69	32,928.61	90,793.87	224,791.37	1,218,646.00
Toronto, ON	129.01	1,262.87	12,796.28	42,167.46	118,763.43	298,399.20	2,950,468.81
Vancouver, BC	76.81	857.02	8,043.67	24,238.67	65,932.51	160,526.78	1,327,125.92
Winnipeg, MB	73.05	714.25	7,960.39	22,039.09	54,417.24	128,144.04	1,107,352.80
American Cities							
Boston, MA	159.12	1,698.32	18,865.78	53,961.56	147,196.72	341,219.47	3,410,140.27
Chicago, IL⁵	119.34	1,060.59	10,852.89	31,798.15	87,107.65	210,124.10	1,885,745.85
Detroit, MI <sup>5</sup>	128.57	1,101.87	10,790.57	33,482.45	85,703.09	203,123.67	1,969,345.96
Houston, TX⁵	89.54	884.96	9,794.78	32,129.17	87,857.57	217,095.55	2,026,972.88
Miami, FL <sup>5</sup>	90.54	937.52	10,558.32	31,448.44	85,360.98	207,092.63	1,903,112.03
Nashville, TN	100.40	1,026.85	11,831.94	35,498.74	101,619.25	247,375.77	2,092,677.63
New York, NY <sup>5</sup>	221.51	2,217.19	24,115.83	73,352.50	159,858.84	386,676.36	3,866,159.30
Portland, OR	94.21	874.22	9,012.55	26,608.34	71,159.74	175,523.59	1,685,066.01
San Francisco, CA <sup>5</sup>	202.43	1,634.07	17,710.77	52,708.12	112,719.39	276,259.82	2,749,785.94
Seattle, WA	76.85	644.18	6,066.27	22,749.48	66,159.90	171,650.41	1,605,755.15
AVERAGE	124.55	1,174.24	12,423.06	38,130.89	100,374.15	232,963.03	2,173,019.37

<sup>1)</sup> Supply voltage of 25 kV.
2) Supply voltage of 120 kV.
3) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.
4) Newfoundland and Labrador Hydro rates for customers with a power demand of 30,000 kW or more, Newfoundland Power rates for all other customer categories.

5) These bills have been estimated by Hydro-Québec and may differ from actual bills.

## **AVERAGE PRICES ON APRIL 1, 2011**

(in ¢/kWh)1

## Summary Table (excluding taxes)

RESIDENT	TIAL SERVICE	GENERAL SERVICE						
		Small Power					arge ower	
Power demand Consumption Load factor	1,000 kWh	40 kW 10,000 kWh 35%	500 kW 100,000 kWh 28%	1,000 kW 400,000 kWh 56%	2,500 kW <sup>2</sup> 1,170,000 kWh 65%	5,000 kW <sup>2</sup> 3,060,000 kWh 85%	50,000 kW³ 30,600,000 kWh 85%	
Canadian Cities								
Montréal, QC	6.82	8.90	11.12	7.22	6.06	4.78	4.53	
Calgary, AB	17.47	8.93	9.64	7.75	7.08	6.81	6.80	
Charlottetown, PE	14.51	15.18	16.07	12.68	12.18	8.36	8.36	
Edmonton, AB <sup>4</sup>	16.40	15.91	13.34	10.76	10.29	8.83	8.49	
Halifax, NS	13.62	13.43	14.90	11.23	9.86	8.07	8.07	
Moncton, NB	11.82	12.46	13.39	10.98	10.62	7.19	6.86	
Ottawa, ON	12.44	12.03	12.34	10.35	10.39	9.94	9.51	
Regina, SK	13.79	11.34	13.43	9.99	8.19	7.35	6.24	
St. John's, NL <sup>5</sup>	10.99	11.02	10.68	8.23	7.76	7.35	3.98	
Toronto, ON	12.90	12.63	12.80	10.54	10.15	9.75	9.64	
Vancouver, BC	7.68	8.57	8.04	6.06	5.64	5.25	4.34	
Winnipeg, MB	7.31	7.14	7.96	5.51	4.65	4.19	3.62	
American Cities								
Boston, MA	15.91	16.98	18.87	13.49	12.58	11.15	11.14	
Chicago, IL <sup>6</sup>	11.93	10.61	10.85	7.95	7.45	6.87	6.16	
Detroit, MI <sup>6</sup>	12.86	11.02	10.79	8.37	7.33	6.64	6.44	
Houston, TX <sup>6</sup>	8.95	8.85	9.79	8.03	7.51	7.09	6.62	
Miami, FL <sup>6</sup>	9.05	9.38	10.56	7.86	7.30	6.77	6.22	
Nashville, TN	10.04	10.27	11.83	8.87	8.69	8.08	6.84	
New York, NY <sup>6</sup>	22.15	22.17	24.12	18.34	13.66	12.64	12.63	
Portland, OR	9.42	8.74	9.01	6.65	6.08	5.74	5.51	
San Francisco, CA <sup>6</sup>	20.24	16.34	17.71	13.18	9.63	9.03	8.99	
Seattle, WA	7.68	6.44	6.07	5.69	5.65	5.61	5.25	
AVERAGE	12.45	11.74	12.42	9.53	8.58	7.61	7.10	

In Canadian dollars.
 Supply voltage of 25 kV.
 Supply voltage of 120 kV.
 Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.
 Newfoundland and Labrador Hydro rates for customers with a power demand of 30,000 kW or more, Newfoundland Power rates for all other customer categories.
 There bills have been estimated by Hydro Québec and may differ from actual bills.

<sup>6)</sup> These bills have been estimated by Hydro-Québec and may differ from actual bills.

## **COMPARATIVE INDEX ON APRIL 1, 2011**

(Hydro-Québec = 100)

## Summary Table (excluding taxes)

RESIDENT	TIAL SERVICE	GENERAL SERVICE						
		Small Power		Medium Power			arge ower	
Power demand Consumption Load factor	1,000 kWh	40 kW 10,000 kWh 35%	500 kW 100,000 kWh 28%	1,000 kW 400,000 kWh 56%	2,500 kW¹ 1,170,000 kWh 65%	5,000 kW <sup>1</sup> 3,060,000 kWh 85%	50,000 kW <sup>2</sup> 30,600,000 kWh 85%	
Canadian Cities								
Montréal, QC	100	100	100	100	100	100	100	
Calgary, AB	256	100	87	107	117	142	150	
Charlottetown, PE	213	170	145	176	201	175	185	
Edmonton, AB <sup>3</sup>	240	179	120	149	170	185	188	
Halifax, NS	200	151	134	156	163	169	178	
Moncton, NB	173	140	120	152	175	150	152	
Ottawa, ON	182	135	111	143	171	208	210	
Regina, SK	202	127	121	138	135	154	138	
St. John's, NL <sup>4</sup>	161	124	96	114	128	154	88	
Toronto, ON	189	142	115	146	168	204	213	
Vancouver, BC	113	96	72	84	93	110	96	
Winnipeg, MB	107	80	72	76	77	88	80	
American Cities								
Boston, MA	233	191	170	187	208	233	246	
Chicago, IL⁵	175	119	98	110	123	144	136	
Detroit, MI <sup>5</sup>	188	124	97	116	121	139	142	
Houston, TX⁵	131	99	88	111	124	148	146	
Miami, FL <sup>5</sup>	133	105	95	109	120	141	137	
Nashville, TN	147	115	106	123	143	169	151	
New York, NY <sup>5</sup>	325	249	217	254	225	264	279	
Portland, OR	138	98	81	92	100	120	122	
San Francisco, CA <sup>5</sup>	297	184	159	183	159	189	199	
Seattle, WA	113	72	55	79	93	117	116	
AVERAGE	183	132	112	132	142	159	157	

<sup>1)</sup> Supply voltage of 25 kV.
2) Supply voltage of 120 kV.
3) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.
4) Newfoundland and Labrador Hydro rates for customers with a power demand of 30,000 kW or more, Newfoundland Power rates for all other customer categories.

5) These bills have been estimated by Hydro-Québec and may differ from actual bills.

# DETAILED RESULTS SUMMARY TABLES (INCLUDING TAXES)

Monthly Bills

Average Prices

Comparative Ind.

**MONTHLY BILLS ON APRIL 1, 2011** 

(in CA\$)

## Summary Table (including taxes)

RESIDEN	IAL SERVICE GENERAL SERVICE						
		Small Power		Medium Power			arge ower
Power demand Consumption Load factor	1,000 kWh	40 kW 10,000 kWh 35%	500 kW 100,000 kWh 28%	1,000 kW 400,000 kWh 56%	2,500 kW¹ 1,170,000 kWh 65%	5,000 kW <sup>1</sup> 3,060,000 kWh 85%	50,000 kW <sup>2</sup> 30,600,000 kWh 85%
Canadian Cities							
Montréal, QC	77,71	1,014.31	12,662.76	32,886.73	80,770.83	166,784.50	1,577,616.31
Calgary, AB	183.43	937.52	10,126.85	32,533.96	86,961.39	218,900.22	2,183,313.25
Charlottetown, PE	152.32	1,593.55	16,878.19	53,255.44	149,679.04	268,583.70	2,685,837.00
Edmonton, AB <sup>3</sup>	172.24	1,670.03	14,002.80	45,177.45	126,389.08	283,866.17	2,726,543.58
Halifax, NS	143.04	1,544.24	17,130.40	51,641.90	132,636.91	284,135.58	2,841,378.54
Moncton, NB	133.60	1,407.56	15,134.35	49,610.65	140,464.91	248,770.44	2,372,435.00
Ottawa, ON	126.49	1,223.82	13,941.51	46,786.37	137,325.19	343,663.85	3,287,697.47
Regina, SK	144.19	1,242.62	14,717.09	43,772.65	104,913.98	246,273.19	2,091,838.11
St. John's, NL <sup>4</sup>	124.14	1,245.17	12,063.53	37,209.33	102,597.07	254,014.25	1,377,069.98
Toronto, ON	131.21	1,284.34	14,459.79	47,649.22	134,202.67	337,191.09	3,334,029.76
Vancouver, BC	82.65	959.87	9,008.91	27,147.31	73,844.41	179,790.00	1,486,381.03
Winnipeg, MB	83.64	835.67	9,313.66	25,785.73	60,620.80	142,752.46	1,233,591.02
American Cities							
Boston, MA	159.12	1,773.78	19,737.97	56,106.46	152,805.50	353,153.80	3,529,355.17
Chicago, IL <sup>5</sup>	133.67	1,172.51	11,854.92	35,582.00	97,765.65	236,781.45	2,122,290.55
Detroit, MI <sup>5</sup>	142.71	1,223.07	11,977.53	37,165.52	95,130.43	225,467.27	2,185,974.01
Houston, TX⁵	90.43	957.93	10,535.34	34,549.09	95,143.25	235,261.09	2,196,618.72
Miami, FL⁵	103.57	1,150.49	13,001.62	38,366.68	103,876.40	251,239.96	2,288,749.42
Nashville, TN	100.40	1,098.73	12,660.18	37,983.65	108,732.60	251,086.40	2,124,067.80
New York, NY <sup>5</sup>	262.80	2,474.90	26,919.68	81,870.68	178,412.87	431,540.54	4,314,730.22
Portland, OR	95.40	885.22	9,126.92	26,926.70	71,991.81	177,552.17	1,704,361.12
San Francisco, CA <sup>5</sup>	217.89	1,759.42	19,067.00	56,772.93	121,500.05	297,833.79	2,964,564.66
Seattle, WA	76.85	644.18	6,066.27	22,749.48	66,159.90	171,650.41	1,605,755.15
AVERAGE	133.52	1,277.22	13,653.97	41,887.72	110,087.49	254,831.47	2,374,281.72

<sup>1)</sup> Supply voltage of 25 kV.

Supply voltage of 23 kV.
 Supply voltage of 120 kV.
 Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.
 Newfoundland and Labrador Hydro rates for customers with a power demand of 30,000 kW or more, Newfoundland Power rates

for all other customer categories.

5) These bills have been estimated by Hydro-Québec and may differ from actual bills.

## **AVERAGE PRICES ON APRIL 1, 2011**

(in ¢/kWh)1

## **Summary Table (including taxes)**

RESIDENTIAL SERVICE		GENERAL SERVICE							
		Small Power					arge ower		
Power demand Consumption Load factor	1,000 kWh	40 kW 10,000 kWh 35%	500 kW 100,000 kWh 28%	1,000 kW 400,000 kWh 56%	2,500 kW² 1,170,000 kWh 65%	5,000 kW <sup>2</sup> 3,060,000 kWh 85%	50,000 kW³ 30,600,000 kWh 85%		
Canadian Cities									
Montréal, QC	7.77	10.14	12.66	8.22	6.90	5.45	5.16		
Calgary, AB	18.34	9.38	10.13	8.13	7.43	7.15	7.14		
Charlottetown, PE	15.23	15.94	16.88	13.31	12.79	8.78	8.78		
Edmonton, AB <sup>4</sup>	17.22	16.70	14.00	11.29	10.80	9.28	8.91		
Halifax, NS	14.30	15.44	17.13	12.91	11.34	9.29	9.29		
Moncton, NB	13.36	14.08	15.13	12.40	12.01	8.13	7.75		
Ottawa, ON	12.65	12.24	13.94	11.70	11.74	11.23	10.74		
Regina, SK	14.42	12.43	14.72	10.94	8.97	8.05	6.84		
St. John's, NL <sup>5</sup>	12.41	12.45	12.06	9.30	8.77	8.30	4.50		
Toronto, ON	13.12	12.84	14.46	11.91	11.47	11.02	10.90		
Vancouver, BC	8.27	9.60	9.01	6.79	6.31	5.88	4.86		
Winnipeg, MB	8.36	8.36	9.31	6.45	5.18	4.67	4.03		
American Cities									
Boston, MA	15.91	17.74	19.74	14.03	13.06	11.54	11.53		
Chicago, IL <sup>6</sup>	13.37	11.73	11.85	8.90	8.36	7.74	6.94		
Detroit, MI <sup>6</sup>	14.27	12.23	11.98	9.29	8.13	7.37	7.14		
Houston, TX <sup>6</sup>	9.04	9.58	10.54	8.64	8.13	7.69	7.18		
Miami, FL <sup>6</sup>	10.36	11.50	13.00	9.59	8.88	8.21	7.48		
Nashville, TN	10.04	10.99	12.66	9.50	9.29	8.21	6.94		
New York, NY <sup>6</sup>	26.28	24.75	26.92	20.47	15.25	14.10	14.10		
Portland, OR	9.54	8.85	9.13	6.73	6.15	5.80	5.57		
San Francisco, CA <sup>6</sup>	21.79	17.59	19.07	14.19	10.38	9.73	9.69		
Seattle, WA	7.68	6.44	6.07	5.69	5.65	5.61	5.25		
AVERAGE	13.35	12.77	13.65	10.47	9.41	8.33	7.76		

In Canadian dollars.
 Supply voltage of 25 kV.
 Supply voltage of 120 kV.
 Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.
 Newfoundland and Labrador Hydro rates for customers with a power demand of 30,000 kW or more, Newfoundland Power rates for all other customer categories.
 There bills have been estimated by Hydro Québec and may differ from actual bills.

<sup>6)</sup> These bills have been estimated by Hydro-Québec and may differ from actual bills.

## **COMPARATIVE INDEX ON APRIL 1, 2011**

(Hydro-Québec = 100)

## Summary Table (including taxes)

RESIDENTIAL SERVICE		GENERAL SERVICE						
		Small Power	Medium Power				arge ower	
Power demand Consumption Load factor	1,000 kWh	40 kW 10,000 kWh 35%	500 kW 100,000 kWh 28%	1,000 kW 400,000 kWh 56%	2,500 kW¹ 1,170,000 kWh 65%	5,000 kW <sup>1</sup> 3,060,000 kWh 85%	50,000 kW <sup>2</sup> 30,600,000 kWh 85%	
Canadian Cities								
Montréal, QC	100	100	100	100	100	100	100	
Calgary, AB	236	92	80	99	108	131	138	
Charlottetown, PE	196	157	133	162	185	161	170	
Edmonton, AB <sup>3</sup>	222	165	111	137	156	170	173	
Halifax, NS	184	152	135	157	164	170	180	
Moncton, NB	172	139	120	151	174	149	150	
Ottawa, ON	163	121	110	142	170	206	208	
Regina, SK	186	123	116	133	130	148	133	
St. John's, NL <sup>4</sup>	160	123	95	113	127	152	87	
Toronto, ON	169	127	114	145	166	202	211	
Vancouver, BC	106	95	71	83	91	108	94	
Winnipeg, MB	108	82	74	78	75	86	78	
American Cities								
Boston, MA	205	175	156	171	189	212	224	
Chicago, IL⁵	172	116	94	108	121	142	135	
Detroit, MI <sup>5</sup>	184	121	95	113	118	135	139	
Houston, TX⁵	116	94	83	105	118	141	139	
Miami, FL⁵	133	113	103	117	129	151	145	
Nashville, TN	129	108	100	115	135	151	135	
New York, NY <sup>5</sup>	338	244	213	249	221	259	273	
Portland, OR	123	87	72	82	89	106	108	
San Francisco, CA <sup>5</sup>	280	173	151	173	150	179	188	
Seattle, WA	99	64	48	69	82	103	102	
AVERAGE	172	126	108	127	136	153	150	

<sup>1)</sup> Supply voltage of 25 kV.
2) Supply voltage of 120 kV.
3) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.
4) Newfoundland and Labrador Hydro rates for customers with a power demand of 30,000 kW or more, Newfoundland Power rates for all other customer categories.

5) These bills have been estimated by Hydro-Québec and may differ from actual bills.

## DETAILED RESULTS RESIDENTIAL SERVICE

Monthly Bills

Average Prices

Comparative Index

MONTHLY BILLS ON APRIL 1, 2011 (in CA\$)

## **Residential Service**

Consumption	625 kWh	750 kWh	1,000 kWh	2,000 kWh	3,000 kWh
Canadian Cities					
Montréal, QC	45.88	52.62	68.21	143.31	218.41
Calgary, AB	116.18	135.68	174.69	330.73	486.76
Charlottetown, PE	99.88	114.95	145.07	265.57	357.57
Edmonton, AB	110.12	128.09	164.04	307.84	451.64
Halifax, NS	89.21	104.88	136.23	261.63	387.03
Moncton, NB	81.29	93.61	118.23	216.73	315.23
Ottawa, ON	80.41	94.28	124.37	245.70	367.04
Regina, SK	94.15	108.74	137.92	254.63	371.34
St. John's, NL <sup>1</sup>	74.46	86.26	109.86	204.26	298.66
Toronto, ON	86.64	100.70	129.01	246.69	364.36
Vancouver, BC	44.35	54.31	76.81	166.80	256.80
Winnipeg, MB	48.23	56.50	73.05	139.25	205.45
American Cities					
Boston, MA	101.77	120.90	159.12	312.05	464.97
Chicago, IL <sup>2</sup>	78.52	92.13	119.34	228.20	337.05
Detroit, MI <sup>2</sup>	81.01	96.86	128.57	255.39	382.22
Houston, TX <sup>2</sup>	68.15	78.47	89.54	172.14	254.73
Miami, FL <sup>2</sup>	58.72	69.33	90.54	194.66	298.78
Nashville, TN	67.02	78.15	100.40	189.42	278.43
New York, NY <sup>2</sup>	143.76	169.68	221.51	428.85	636.19
Portland, OR	62.41	73.01	94.21	203.27	312.33
San Francisco, CA <sup>2</sup>	128.60	177.17	202.43	579.88	968.43
Seattle, WA	42.33	53.84	76.85	168.90	260.96
AVERAGE	81.96	97.28	124.55	250.72	376.11

Newfoundland Power rates.
 These bills have been estimated by Hydro-Québec and may differ from actual bills.

## AVERAGE PRICES ON APRIL 1, 2011 (in ¢/kWh)¹

## **Residential Service**

Consumption	625 kWh	750 kWh	1,000 kWh	2,000 kWh	3,000 kWh
Canadian Cities					
Montréal, QC	7.34	7.02	6.82	7.17	7.28
Calgary, AB	18.59	18.09	17.47	16.54	16.23
Charlottetown, PE	15.98	15.33	14.51	13.28	11.92
Edmonton, AB	17.62	17.08	16.40	15.39	15.05
Halifax, NS	14.27	13.98	13.62	13.08	12.90
Moncton, NB	13.01	12.48	11.82	10.84	10.51
Ottawa, ON	12.87	12.57	12.44	12.29	12.23
Regina, SK	15.06	14.50	13.79	12.73	12.38
St. John's, NL <sup>2</sup>	11.91	11.50	10.99	10.21	9.96
Toronto, ON	13.86	13.43	12.90	12.33	12.15
Vancouver, BC	7.10	7.24	7.68	8.34	8.56
Winnipeg, MB	7.72	7.53	7.31	6.96	6.85
American Cities					
Boston, MA	16.28	16.12	15.91	15.60	15.50
Chicago, IL <sup>3</sup>	12.56	12.28	11.93	11.41	11.23
Detroit, MI <sup>3</sup>	12.96	12.91	12.86	12.77	12.74
Houston, TX <sup>3</sup>	10.90	10.46	8.95	8.61	8.49
Miami, FL <sup>3</sup>	9.40	9.24	9.05	9.73	9.96
Nashville, TN	10.72	10.42	10.04	9.47	9.28
New York, NY <sup>3</sup>	23.00	22.62	22.15	21.44	21.21
Portland, OR	9.99	9.73	9.42	10.16	10.41
San Francisco, CA <sup>3</sup>	20.58	23.62	20.24	28.99	32.28
Seattle, WA	6.77	7.18	7.68	8.45	8.70
AVERAGE	13.11	12.97	12.45	12.54	12.54

In Canadian dollars.
 Newfoundland Power rates.
 These bills have been estimated by Hydro-Québec and may differ from actual bills.

## **COMPARATIVE INDEX ON APRIL 1, 2011** (Hydro-Québec = 100)

## **Residential Service**

Consumption	625 kWh	750 kWh	1,000 kWh	2,000 kWh	3,000 kWh
Canadian Cities					
Montréal, QC	100	100	100	100	100
Calgary, AB	253	258	256	231	223
Charlottetown, PE	218	218	213	185	164
Edmonton, AB	240	243	240	215	207
Halifax, NS	194	199	200	183	177
Moncton, NB	177	178	173	151	144
Ottawa, ON	175	179	182	171	168
Regina, SK	205	207	202	178	170
St. John's, NL <sup>1</sup>	162	164	161	143	137
Toronto, ON	189	191	189	172	167
Vancouver, BC	97	103	113	116	118
Winnipeg, MB	105	107	107	97	94
American Cities					
Boston, MA	222	230	233	218	213
Chicago, IL <sup>2</sup>	171	175	175	159	154
Detroit, MI <sup>2</sup>	177	184	188	178	175
Houston, TX <sup>2</sup>	149	149	131	120	117
Miami, FL <sup>2</sup>	128	132	133	136	137
Nashville, TN	146	149	147	132	127
New York, NY <sup>2</sup>	313	322	325	299	291
Portland, OR	136	139	138	142	143
San Francisco, CA <sup>2</sup>	280	337	297	405	443
Seattle, WA	92	102	113	118	119
AVERAGE	179	185	183	175	172

Newfoundland Power rates.
 These bills have been estimated by Hydro-Québec and may differ from actual bills.

# DETAILED RESULTS GENERAL SERVICE – SMALL POWER

Monthly Bills

Average Prices

**Comparative Index** 

MONTHLY BILLS ON APRIL 1, 2011 (in CA\$)

# General Service - Small Power

Power demand Consumption Load factor	6 kW 750 kWh 17%	14 kW 2,000 kWh 20%	40 kW 10,000 kWh 35%	100 kW 14,000 kWh 19%	100 kW 25,000 kWh 35%
Canadian Cities					
Montréal, QC	78.18	187.93	890.33	1,675.80	2,459.00
Calgary, AB	157.03	350.00	892.88	1,372.75	2,045.80
Charlottetown, PE	138.42	328.17	1,517.67	2,695.87	3,719.97
Edmonton, AB	131.59	328.74	1,590.50	2,425.28	2,779.04
Halifax, NS	109.63	266.03	1,342.82	2,356.46	3,357.05
Moncton, NB	111.46	262.33	1,245.63	2,167.63	3,109.23
Ottawa, ON	98.49	247.80	1,203.36	2,160.04	3,094.00
Regina, SK	109.82	248.27	1,134.34	2,185.43	2,997.06
St. John's, NL <sup>1</sup>	101.65	300.82	1,101.92	2,018.92	2,776.09
Toronto, ON	111.26	266.89	1,262.87	2,076.31	3,013.58
Vancouver, BC	68.08	172.63	857.02	1,446.19	1,936.04
Winnipeg, MB	70.45	157.45	714.25	1,437.79	1,877.24
American Cities					
Boston, MA	126.39	327.25	1,698.32	3,313.83	4,485.15
Chicago, IL <sup>2</sup>	92.34	222.69	1,060.59	1,683.39	2,621.02
Detroit, MI <sup>2</sup>	96.94	240.65	1,101.87	1,532.47	2,716.65
Houston, TX <sup>2</sup>	72.40	246.90	884.96	1,490.02	2,149.44
Miami, FL <sup>2</sup>	77.62	195.92	937.52	1,697.25	2,320.05
Nashville, TN	99.62	224.92	1,026.85	2,117.40	2,818.88
New York, NY <sup>2</sup>	184.69	597.55	2,217.19	4,132.46	5,518.60
Portland, OR	86.44	199.61	874.22	1,444.05	2,148.95
San Francisco, CA <sup>2</sup>	133.12	340.74	1,634.07	2,625.64	3,914.34
Seattle, WA	48.32	128.84	644.18	884.91	1,487.68
AVERAGE	104.72	265.55	1,174.24	2,042.72	2,879.31

Newfoundland Power rates.
 These bills have been estimated by Hydro-Québec and may differ from actual bills.

# AVERAGE PRICES ON APRIL 1, 2011 (in ¢/kWh)¹

# **General Service - Small Power**

Power demand Consumption Load factor	6 kW 750 kWh 17%	14 kW 2,000 kWh 20%	40 kW 10,000 kWh 35%	100 kW 14,000 kWh 19%	100 kW 25,000 kWh 35%
Canadian Cities					
Montréal, QC	10.42	9.40	8.90	11.97	9.84
Calgary, AB	20.94	17.50	8.93	9.81	8.18
Charlottetown, PE	18.46	16.41	15.18	19.26	14.88
Edmonton, AB	17.55	16.44	15.91	17.32	11.12
Halifax, NS	14.62	13.30	13.43	16.83	13.43
Moncton, NB	14.86	13.12	12.46	15.48	12.44
Ottawa, ON	13.13	12.39	12.03	15.43	12.38
Regina, SK	14.64	12.41	11.34	15.61	11.99
St. John's, NL <sup>2</sup>	13.55	15.04	11.02	14.42	11.10
Toronto, ON	14.84	13.34	12.63	14.83	12.05
Vancouver, BC	9.08	8.63	8.57	10.33	7.74
Winnipeg, MB	9.39	7.87	7.14	10.27	7.51
American Cities					
Boston, MA	16.85	16.36	16.98	23.67	17.94
Chicago, IL <sup>3</sup>	12.31	11.13	10.61	12.02	10.48
Detroit, MI <sup>3</sup>	12.92	12.03	11.02	10.95	10.87
Houston, TX <sup>3</sup>	9.65	12.34	8.85	10.64	8.60
Miami, FL <sup>3</sup>	10.35	9.80	9.38	12.12	9.28
Nashville, TN	13.28	11.25	10.27	15.12	11.28
New York, NY <sup>3</sup>	24.63	29.88	22.17	29.52	22.07
Portland, OR	11.53	9.98	8.74	10.31	8.60
San Francisco, CA <sup>3</sup>	17.75	17.04	16.34	18.75	15.66
Seattle, WA	6.44	6.44	6.44	6.32	5.95
AVERAGE	13.96	13.28	11.74	14.59	11.52

In Canadian dollars.
 Newfoundland Power rates.
 These bills have been estimated by Hydro-Québec and may differ from actual bills.

# **COMPARATIVE INDEX ON APRIL 1, 2011** (Hydro-Québec = 100)

# General Service – Small Power

Power demand Consumption Load factor	6 kW 750 kWh 17%	14 kW 2,000 kWh 20%	40 kW 10,000 kWh 35%	100 kW 14,000 kWh 19%	100 kW 25,000 kWh 35%
Canadian Cities					
Montréal, QC	100	100	100	100	100
Calgary, AB	201	186	100	82	83
Charlottetown, PE	177	175	170	161	151
Edmonton, AB	168	175	179	145	113
Halifax, NS	140	142	151	141	137
Moncton, NB	143	140	140	129	126
Ottawa, ON	126	132	135	129	126
Regina, SK	140	132	127	130	122
St. John's, NL <sup>1</sup>	130	160	124	120	113
Toronto, ON	142	142	142	124	123
Vancouver, BC	87	92	96	86	79
Winnipeg, MB	90	84	80	86	76
American Cities					
Boston, MA	162	174	191	198	182
Chicago, IL <sup>2</sup>	118	118	119	100	107
Detroit, MI <sup>2</sup>	124	128	124	91	110
Houston, TX <sup>2</sup>	93	131	99	89	87
Miami, FL <sup>2</sup>	99	104	105	101	94
Nashville, TN	127	120	115	126	115
New York, NY <sup>2</sup>	236	318	249	247	224
Portland, OR	111	106	98	86	87
San Francisco, CA <sup>2</sup>	170	181	184	157	159
Seattle, WA	62	69	72	53	60
AVERAGE	134	141	132	122	117

Newfoundland Power rates.
 These bills have been estimated by Hydro-Québec and may differ from actual bills.

# **DETAILED RESULTS**

GENERAL SERVICE – MEDIUM POWER

**Monthly Bills** 

Average Prices

Comparative Index

**MONTHLY BILLS ON APRIL 1, 2011** 

(in CA\$)

# General Service - Medium Power

Power demand Consumption Load factor	500 kW 100,000 kWh 28%	500 kW 200,000 kWh 56%	1,000 kW 200,000 kWh 28%	1,000 kW 400,000 kWh 56%	2,500 kW¹ 1,170,000 kWh 65%
Canadian Cities					
Montréal, QC	11,115.00	15,640.00	22,230.00	28,867.00	70,898.25
Calgary, AB	9,644.62	15,708.13	18,857.71	30,984.72	82,820.37
Charlottetown, PE	16,074.47	25,384.47	32,099.47	50,719.47	142,551.47
Edmonton, AB <sup>2</sup>	13,336.00	22,356.02	24,986.12	43,026.14	120,370.55
Halifax, NS	14,896.00	22,453.00	29,792.00	44,906.00	115,336.44
Moncton, NB	13,393.23	21,953.23	26,783.23	43,903.23	124,305.23
Ottawa, ON	12,337.62	20,828.15	24,422.80	41,403.87	121,526.72
Regina, SK	13,434.69	19,976.49	26,875.04	39,958.44	95,772.09
St. John's, NL <sup>3</sup>	10,675.69	16,986.58	20,431.47	32,928.61	90,793.87
Toronto, ON	12,796.28	21,316.93	25,310.57	42,167.46	118,763.43
Vancouver, BC	8,043.67	12,071.92	16,182.17	24,238.67	65,932.51
Winnipeg, MB	7,960.39	11,110.39	15,739.09	22,039.09	54,417.24
American Cities					
Boston, MA	18,865.78	27,061.02	37,571.08	53,961.56	147,196.72
Chicago, IL⁴	10,852.89	15,955.47	21,593.00	31,798.15	87,107.65
Detroit, MI <sup>4</sup>	10,790.57	16,980.63	21,555.79	33,482.45	85,703.09
Houston, TX <sup>4</sup>	9,794.78	15,789.51	20,139.72	32,129.17	87,857.57
Miami, FL <sup>4</sup>	10,558.32	15,748.35	21,068.38	31,448.44	85,360.98
Nashville, TN	11,831.94	17,844.29	23,474.04	35,498.74	101,619.25
New York, NY <sup>4</sup>	24,115.83	36,717.11	48,149.94	73,352.50	159,858.84
Portland, OR	9,012.55	14,334.66	16,601.86	26,608.34	71,159.74
San Francisco, CA <sup>4</sup>	17,710.77	26,973.99	34,902.41	52,708.12	112,719.39
Seattle, WA	6,066.27	11,458.51	11,823.45	22,749.48	66,159.90
AVERAGE	12,423.06	19,302.22	24,572.24	38,130.89	100,374.15

Supply voltage of 25 kV.
 Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.
 Newfoundland Power rates.
 These bills have been estimated by Hydro-Québec and may differ from actual bills.

# AVERAGE PRICES ON APRIL 1, 2011 (in ¢/kWh)¹

# **General Service - Medium Power**

Power demand Consumption Load factor	500 kW 100,000 kWh 28%	500 kW 200,000 kWh 56%	1,000 kW 200,000 kWh 28%	1,000 kW 400,000 kWh 56%	2,500 kW² 1,170,000 kWh 65%
Canadian Cities					
Montréal, QC	11.12	7.82	11.12	7.22	6.06
Calgary, AB	9.64	7.85	9.43	7.75	7.08
Charlottetown, PE	16.07	12.69	16.05	12.68	12.18
Edmonton, AB <sup>3</sup>	13.34	11.18	12.49	10.76	10.29
Halifax, NS	14.90	11.23	14.90	11.23	9.86
Moncton, NB	13.39	10.98	13.39	10.98	10.62
Ottawa, ON	12.34	10.41	12.21	10.35	10.39
Regina, SK	13.43	9.99	13.44	9.99	8.19
St. John's, NL <sup>4</sup>	10.68	8.49	10.22	8.23	7.76
Toronto, ON	12.80	10.66	12.66	10.54	10.15
Vancouver, BC	8.04	6.04	8.09	6.06	5.64
Winnipeg, MB	7.96	5.56	7.87	5.51	4.65
American Cities					
Boston, MA	18.87	13.53	18.79	13.49	12.58
Chicago, IL <sup>5</sup>	10.85	7.98	10.80	7.95	7.45
Detroit, MI <sup>5</sup>	10.79	8.49	10.78	8.37	7.33
Houston, TX⁵	9.79	7.89	10.07	8.03	7.51
Miami, FL <sup>5</sup>	10.56	7.87	10.53	7.86	7.30
Nashville, TN	11.83	8.92	11.74	8.87	8.69
New York, NY <sup>5</sup>	24.12	18.36	24.07	18.34	13.66
Portland, OR	9.01	7.17	8.30	6.65	6.08
San Francisco, CA⁵	17.71	13.49	17.45	13.18	9.63
Seattle, WA	6.07	5.73	5.91	5.69	5.65
AVERAGE	12.42	9.65	12.29	9.53	8.58

In Canadian dollars.
 Supply voltage of 25 kV.
 Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.
 Newfoundland Power rates.
 These bills have been estimated by Hydro-Québec and may differ from actual bills.

# **COMPARATIVE INDEX ON APRIL 1, 2011**

(Hydro-Québec = 100)

# General Service – Medium Power

Power demand Consumption Load factor	500 kW 100,000 kWh 28%	500 kW 200,000 kWh 56%	1,000 kW 200,000 kWh 28%	1,000 kW 400,000 kWh 56%	2,500 kW¹ 1,170,000 kWh 65%
Canadian Cities					
Montréal, QC	100	100	100	100	100
Calgary, AB	87	100	85	107	117
Charlottetown, PE	145	162	144	176	201
Edmonton, AB <sup>2</sup>	120	143	112	149	170
Halifax, NS	134	144	134	156	163
Moncton, NB	120	140	120	152	175
Ottawa, ON	111	133	110	143	171
Regina, SK	121	128	121	138	135
St. John's, NL <sup>3</sup>	96	109	92	114	128
Toronto, ON	115	136	114	146	168
Vancouver, BC	72	77	73	84	93
Winnipeg, MB	72	71	71	76	77
American Cities					
Boston, MA	170	173	169	187	208
Chicago, IL⁴	98	102	97	110	123
Detroit, MI <sup>4</sup>	97	109	97	116	121
Houston, TX⁴	88	101	91	111	124
Miami, FL <sup>4</sup>	95	101	95	109	120
Nashville, TN	106	114	106	123	143
New York, NY <sup>4</sup>	217	235	217	254	225
Portland, OR	81	92	75	92	100
San Francisco, CA <sup>4</sup>	159	172	157	183	159
Seattle, WA	55	73	53	79	93
AVERAGE	112	123	111	132	142

Supply voltage of 25 kV.
 Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.
 Newfoundland Power rates.
 These bills have been estimated by Hydro-Québec and may differ from actual bills.

# DETAILED RESULTS GENERAL SERVICE – LARGE POWER

Monthly Bills

Average Prices

**Comparative Index** 

**MONTHLY BILLS ON APRIL 1, 2011** 

(in CA\$)

# General Service – Large Power

Power demand Consumption Voltage Load factor	5,000 kW 2,340,000 kWh 25 kV 65%	5,000 kW 3,060,000 kWh 25 kV 85%	10,000 kW 5,760,000 kWh 120 kV 80%	30,000 kW 17,520,000 kWh 120 kV 81%	50,000 kW 23,400,000 kWh 120 kV 65%	50,000 kW 30,600,000 kWh 120 kV 85%
Canadian Cities						
Montréal, QC	125,014.50	146,398.50	266,265.00	805,923.00	1,170,945.00	1,384,785.00
Calgary, AB	163,990.77	208,476.40	394,107.19	1,195,948.08	1,634,489.64	2,079,345.96
Charlottetown, PE	212,666.00	255,794.00	490,024.00	1,484,448.00	2,126,660.00	2,557,940.00
Edmonton, AB <sup>1</sup>	213,833.84	270,348.73	497,131.90	1,495,849.85	2,039,578.82	2,596,708.17
Halifax, NS	201,181.62	247,074.42	471,202.44	1,428,914.79	2,011,835.95	2,470,763.95
Moncton, NB	185,437.83	220,150.83	402,800.00	1,219,800.00	1,757,500.00	2,099,500.00
Ottawa, ON	244,487.85	304,127.30	563,789.74	1,681,958.77	2,313,072.28	2,909,466.79
Regina, SK	183,392.10	224,813.70	369,159.91	1,105,594.58	1,541,202.56	1,909,561.76
St. John's, NL <sup>2</sup>	179,121.77	224,791.37	420,683.21	706,903.20	1,010,494.00	1,218,646.00
Toronto, ON	236,059.76	298,399.20	562,231.04	1,701,053.83	2,347,238.66	2,950,468.81
Vancouver, BC	131,958.44	160,526.78	253,351.80	768,108.51	1,085,703.98	1,327,125.92
Winnipeg, MB	106,760.04	128,144.04	211,784.40	641,814.60	913,672.80	1,107,352.80
American Cities						
Boston, MA	283,336.86	341,219.47	653,269.37	1,978,645.75	2,831,314.12	3,410,140.27
Chicago, IL³	173,676.75	210,124.10	374,421.58	1,089,257.09	1,521,272.34	1,885,745.85
Detroit, MI <sup>3</sup>	170,927.37	203,123.67	378,327.42	1,144,641.17	1,650,849.45	1,969,345.96
Houston, TX <sup>3</sup>	173,944.61	217,095.55	384,108.96	1,165,989.71	1,595,505.10	2,026,972.88
Miami, FL <sup>3</sup>	170,549.42	207,092.63	364,865.42	1,103,064.62	1,565,758.09	1,903,112.03
Nashville, TN	204,260.19	247,375.77	408,919.88	1,224,260.72	1,816,240.60	2,092,677.63
New York, NY <sup>3</sup>	319,650.55	386,676.36	739,772.67	2,241,525.65	3,195,901.17	3,866,159.30
Portland, OR	141,510.74	175,523.59	322,104.95	973,991.12	1,362,218.42	1,685,066.01
San Francisco, CA <sup>3</sup>	223,451.89	276,259.82	524,692.09	1,588,831.74	2,221,706.55	2,749,785.94
Seattle, WA	132,318.83	171,650.41	302,792.57	921,386.49	1,238,582.12	1,605,755.15
AVERAGE	189,887.81	232,963.03	425,263.89	1,257,632.33	1,770,533.71	2,173,019.37

Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.
 Newfoundland and Labrador Hydro rates for customers with a power demand of 30,000 kW or more, Newfoundland Power rates for all other customer categories.
 These bills have been estimated by Hydro-Québec and may differ from actual bills.

# **AVERAGE PRICES ON APRIL 1, 2011**

(in ¢/kWh)1

# General Service – Large Power

Power demand Consumption Voltage Load factor	5,000 kW 2,340,000 kWh 25 kV 65%	5,000 kW 3,060,000 kWh 25 kV 85%	10,000 kW 5,760,000 kWh 120 kV 80%	30,000 kW 17,520,000 kWh 120 kV 81%	50,000 kW 23,400,000 kWh 120 kV 65%	50,000 kW 30,600,000 kWh 120 kV 85%
Canadian Cities						
Montréal, QC	5.34	4.78	4.62	4.60	5.00	4.53
Calgary, AB	7.01	6.81	6.84	6.83	6.98	6.80
Charlottetown, PE	9.09	8.36	8.51	8.47	9.09	8.36
Edmonton, AB <sup>2</sup>	9.14	8.83	8.63	8.54	8.72	8.49
Halifax, NS	8.60	8.07	8.18	8.16	8.60	8.07
Moncton, NB	7.92	7.19	6.99	6.96	7.51	6.86
Ottawa, ON	10.45	9.94	9.79	9.60	9.88	9.51
Regina, SK	7.84	7.35	6.41	6.31	6.59	6.24
St. John's, NL <sup>3</sup>	7.65	7.35	7.30	4.03	4.32	3.98
Toronto, ON	10.09	9.75	9.76	9.71	10.03	9.64
Vancouver, BC	5.64	5.25	4.40	4.38	4.64	4.34
Winnipeg, MB	4.56	4.19	3.68	3.66	3.90	3.62
American Cities						
Boston, MA	12.11	11.15	11.34	11.29	12.10	11.14
Chicago, IL⁴	7.42	6.87	6.50	6.22	6.50	6.16
Detroit, MI <sup>4</sup>	7.30	6.64	6.57	6.53	7.05	6.44
Houston, TX <sup>4</sup>	7.43	7.09	6.67	6.66	6.82	6.62
Miami, FL <sup>4</sup>	7.29	6.77	6.33	6.30	6.69	6.22
Nashville, TN	8.73	8.08	7.10	6.99	7.76	6.84
New York, NY <sup>4</sup>	13.66	12.64	12.84	12.79	13.66	12.63
Portland, OR	6.05	5.74	5.59	5.56	5.82	5.51
San Francisco, CA <sup>4</sup>	9.55	9.03	9.11	9.07	9.49	8.99
Seattle, WA	5.65	5.61	5.26	5.26	5.29	5.25
AVERAGE	8.11	7.61	7.38	7.18	7.57	7.10

In Canadian dollars.
 Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.
 Newfoundland and Labrador Hydro rates for customers with a power demand of 30,000 kW or more, Newfoundland Power rates

for all other customer categories.

4) These bills have been estimated by Hydro-Québec and may differ from actual bills.

# **COMPARATIVE INDEX ON APRIL 1, 2011**

(Hydro-Québec = 100)

# General Service – Large Power

Power demand Consumption Voltage Load factor	5,000 kW 2,340,000 kWh 25 kV 65%	5,000 kW 3,060,000 kWh 25 kV 85%	10,000 kW 5,760,000 kWh 120 kV 80%	30,000 kW 17,520,000 kWh 120 kV 81%	50,000 kW 23,400,000 kWh 120 kV 65%	50,000 kW 30,600,000 kWh 120 kV 85%
Canadian Cities						
Montréal, QC	100	100	100	100	100	100
Calgary, AB	131	142	148	148	140	150
Charlottetown, PE	170	175	184	184	182	185
Edmonton, AB <sup>1</sup>	170	1/3	187	186	174	188
Halifax, NS	161	169	177	177	174	178
Moncton, NB	148	150	151	151	150	152
Ottawa, ON	196	208	212	209	198	210
Regina, SK	147	154	139	137	132	138
St. John's, NL <sup>2</sup>	143	154	158	88	86	88
Toronto, ON	189	204	211	211	200	213
Vancouver, BC	106	110	95	95	93	96
Winnipeg, MB	85	88	80	80	78	80
American Cities						
Boston, MA	227	233	245	246	242	246
Chicago, IL <sup>3</sup>	139	144	141	135	130	136
Detroit, MI <sup>3</sup>	137	139	142	142	141	142
Houston, TX <sup>3</sup>	139	148	144	145	136	146
Miami, FL <sup>3</sup>	136	141	137	137	134	137
Nashville, TN	163	169	154	152	155	151
New York, NY <sup>3</sup>	256	264	278	278	273	279
Portland, OR	113	120	121	121	116	122
San Francisco, CA <sup>3</sup>	179	189	197	197	190	199
Seattle, WA	106	117	114	114	106	116
AVERAGE	152	159	160	156	151	157

Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.
 Newfoundland and Labrador Hydro rates for customers with a power demand of 30,000 kW or more, Newfoundland Power rates for all other customer categories.
 These bills have been estimated by Hydro-Québec and may differ from actual bills.

# APPENDIX RATE ADJUSTMENTS

Average Adjustments

Adjustments by Customer Category

# **RATE ADJUSTMENTS**

All Categories

	Before Ap	oril 2010	Between April and April		
	Year	%	Date	%	Comments
Canadian Utilities					
Hydro-Québec, QC	2010	0.35	April 1, 2011	-0.41	
ENMAX, AB	2009	12.39	January 1, 2011 January 1, 2011	1.59 18.17	Distribution component Transmission component
Maritime Electric, PE	2009	8.4	March 1, 2011	-14.0	
EPCOR, AB	_	_	n.a.	n.a.	
Nova Scotia Power, NS	2010	n.a.	January 1, 2011	0.28	
NB Power, NB	2009	3.0	June 1, 2010	3.00	
Hydro Ottawa, ON	2009	n.a.	May 1, 2010	n.a.	
SaskPower, SK	2009	8.5	August 1, 2010	4.5	
Newfoundland Power, NL <sup>1</sup>	2010	3.5	July 1, 2010 January 1, 2011	1.7 0.8	
Newfoundland and Labrador Hydro, NL <sup>1</sup>	2007	-18.3	_	_	
Toronto Hydro, ON	2009	n.a.	May 1, 2010 November 1, 2010	n.a. n.a.	
BC Hydro, BC	2010	6.11	<del>-</del>	_	
Manitoba Hydro, MB	2010	2.84	April 1, 2011	2.0	Interim increase
American Utilities					
Boston Edison, MA	2010	n.a.	January 11, 2011 January 1, 2011	-0.50 n.a.	Delivery charge Default service
Commonwealth Edison, IL	2010	n n	April 1, 2011	n.a.	Default service
Detroit Edison, MI	2010	n.a. n.a.	n.a. n.a.	n.a. n.a.	
CenterPoint Energy, TX	n.a.	n.a.	n.a.	n.a.	
Florida Power and Light, FL	2010		March 1, 2011	n.a.	
Nashville Electric Service, TN	2010	n.a. 10.2		n.a.	
Consolidated Edison, NY	n.a.	n.a.	n.a. n.a.	n.a.	
Pacific Power and Light, OR	2010	0.1		n.a.	
Pacific Gas and Electric, CA	2010	n.a.	n.a. March 1, 2011	n.a.	
Seattle City Light, WA	2010	13.80	January 1, 2011	4.30	

n.a.: Not available.

<sup>1)</sup> Newfoundland and Labrador Hydro rates for customers with a power demand of 30,000 kW or more, Newfoundland Power rates for all other customer categories.

# RATE ADJUSTMENTS (between April 1, 2010, and April 1, 2011)

Adjustments by Customer Category

		Residential	General	Industrial	Average
	Date	%	%	%	%
Canadian Utilities					
Hydro-Québec, QC	April 1, 2011	-0.41	-0.41	-0.41	-0.41
ENMAX, AB	January 1, 2011 January 1, 2011	1.59 18.01	1.59 18.26	n.a. n.a.	1.59 <sup>2</sup> 18.17 <sup>2</sup>
Maritime Electric, PE	March 1, 2011	-14.0	-14.0	-14.0	-14.0
EPCOR, AB	n.a.	n.a.	n.a.	n.a.	n.a
Nova Scotia Power, NS	January 1, 2011	0.02	0.41	0.68	0.28
NB Power, NB	June 1, 2010	3.0	3.0	3.0	3.0
Hydro Ottawa, ON	May 1, 2010	n.a.	n.a.	n.a.	n.a
SaskPower, SK	August 1, 2010	5.3	5.3	3.8	4.5
Newfoundland Power, NL <sup>3</sup>	July 1, 2010 January 1, 2011	1.6 0.8	1.7 0.8	2.2 0.8	1.7 0.8
Newfoundland and Labrador Hydro, NL <sup>3</sup>	_	_	_	_	_
Toronto Hydro, ON	May 1, 2010 November 1, 2010	12.0 -3.0	8.0 -0.9	9.0 -1.0	n.a n.a
BC Hydro, BC	_	_	_	_	_
Manitoba Hydro, MB	April 1, 2011	2.1	2.0 <sup>4</sup> 2.1 <sup>5</sup>	2.0	2.0
American Utilities					
Boston Edison, MA	January 11, 2011 January 1, 2011 April 1, 2011	-0.50 -3.30 <sup>8</sup>	-0.50 -5.80 <sup>8</sup>	-0.50 -1.70 <sup>8</sup> 1.60 <sup>8</sup>	-0.50 n.a. n.a.
Commonwealth Edison, IL	n.a.	n.a.	n.a.	n.a.	n.a
Detroit Edison, MI	n.a.	n.a.	n.a.	n.a.	n.a
CenterPoint Energy, TX	n.a.	n.a.	n.a.	n.a.	n.a
Florida Power and Light, FL	March 1, 2011	n.a.	n.a.	n.a.	n.a
Nashville Electric Service, TN	n.a.	n.a.	n.a.	n.a.	n.a
Consolidated Edison, NY	n.a.	n.a.	n.a.	n.a.	n.a
Pacific Power and Light, OR	n.a.	n.a.	n.a.	n.a.	n.a
Pacific Gas and Electric, CA	March 1, 2011	n.a.	n.a.	n.a.	n.a
Seattle City Light, WA	January 1, 2011	4.30	4.30	4.30	4.3

n.a.: Not available.

Note: Because of adjustment clauses (see list in Appendix B), electricity bills issued by a utility may vary, even though base rates have not changed.

<sup>1)</sup> Increase applicable to distribution component.

<sup>2)</sup> Increase applicable to transmission component.

<sup>3)</sup> Newfoundland and Labrador Hydro rates for customers with a power demand of 30,000 kW or more, Newfoundland Power rates for all other customer categories.

<sup>4)</sup> General service - Small.

<sup>5)</sup> General service – Medium.

<sup>6)</sup> Interim increase.

<sup>7)</sup> Delivery charge.8) Default service.

ADDENIDIY

TIME-OF-USE RATES
ADJUSTMENT CLAUSES

# **TIME-OF-USE RATES**

The utilities listed below apply time-of-use rates for different consumption levels. For the purposes of this study, an annual average has been calculated for utilities whose rates vary according to the season or time of day (or both). In the case of utilities whose supply costs are determined by the market, the average for the month of March 2011 was used.

Boston Edison, MA General: All levels

CenterPoint Energy, TX All levels

Commonwealth Edison, IL All levels

Consolidated Edison, NY All levels

Detroit Edison, MI 500–50,000 kW

ENMAX, AB All levels

EPCOR, AB All levels

Hydro Ottawa, ON All levels

Nashville Electric Service, TN All levels

Newfoundland Power, NL 14–10,000 kW

Pacific Gas and Electric, CA All levels

Pacific Power and Light, OR 1,000–50,000 kW

Seattle City Light, WA All levels
Toronto Hydro, ON All levels

# **ADJUSTMENT CLAUSES**

Below is a list of utilities whose rates include adjustment clauses that may cause fluctuations in the price of electricity even though base rates have not been adjusted.

BC Hydro, BC Deferral Account Rate Rider

Boston Edison, MA Demand-Side Management Charge

Pension Adjustment Renewable Energy Charge

Residential Assistance Adjustment Clause Energy Efficiency Reconciliation Factor

Default Service Adjustment Transition Cost Adjustment

Transmission Service Cost Adjustment Net Metering Recovery Surcharge

Miscellaneous Charges

CenterPoint Energy, TX Transition Charges

System Benefit Fund Charge

Advanced Metering System Surcharge Energy Efficiency Cost Recovery Factor

Accumulated Deferred Federal Income Tax Credit

Nuclear Decommissioning Charge Transmission Cost Recovery Factor

**UCOS Retail Credit** 

Commonwealth Edison, IL Capacity Charges

Energy Efficiency and Demand Response Adjustments

Environmental Cost Recovery Adjustment Renewable Energy Assistance Charge

Energy Assistance Charge for the Supplemental Low-Income

**Energy Assistance Fund** 

Residential Real-time Pricing Program Cost Recovery Charge

Hourly Purchased Electricity Adjustment Factor Miscellaneous Procurement Components Charge

PJM Services Charge

Purchased Electricity Adjustment Factor Advanced Metering Program Adjustment

Purchased Electricity Charges Uncollectible Cost Factors

Consolidated Edison, NY System Benefits Charge

Market Supply Charge Merchant Function Charge Monthly Adjustment Clause

Adjustment Factors - MSC and MAC

Delivery Revenue Surcharge

Surcharge to collect PSL Section 18-a Assessments

Renewable Portfolio Standard Charge

**Ancillary Service Charges** 

NYPA Transmission Adjustment Charges Revenue Decoupling Mechanism Adjustment Detroit Edison, MI Enhanced Security Cost Surcharge

Nuclear Decommissioning Surcharge Power Supply Cost Recovery Clause

Securitization Bond Charge and Securitization Bond Tax Charge

Choice Implementation Surcharge Renewable Energy Plan Surcharge Energy Optimization Surcharge

ENMAX, AB Balancing Pool Allocation Refund Rider

DAS Adjustment Rider Local Access Fee

TAC Deferral Account Rider

EPCOR, AB Local Access Fee

**Balancing Pool Rider** 

Transmission Charge Deferral Account True-Up Rider

Florida Power and Light, FL Conservation Charge

Capacity Payment Charge

**Fuel Charge** 

**Environmental Charge** 

Storm Charge

Hydro Ottawa, ON Lost Revenue Adjustment Mechanism Recovery/Shared

Savings Mechanism Recovery Rate Rider

Debt Retirement Charge Ontario Clean Energy Benefit Rate Rider for Tax Change Rural Rate Protection Charge Smart Meter Funding Adder Special Purpose Charge

Maritime Electric, PE Energy Cost Adjustment Mechanism

Energy accord

Newfoundland and Labrador Hydro, NL Rate Stabilization Plan Adjustment

Newfoundland Power, NL Rate Stabilization Adjustment

Municipal Tax Adjustment

Nova Scotia Power, NS Demand Side Management Cost Recovery Rider

Fuel Adjustment Mechanism

Pacific Power and Light, OR

**BPA** Credit

Low Income Bill Payment Assistance Fund

Public Purpose Charge Rate Mitigation Adjustment Klamath Dam Removal Surcharges Klamath Rate Reconciliation Adjustment Independent Evaluator Cost Adjustment

Intervenor Funding Adjustment Renewable Adjustment Clause

Renewable Resource Deferral Adjustment

**Energy Conservation Charge** 

MEHC Change-in-Control Severance Regulatory Asset Adjustment

Grid West Regulatory Asset Adjustment

Income Tax Adjustment

Property Sales Balancing Account Adjustment

Pacific Gas and Electric, CA

Transmission Rate Adjustments

Reliability Services
Public Purpose Programs
Competition Transition Charge
Energy Cost Recovery Amount
Nuclear Decommissioning

**DWR Bond** 

SaskPower, SK

Municipal Surcharge

Toronto Hydro, ON

Ontario Clean Energy Benefit Smart Meter Funding

Regulatory Asset Recovery Rate Rider

Lost Revenue Adjustment Mechanism Rate Rider

Shared Savings Mechanism Rate Rider

Debt Retirement Charge Special Purpose Charge

# APPENDIX TAXES APPLICABLE

**Residential Service** 

General Service

Industrial Service

# TAXES APPLICABLE TO RESIDENTIAL SERVICE

On April 1, 2011

	Тах	% (or other)	Applicable
Canadian Citics			
Canadian Cities	Goods and Services Tax (GST)	5	To have a married of hill
Montréal, QC	Ouébec Sales Tax	5 8.5	To base amount of bill To base amount of bill + GST
Calgary, AB	Goods and Services Tax	5	To base amount of bill
Charlottetown, PE	Goods and Services Tax	5	To base amount of bill
Edmonton, AB	Goods and Services Tax	5	To base amount of bill
Halifax, NS	Harmonized Sales Tax	5	To base amount of bill
Moncton, NB	Harmonized Sales Tax	13	To base amount of bill
Ottawa, ON	Harmonized Sales Tax	13	To base amount of bill
Regina, SK	Goods and Services Tax	5	To base amount of bill
St. John's, NL	Harmonized Sales Tax	13	To base amount of bill
Toronto, ON	Harmonized Sales Tax	13	To base amount of bill
Vancouver, BC	Regional Transit Levy	\$1.90	Monthly
varieouvei, be	Harmonized Sales Tax	12	To base amount of bill + Regional Transit Levy
	Residential Energy Credit	-7	To base amount of bill + Regional Transit Levy
Winnipeg, MB	Provincial Sales Tax	7	To base amount of bill
		1.4	(heating other than electric) To base amount of bill (electric heating)
	Municipal Tax	1.4 2.5	To base amount of bill
	Wallelpartax	2.3	(heating other than electric)
		0.5	To base amount of bill (electric heating)
	Goods and Services Tax	5	To base amount of bill
American Cities			
Boston, MA	None		
Chicago, IL	State Tax	¢/kWh	Tax varies by energy block
3 /	Municipal Tax	¢/kWh	Tax varies by energy block
	Franchise Cost	¢/kWh	Tax varies by energy block
Detroit, MI	State Sales Tax	6	To base amount of bill
	City of Detroit Utility Users'Tax	5	To base amount of bill
Houston, TX	Municipal Tax	1	To base amount of bill
Miami, FL	Gross Receipts Tax Franchise Fee	2.5641 4.5	To base amount of bill  To base amount of bill + Gross Receipts Tax
	Municipal Tax	10	To a portion of base amount of bill
Nashville, TN	None		
New York, NY	Commodity Gross Receipts Tax	2.4066	To commodity component
	Delivery Gross Receipts Tax	5.1304	To other components
	Sales Tax	4.5	To base amount of bill + Gross Receipts Tax
Portland, OR	Multnomah County		ci
	Business Income Tax	0.05	To a portion of base amount of bill
	Multnomah County Business Income Tax Adjustment Rate	-0.017¢	To energy consumption
	City of Portland Franchise Tax	1.5	To a portion of base amount of bill
San Francisco, CA	Energy Commission Surcharge	0.029¢	To energy consumption
, -	San Francisco Utility Users' Tax	7.5	To base amount of bill
Seattle, WA	State Utility Tax	3.873	Tax included in rate schedule prices
	Seattle Occupation Tax	6	Tax included in rate schedule prices

# TAXES APPLICABLE TO GENERAL SERVICE

On April 1, 2011

	_	%	
	Tax	(or other)	Applicable
Canadian Cities			
Montréal, QC	Goods and Services Tax (GST) Québec Sales Tax	5 8.5	To base amount of bill (tax refundable) To base amount of bill + GST (tax refundable)
Calgary, AB	Goods and Services Tax	5	To base amount of bill
Charlottetown, PE	Goods and Services Tax	5	To base amount of bill (tax refundable)
Edmonton, AB	Goods and Services Tax	5	To base amount of bill
Halifax, NS	Harmonized Sales Tax	13	To base amount of bill (tax refundable)
Moncton, NB	Harmonized Sales Tax	13	To base amount of bill (tax refundable)
Ottawa, ON	Harmonized Sales Tax	13	To base amount of bill (tax refundable)
Regina, SK	Provincial Sales Tax	5	To base amount of bill + Municipal Tax (tax refundable) <sup>2</sup>
	Goods and Services Tax	5	To base amount of bill (tax refundable)
St. John's, NL	Harmonized Sales Tax	13	To base amount of bill (tax refundable)
Toronto, ON	Harmonized Sales Tax	13	To base amount of bill (tax refundable)
Vancouver, BC	Harmonized Sales Tax	12	To base amount of bill (tax refundable)
Winnipeg, MB	Provincial Sales Tax	7	To base amount of bill (heating other than electric)
	Municipal Tax	1.4 2.5	To base amount of bill (electric heating) To base amount of bill (heating other than electric)
	Goods and Services Tax	0.5 5	To base amount of bill (electric heating) To base amount of bill (tax refundable)
American Cities			
Boston, MA	State Sales Tax	6.25	To a portion of base amount of bill
Chicago, IL	State Tax Municipal Tax Franchise Cost	¢/kWh ¢/kWh ¢/kWh	Tax varies by energy block Tax varies by energy block Tax varies by energy block
Detroit, MI	State Sales Tax City of Detroit Utility Users' Tax	6 5	To base amount of bill To base amount of bill
Houston, TX	State Tax Municipal Tax Transit Tax County Tax	6.25 1 1 0.5	To base amount of bill To base amount of bill To base amount of bill To base amount of bill
Miami, FL	Gross Receipts Tax Franchise Fee Municipal Tax State Sales Tax  Local Tax	2.5641 4.5 10 7	To base amount of bill To base amount of bill + Gross Receipts Tax To a portion of base amount of bill To base amount of bill + Gross Receipts Tax + Franchise Fee To base amount of bill

<sup>1)</sup> Commercial customers with revenue below \$10 million and customers in the manufacturing sector are entitled to a refund of this tax.
2) Customers in the manufacturing sector are entitled to a partial refund of this tax, based on their taxable income.

# TAXES APPLICABLE TO GENERAL SERVICE (cont'd) On April 1, 2011

	Tax	% (or other)	Applicable
Nashville, TN	State Sales Tax	7	To base amount of bill
New York, NY	Commodity Gross Receipts Tax	2.4066	To commodity component
	Delivery Gross Receipts Tax	2.6185	To other components
	Sales Tax	8.875	To base amount of bill + Gross Receipts Tax
Portland, OR	Multnomah County Franchise Tax Multnomah County Business	0.05	To a portion of base amount of bill
	Income Tax Adjustment Rate	-0.017¢	To energy consumption
	City of Portland Franchise Tax	1.5	To a portion of base amount of bill
San Francisco, CA	Energy Commission Surcharge	0.029¢	To energy consumption
,	San Francisco Utility Users' Tax	7.5	To base amount of bill
Seattle, WA	State Utility Tax	3.873	Tax included in rate schedule prices
,	Seattle Occupation Tax	6	Tax included in rate schedule prices

# TAXES APPLICABLE TO INDUSTRIAL SERVICE

On April 1, 2011

	Tax	% (or other)	Applicable
Canadian Cities			
Montréal, QC	Goods and Services Tax (GST) Québec Sales Tax	5 8.5	To base amount of bill (tax refundable) To base amount of bill + GST (tax refundable)
Calgary, AB	Goods and Services Tax	5	To base amount of bill
Charlottetown, PE	Goods and Services Tax	5	To base amount of bill (tax refundable)
Edmonton, AB	Goods and Services Tax	5	To base amount of bill
Halifax, NS	Harmonized Sales Tax	13	To base amount of bill (tax refundable)
Moncton, NB	Harmonized Sales Tax	13	To base amount of bill (tax refundable)
Ottawa, ON	Harmonized Sales Tax	13	To base amount of bill (tax refundable)
Regina, SK	Provincial Sales Tax	5	To base amount of bill + Municipal Tax (tax refundable) <sup>2</sup>
	Goods and Services Tax	5	To base amount of bill (tax refundable)
St. John's, NL	Harmonized Sales Tax	13	To base amount of bill (tax refundable)
Toronto, ON	Harmonized Sales Tax	13	To base amount of bill (tax refundable)
Vancouver, BC	Harmonized Sales Tax	12	To base amount of bill (tax refundable)
Winnipeg, MB	Provincial Sales Tax	7 1.4	To base amount of bill (industries other than mining and manufacturing) To base amount of bill (mining and manufacturing industries)
	Municipal Tax	2.5	To base amount of bill (heating other than electric)
	Goods and Services Tax	0.5 5	To base amount of bill (electric heating) To base amount of bill (tax refundable)
American Cities			
Boston, MA	State Sales Tax	6.25	To a portion of base amount of bill
Chicago, IL	State Tax Municipal Tax Franchise Cost	¢/kWh ¢/kWh ¢/kWh	Tax varies by energy block Tax varies by energy block Tax varies by energy block
Detroit, MI	State sales Tax City of Detroit Utility Users' Tax	6 5	To base amount of bill To base amount of bill
Houston, TX	State Tax Municipal Tax Transit Tax County Tax	6.25 1 1 0.5	To base amount of bill To base amount of bill To base amount of bill To base amount of bill
Miami, FL	Gross Receipts Tax Franchise Fee Municipal Tax State Sales Tax	2.5641 4.5 10 7	To base amount of bill To base amount of bill + Gross Receipts Tax To a portion of base amount of bill To base amount of bill + Gross Receipts Tax + Franchise Fee
	Local Tax	1	To base amount of bill + Gross Receipts Tax + Franchise Fee

<sup>1)</sup> Commercial customers with revenue below \$10 million and customers in the manufacturing sector are entitled to a refund of this tax.
2) Customers in the manufacturing sector are entitled to a partial refund of this tax, based on their taxable income.

# TAXES APPLICABLE TO INDUSTRIAL SERVICE (cont'd) On April 1, 2011

	Tax	% (or other)	Applicable
Nashville, TN	State Sales Tax State Sales Tax	7	To base amount of bill (companies other than manufacturing) To base amount of bill
New York, NY	Commodity Gross Receipts Tax Delivery Gross Receipts Tax Sales Tax	2.4066 2.6185 8.875	(manufacturing companies)  To commodity component To other components To base amount of bill + Gross Receipts Tax
Portland, OR	Multnomah County Franchise Tax Multnomah County Business Income Tax Adjustment Rate City of Portland Franchise Tax	0.05 -0.017¢ 1.5	To a portion of base amount of bill  To energy consumption To a portion of base amount of bill
San Francisco, CA	Energy Commission Surcharge San Francisco Utility Users' Tax	0.029¢ 7.5	To energy consumption To base amount of bill
Seattle, WA	State Utility Tax Seattle Occupation Tax	3.873 6	Tax included in rate schedule prices Tax included in rate schedule prices

APPENDIX
UTILITIES IN THE STUDY

# **UTILITIES IN THE STUDY**



# **CANADIAN UTILITIES**

- 1- Hydro-Québec
- 2- ENMAX
- 3- Maritime Electric
- 4- EPCOR
- 5- Nova Scotia Power
- 6- NB Power
- 7- Hydro Ottawa
- 8- SaskPower
- 9- Newfoundland and Labrador Hydro (customers with a power demand of 30,000 kW or more) Newfoundland Power (all other customer categories)
- 10- Toronto Hydro
- 11- BC Hydro
- 12- Manitoba Hydro

# **AMERICAN UTILITIES**

- 13- Boston Edison
- 14- Commonwealth Edison
- 15- Detroit Edison
- 16- CenterPoint Energy
- 17- Florida Power and Light
- 18- Nashville Electric Service
- 19- Consolidated Edison
- 20- Pacific Power and Light
- 21- Pacific Gas and Electric
- 22- Seattle City Light

# CANADIAN UTILITIES

#### HYDRO-OUÉBEC

Montréal, Québec

A government-owned company whose lines of business have been unbundled, Hydro-Québec is one of the largest electric utilities in North America, with an installed capacity of 36,671 MW; 98% of electricity is generated using waterpower. Its transmission and distribution activities are regulated. The utility distributes electricity to nearly 4 million residential, commercial, institutional and industrial customer accounts throughout Québec and delivers electricity to nine municipal systems and one regional cooperative. Hydro-Québec also does business with many electric utilities in the Northeastern United States, Ontario and New Brunswick.

The Act respecting the Régie de l'énergie (Québec energy board) established an annual maximum heritage pool of 165 TWh that Hydro-Québec Production must supply to Hydro-Québec Distribution at an average cost of 2.79¢/kWh. Above that volume, needs have to be met through tender calls. The Régie de l'énergie approved a 0.41% reduction in the rates of Hydro-Québec Distribution, which took effect on April 1, 2011.

......

## MARITIME ELECTRIC

Charlottetown, Prince Edward Island

A subsidiary of Fortis, Maritime Electric is the principal supplier of electricity on Prince Edward Island, with some 74,000 customers. Since its two power plants (with a total capacity of 150 MW) are operated strictly for reserve purposes, it purchases most of its electricity from NB Power, with which it has long-term contracts, and through additional short-term contracts on the New England wholesale market. Maritime Electric also purchases nearly 52 MW of wind-generated electricity from private producers.

Since the adoption of the *Electric Power Act* on January 1, 2004, Maritime Electric has had to submit all requests for rate increases to the Island Regulatory and Appeals Commission.

# ENMAX EPCOR

Calgary, Alberta Edmonton, Alberta

ENMAX Corporation is a wholly owned subsidiary of the City of Calgary. It generates, transmits and distributes electricity to more than 640,000 customers throughout the province. In addition to its active participation in Alberta's restructured electricity industry, ENMAX serves customers who are eligible for the City of Calgary's regulated rate option tariff.

......

EPCOR Utilities, whose sole shareholder is the City of Edmonton, transmits and distributes electricity to more than 300,000 residential and business customers in Edmonton. It also supplies close to 600,000 customers throughout the province who are eligible for a regulated rate option tariff.

Since July 1, 2010, prices under the regulated rate option tariff have fluctuated monthly with market forecasts, so customers' electricity bills have varied more.

#### **NOVA SCOTIA POWER**

Halifax, Nova Scotia

Nova Scotia Power, a subsidiary of Emera, is the principal supplier of electricity in Nova Scotia, meeting most of the province's needs for electricity generation, transmission and distribution. It supplies electricity to 490,000 customers. Its generating facilities have an installed capacity of almost 2,300 MW.

The open access transmission tariff came into effect on November 1, 2005. Under the province's energy policy, eligible customers have nondiscriminatory access to the utility's transmission system.

......

## **NB POWER**

Moncton, New Brunswick

A subsidiary of provincial Crown corporation NB Power Group, NB Power Distribution and Customer Service Corporation directly serves more than 335,000 customers and sells electricity to the province's municipal systems, which supply over 41,000 customers. NB Power has a generating capacity of about 4,000 MW under the management of NB Power Generation and NB Power Nuclear.

The New Brunswick electricity market has been partially open to competition since October 1, 2004. Large industrial customers and three municipal electricity distribution utilities are free to choose their supplier. However, other retail market customers continue to be served by NB Power.

#### **SASKPOWER**

Regina, Saskatchewan

Crown utility SaskPower directly serves more than 467,000 customers and sells wholesale electricity to municipal systems in Saskatchewan. The utility operates 17 power plants, with a net installed capacity of some 3,400 MW.

......

In Saskatchewan, the wholesale electricity market has been open to competition since 2001. In October 2009, SaskPower adopted a supply strategy that calls for the rehabilitation or replacement of some of its power plants or the construction of new facilities, with a view to increasing its generating capability by 4,100 MW by 2032.

......

## **NEWFOUNDLAND AND LABRADOR HYDRO**

(customers with a power demand of 30,000 kW or more)

**NEWFOUNDLAND POWER** (all other customer categories)
St. John's. Newfoundland and Labrador

Newfoundland Power, a subsidiary of Fortis, serves about 243,000 customers on the island of Newfoundland. Since it operates only small generating stations with a total installed capacity of less than 140 MW, it purchases 90% of its electricity from Newfoundland and Labrador Hydro (NLH), a subsidiary of Nalcor Energy that operates generating facilities with an installed capacity of more than 1,600 MW and a transmission system that serves the whole province. NLH also supplies remote regions, Labrador and large industrial customers. Nalcor Energy operates generating facilities with an installed capacity in excess of 7,300 MW.

In November 2005, the Newfoundland and Labrador government made public a discussion paper that serves as the basis for the province's energy policy. Security of supply and the regulatory framework are among the topics covered in the section on electricity. In 2007, the government released its long-term energy plan, which aims to achieve economic self-reliance and environmental sustainability.

......

# TORONTO HYDRO HYDRO OTTAWA

Toronto, Ontario Ottawa, Ontario

A subsidiary of Hydro Ottawa Holding, whose sole shareholder is the City of Ottawa, Hydro Ottawa serves some 300,000 customers. Toronto Hydro-Electric System is a subsidiary of city-owned Toronto Hydro Corporation and serves about 696,000 customers, or 18% of Ontario electricity consumers.

In Ontario, the wholesale and retail markets have been open to competition since May 2002. Electricity generation is the responsibility of Ontario Power Generation while transmission service is supplied by Hydro One.

Following the adoption of the *Electricity Restructuring Act* in December 2004, the Ontario Energy Board was mandated to establish a regulated price plan. Prices have been reviewed on May 1 each year since 2006 and adjusted six months later, if necessary. Two new rates came into effect on April 1, 2005: a seasonally variable two-tier rate for consumers with a standard meter, and an optional time-of-use rate for consumers under the Ontario Energy Board Smart Metering Initiative. The Government of Ontario plans to have smart meters installed in all homes throughout the province.

#### **BC HYDRO**

Vancouver, British Columbia

Provincial Crown corporation BC Hydro operates generating facilities with a total capacity of more than 11,300 MW; more than 90% of electricity is generated using waterpower. It distributes electricity to about 1.8 million customers.

......

The wholesale market in British Columbia is open to competition, as is the retail market for some large industrial companies. When the market was opened up, generation, transmission and distribution activities were made into separate entities. The Clean Energy Act grouped transmission and distribution in July 2010 to ensure coordinated supply planning for the province.

......

#### MANITOBA HYDRO

Winnipeg, Manitoba

Manitoba Hydro is a Crown utility serving nearly 532,000 customers throughout the province. Virtually all the electricity it generates and distributes comes from its 14 hydropower plants, which have a total capacity of 5.500 MW.

The wholesale electricity market has been open to competition since 1997 and Manitoba Hydro joined Midwest ISO, a regional transmission organization, in 2001.

# AMERICAN UTILITIES

#### **BOSTON EDISON**

Boston, Massachusetts

Boston Edison, a subsidiary of NStar, serves 1.1 million residential and commercial customers in Boston and eastern Massachusetts. Having divested its last generating assets in July 1999, the utility now purchases electricity on the market and concentrates on transmission and distribution.

......

Since March 1, 2005, Boston Edison has applied basic service rates to the electricity commodity component for customers who have chosen not to purchase electricity from a competitor. These rates are adjusted every six months, or every three months in the case of large industrial customers. The rates reflect the average market price of electricity.

#### COMMONWEALTH EDISON (ComEd)

Chicago, Illinois

ComEd, a subsidiary of Exelon Corporation, purchases, transmits and distributes electricity on the wholesale and retail markets. On the retail market, it serves more than 3.8 million customers in northern Illinois, or 70% of the state's population.

Since May 1, 2002, the retail market has been fully open for residential, commercial and industrial customers. On January 2, 2007, ComEd raised its electricity rates for the first time since 1997. On the same date, energy supply charges based on the September 2006 auction in the State of Illinois came into effect for residential and commercial customers. In 2007, the Illinois Commerce Commission opened the market to free competition for medium- and large-power customers.

## **DETROIT EDISON**

Detroit, Michigan

Detroit Edison operates generating facilities with a total installed capacity of almost 11,100 MW. A subsidiary of DTE Energy, it serves 2.1 million customers in southeastern Michigan.

Under the June 2000 legislation restructuring the electricity industry, all retail market customers in Michigan have been able to choose their electricity supplier since January 1, 2002.

......

#### **CENTERPOINT ENERGY**

Houston, Texas

CenterPoint Energy concentrates on electricity transmission and distribution and delivering natural gas. It sells electricity to approximately 2.1 million customers in the Houston area.

The majority of Texas consumers have had access to an open retail market since January 1, 2002. As of January 2007, electricity distributors with effective monopolies are no longer obliged to maintain their rates above the "price to beat" designed to encourage new market entrants. Customers who have opted to continue doing business with the same distributor pay a monthly rate that varies according to the market price.

The Texas transmission market was restructured in early 2011, moving from a zonal to nodal system.

## FLORIDA POWER AND LIGHT (FPL)

Miami, Florida

FPL's vast transmission and distribution system supplies more than 4.5 million customers. A subsidiary of NextEra Energy, the utility operates generating facilities with an installed capacity of more than 25,000 MW.

In May 2006, the Florida Public Service Commission concluded that it was not in the best interests of consumers to set up a regional transmission organization. On April 1, 2010, FPL released its 2010–2019 strategic plan, in which it proposes to upgrade some of its nuclear plants and add new generating facilities using thermal and renewable energy. It will also rely on energy efficiency measures to meet the demand for power during the strategic plan time frame.

## NASHVILLE ELECTRIC SERVICE

Nashville, Tennessee

Nashville Electric Service, whose sole shareholder is the City of Nashville, distributes the electricity that it purchases from the Tennessee Valley Authority (TVA) to more than 350,000 customers. A federal agency, the TVA supplies 155 distributors and nearly 60 large industrial and federal customers.

......

Close to half the electricity produced by the TVA comes from its 11 coal-fired plants, with the rest from gas, nuclear and hydro plants. Since 2000, the TVA has also included renewables, including solar, wind and biomass energy.

## **CONSOLIDATED EDISON (ConEd)**

New York, New York

ConEd of New York delivers electricity to 3.3 million customers and natural gas to nearly 1.1 million customers in and around New York City and Westchester County. This ConEd subsidiary operates the largest underground system in the world, which represents 72% of its distribution system.

When the electricity market was opened to competition in 1998, ConEd had to dispose of a large part of its generating capacity, which is now limited to about 700 MW. Rates, which continue to be regulated by the New York State Public Service Commission, are adjusted monthly to reflect the market price of electricity.

......

#### PACIFIC POWER AND LIGHT

Portland, Oregon

Pacific Power and Light, a subsidiary of PacifiCorp, serves some 727,000 customers across three states, including more than 555,000 in Oregon. PacifiCorp operates generating facilities with an installed capacity of over 10,500 MW.

On March 1, 2002, the Oregon state government opened its retail market to competition for large commercial and industrial customers. Residential and small commercial customers have fewer suppliers to choose from, but they do have a range of options, including market-based rates, regulated rates or rates applicable to green energy.

## PACIFIC GAS AND ELECTRIC (PG&E)

San Francisco, California

Pacific Gas and Electric concentrates on the transmission and distribution of electricity and natural gas. A subsidiary of PG&E Corporation, it has 5.1 million electric customer accounts.

......

In 2001, California adopted emergency measures to mitigate the price volatility that followed the opening of the electricity market. Those measures allowed it to reinstate regulatory authority over production costs and to give responsibility for electricity purchases to the California Department of Water and Resources. Since January 1, 2003, PG&E has been authorized to again purchase energy and directly supply its customers.

#### **SEATTLE CITY LIGHT**

Seattle, Washington

Seattle City Light, whose shareholder is the City of Seattle, serves about 395,000 customers. It produces 45% of the electricity it needs and purchases the rest from the Bonneville Power Administration (BPA), a northwestern U.S. federal agency that wholesales electricity produced by some 30 hydropower stations.

Six electric utilities in the Pacific Northwestern states, including Seattle City Light and BPA, got together in early 2006 to form the nonprofit ColumbiaGrid. The group's objective is to develop an integrated approach to the use and expansion of the region's interconnected transmission system.

#### Sources

Annual reports and Web sites of the Canadian and American utilities in the study.

Coordinated by – Communication-marketing for Direction – Affaires réglementaires et tarifaires

Legal deposit – 3rd quarter 2011 Library and Archives Canada Bibliothèque et Archives nationales du Québec ISBN 978-2-550-62676-3 (print version) ISBN 978-2-550-62677-0 (PDF)

For more information, please contact *Direction – Affaires réglementaires et tarifaires*, Hydro-Québec, at the following numbers:

Tel.: 514 289-2211, ext. 5660

Fax: 514 289-5622

This document can be consulted online at www.hydroquebec.com/publications/en

Ce document est également publié en français.

