

COMPARISON OF ELECTRICITY PRICES IN MAJOR NORTH AMERICAN CITIES

Rates in effect April 1, 2016

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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, 2016. 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 CUSTOMERS¹
(IN ¢/KWH)²



1) For a monthly consumption of 1,000 kWh; rates in effect April 1, 2016.
2) In Canadian currency.

MAJOR NORTH AMERICAN CITIES

AVERAGE PRICES FOR LARGE-POWER CUSTOMERS¹
(IN ¢/KWH)²



1) For a monthly consumption of 3,060,000 kWh and a power demand of 5,000 kW; rates in effect April 1, 2016.
2) In Canadian currency.

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 American states. The results are based, in part, on a survey to which 12 utilities responded, and in part on estimates of bills calculated by Hydro-Québec and confirmed in most cases by the utilities concerned.

The results presented here show the total bill for various consumption levels. If the bill is calculated according to an unbundled rate, it includes all components, including supply, transmission and distribution.

PERIOD COVERED

Monthly bills have been calculated based on rates in effect on April 1, 2016. The most recent rate adjustments applied by the utilities in the study between April 1, 2015, and April 1, 2016, are shown 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, taxes are not included in any of the calculations. Appendix C lists taxes applicable on April 1, 2016, 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, 2016.

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, 2015, and April 1, 2016, 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 \$0.7665 (CA\$1 = US\$0.7665), the rate in effect at noon on April 1, 2016. The Canadian dollar had thus depreciated by 2.64% relative to the U.S. dollar on April 1, 2015.

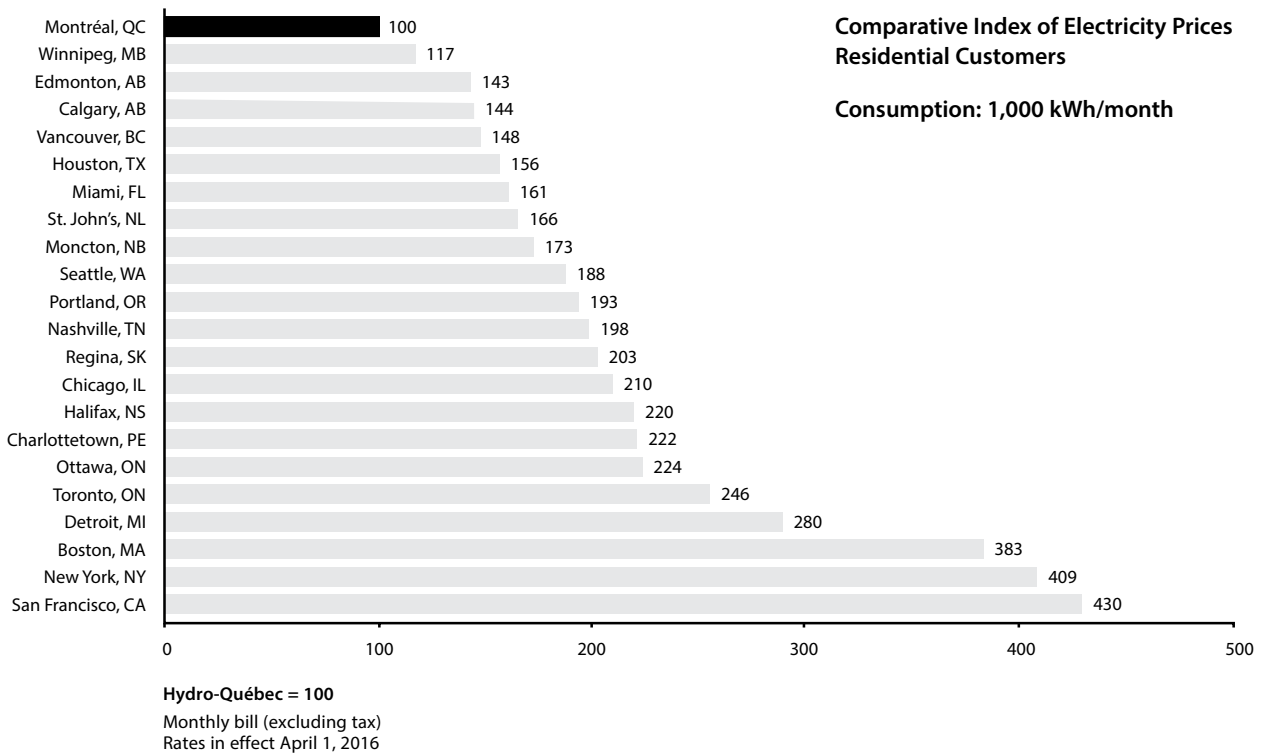
HIGHLIGHTS

The *Electricity Rates* effective April 1, 2016 sets out Hydro-Québec's rates, as approved by the Régie de l'énergie (the Québec energy board) in accordance with Decision D-2016-047. Three types of rates are in effect: domestic rates, for residential customers, the industrial rate, for large-power industrial customers, and general rates, for other customers. General rates are applied according to 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. The industrial rate has been used to calculate the bills of large-power customers.

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.

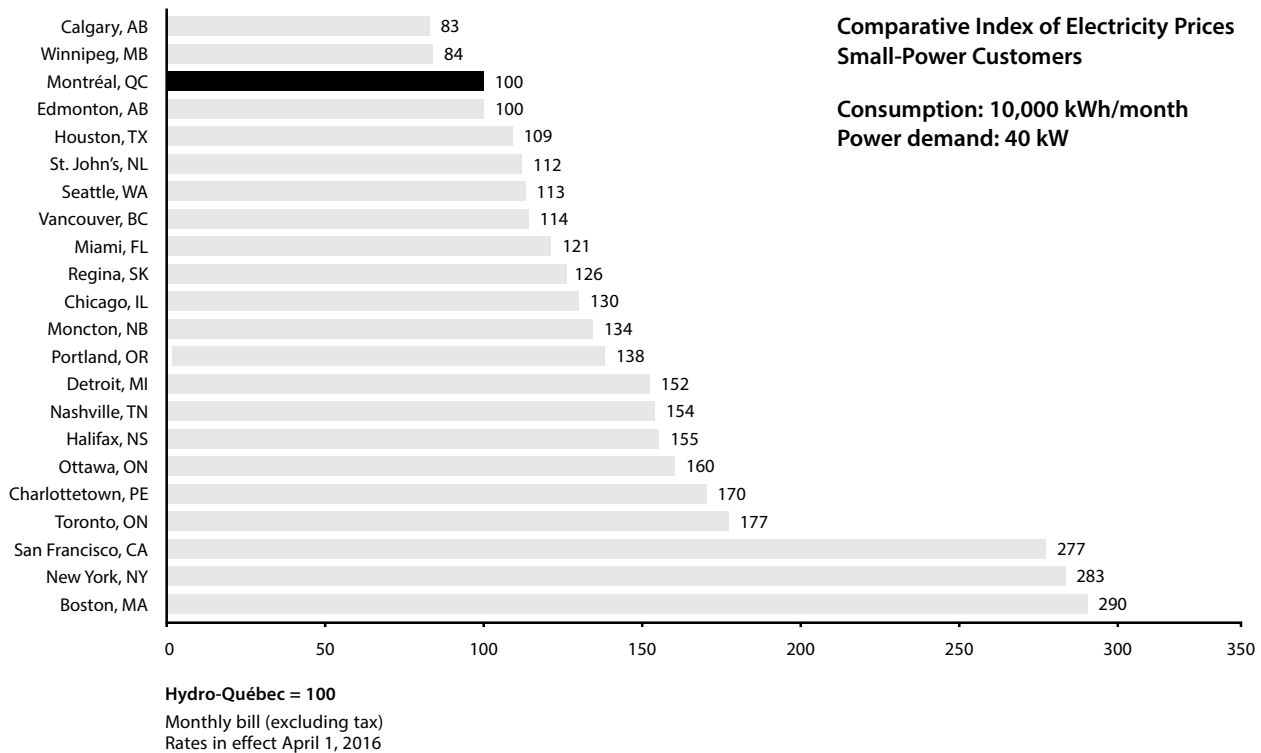
FIGURE 1



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 holds *third* place followed closely by Edmonton. Figure 2 shows the comparative index of electricity prices.

FIGURE 2

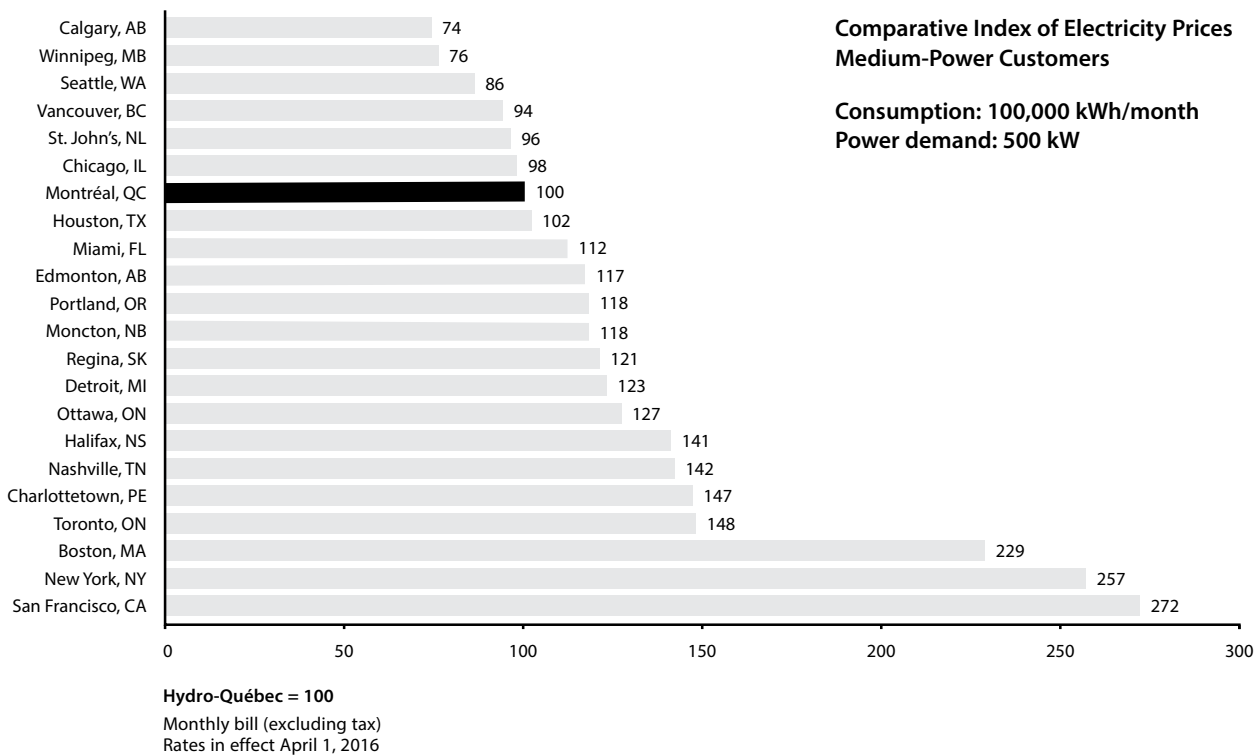


MEDIUM-POWER CUSTOMERS (100 TO 5,000 KW)

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 of the other major North American cities. Figures 3, 4 and 5 show the comparative index of electricity prices for these consumption profiles.

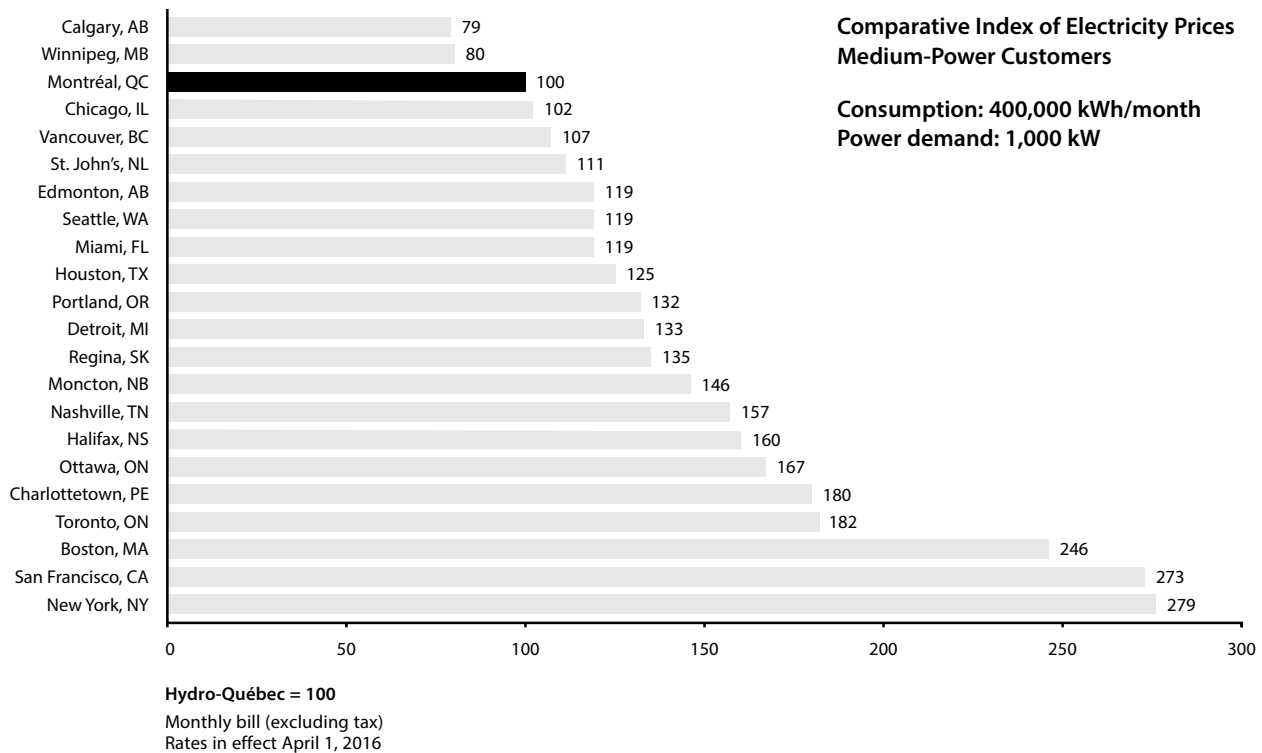
For medium-power customers with a monthly consumption of 100,000 kWh and a power demand of 500 kW, Montréal is in *seventh* place, whereas it held sixth place last year.

FIGURE 3



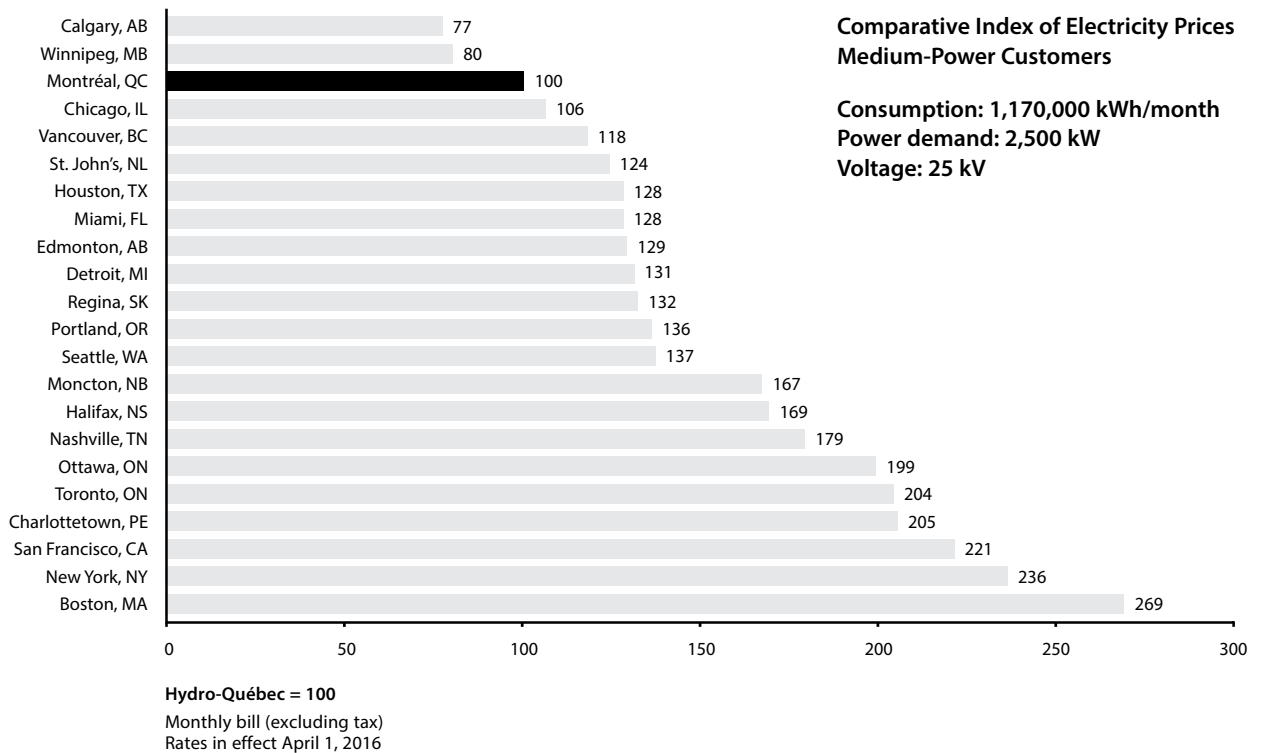
For customers with a monthly consumption of 400,000 kWh and a power demand of 1,000 kW, Montréal is in *third* place, as was the case last year.

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 holds *third* place.

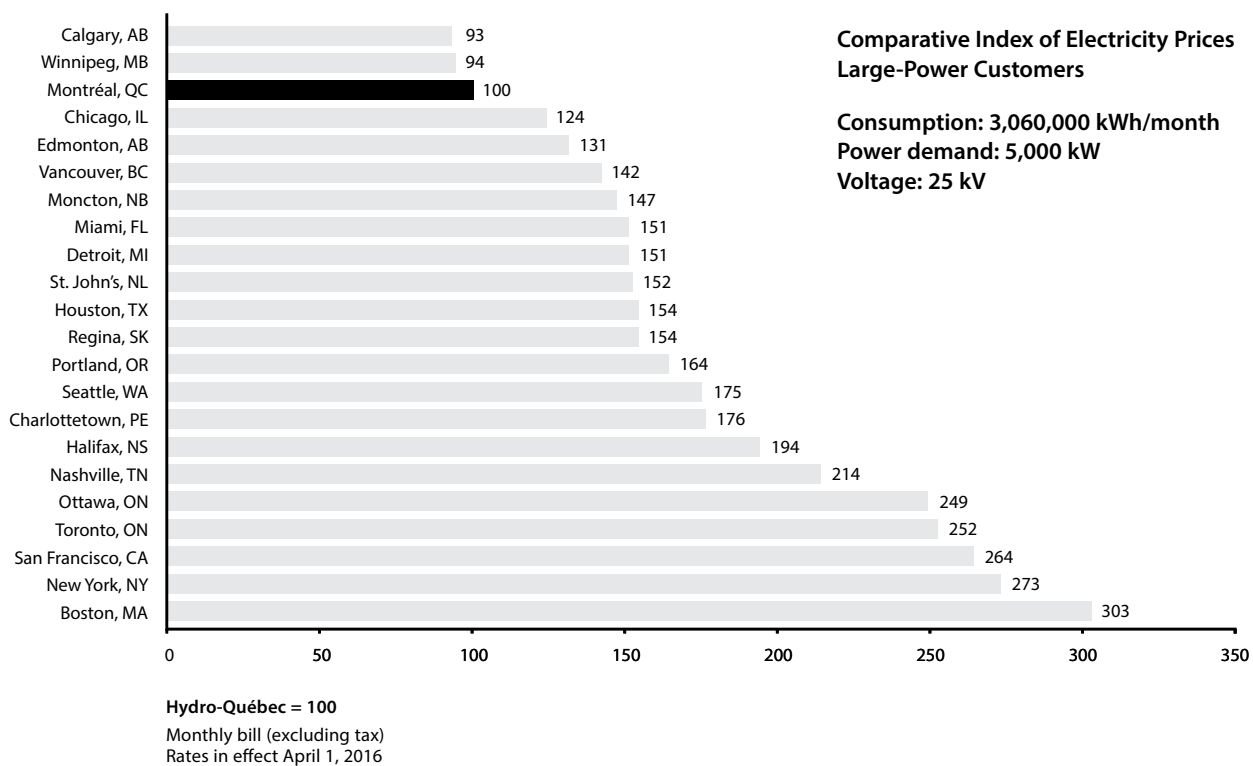
FIGURE 5



LARGE-POWER CUSTOMERS (5,000 KW OR MORE)

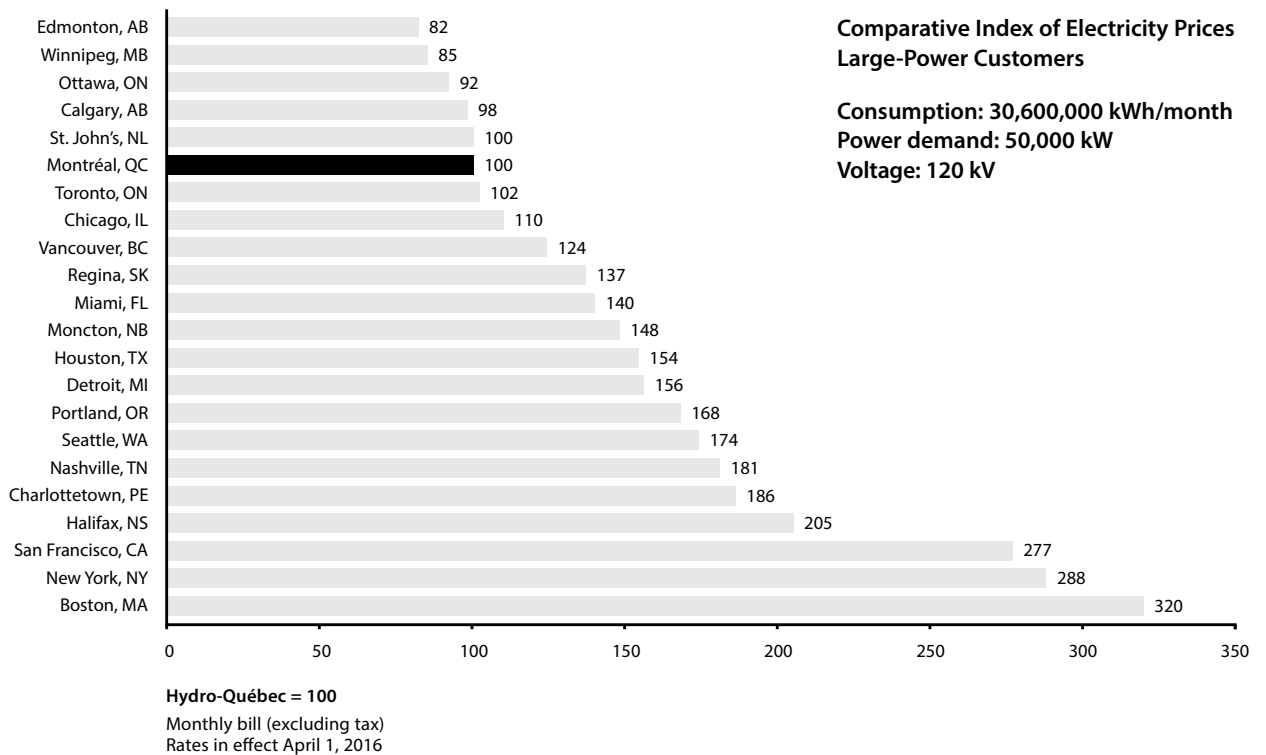
Figure 6 illustrates the comparative index of electricity prices for large-power customers with a monthly consumption of 3,060,000 kWh and a power demand of 5,000 kW. Montréal is in *third* place, as was the case last year.

FIGURE 6



For industrial customers with a power demand of 50,000 kW and a load factor of 85%, Montréal went from fifth to sixth rank with a bill slightly higher than St. John's.

FIGURE 7



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DETAILED RESULTS SUMMARY TABLES (EXCLUDING TAXES)

Monthly Bills

Average Prices

Comparative Index

MONTHLY BILLS ON APRIL 1, 2016

(in CA\$)

Summary Table (excluding taxes)

	Residential	Small Power	Medium Power			Large Power	
Power demand		40 kW	500 kW	1,000 kW	2,500 kW ¹	5,000 kW ¹	50,000 kW ²
Consumption	1,000 kWh	10,000 kWh	100,000 kWh	400,000 kWh	1,170,000 kWh	3,060,000 kWh	30,600,000 kWh
Load factor		35%	28%	56%	65%	85%	85%
Canadian Cities							
Montréal, QC	72.26	983.33	12,000.00	31,677.00	78,519.75	158,317.50	1,498,275.00
Calgary, AB	104.00	818.88	8,860.12	24,894.19	60,775.12	147,544.56	1,469,424.30
Charlottetown, PE ³	160.17	1,670.17	17,657.97	57,072.97	161,147.97	279,050.00	2,790,500.00
Edmonton, AB ⁴	103.69	987.29	14,029.91	37,673.66	100,982.06	207,432.27	1,230,495.47
Halifax, NS	158.83	1,521.36	16,919.13	50,621.54	132,540.38	306,632.99	3,066,353.91
Moncton, NB	124.98	1,316.65	14,153.65	46,403.65	131,388.65	232,564.22	2,218,680.00
Ottawa, ON	161.52	1,576.30	15,293.41	52,882.77	156,328.50	394,959.15	1,381,901.88
Regina, SK	146.45	1,240.42	14,504.30	42,612.50	104,021.73	243,810.19	2,052,428.20
St. John's, NL ⁵	119.64	1,103.14	11,537.03	35,262.28	96,995.26	241,144.89	1,498,150.00
Toronto, ON ³	178.08	1,737.21	17,815.79	57,595.60	160,523.79	399,157.95	1,526,728.08
Vancouver, BC	107.03	1,119.03	11,255.87	33,899.12	92,438.53	224,920.25	1,859,722.96
Winnipeg, MB	84.29	826.31	9,146.15	25,466.90	62,902.00	148,452.00	1,278,750.00
American Cities							
Boston, MA	276.87	2,852.54	27,492.64	77,787.96	211,535.12	480,083.77	4,798,053.91
Chicago, IL ³	151.92	1,282.88	11,729.48	32,263.46	83,333.09	196,792.14	1,651,153.67
Detroit, MI ³	202.40	1,491.77	14,773.37	42,189.93	103,136.65	239,572.95	2,330,869.94
Houston, TX ³	112.53	1,074.99	12,294.85	39,463.27	100,483.50	243,180.66	2,306,468.61
Miami, FL ³	116.69	1,190.33	13,399.05	37,789.11	100,527.16	238,569.12	2,097,066.41
Nashville, TN ³	142.81	1,510.64	17,018.08	49,641.23	140,556.79	339,262.82	2,707,857.88
New York, NY ³	295.22	2,780.54	30,887.92	88,353.30	185,213.17	431,632.98	4,315,105.75
Portland, OR ³	139.43	1,359.42	14,153.18	41,748.39	106,779.54	259,365.83	2,513,733.42
San Francisco, CA ³	310.48	2,719.77	32,658.12	86,370.53	173,852.10	417,276.53	4,149,618.26
Seattle, WA	136.17	1,106.39	10,320.18	37,681.16	107,526.55	277,794.35	2,607,258.22
AVERAGE	154.79	1,466.79	15,813.64	46,788.66	120,523.06	277,614.41	2,334,027.08

1) Supply voltage of 25 kV, customer-owned transformer.

2) Supply voltage of 120 kV, customer-owned transformer.

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

4) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.

5) 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.

AVERAGE PRICES ON APRIL 1, 2016

(in ¢/kWh)¹

Summary Table (excluding taxes)

	Residential	Small Power	Medium Power			Large Power	
Power demand		40 kW	500 kW	1,000 kW	2,500 kW ²	5,000 kW ²	50,000 kW ³
Consumption	1,000 kWh	10,000 kWh	100,000 kWh	400,000 kWh	1,170,000 kWh	3,060,000 kWh	30,600,000 kWh
Load factor		35%	28%	56%	65%	85%	85%
Canadian Cities							
Montréal, QC	7.23	9.83	12.00	7.92	6.71	5.17	4.90
Calgary, AB	10.40	8.19	8.86	6.22	5.19	4.82	4.80
Charlottetown, PE ⁴	16.02	16.70	17.66	14.27	13.77	9.12	9.12
Edmonton, AB ⁵	10.37	9.87	14.03	9.42	8.63	6.78	4.02
Halifax, NS	15.88	15.21	16.92	12.66	11.33	10.02	10.02
Moncton, NB	12.50	13.17	14.15	11.60	11.23	7.60	7.25
Ottawa, ON	16.15	15.76	15.29	13.22	13.36	12.91	4.52
Regina, SK	14.65	12.40	14.50	10.65	8.89	7.97	6.71
St. John's, NL ⁶	11.96	11.03	11.54	8.82	8.29	7.88	4.90
Toronto, ON ⁴	17.81	17.37	17.82	14.40	13.72	13.04	4.99
Vancouver, BC	10.70	11.19	11.26	8.47	7.90	7.35	6.08
Winnipeg, MB	8.43	8.26	9.15	6.37	5.38	4.85	4.18
American Cities							
Boston, MA	27.69	28.53	27.49	19.45	18.08	15.69	15.68
Chicago, IL ⁴	15.19	12.83	11.73	8.07	7.12	6.43	5.40
Detroit, MI ⁴	20.24	14.92	14.77	10.55	8.82	7.83	7.62
Houston, TX ⁴	11.25	10.75	12.29	9.87	8.59	7.95	7.54
Miami, FL ⁴	11.67	11.90	13.40	9.45	8.59	7.80	6.85
Nashville, TN ⁴	14.28	15.11	17.02	12.41	12.01	11.09	8.85
New York, NY ⁴	29.52	27.81	30.89	22.09	15.83	14.11	14.10
Portland, OR ⁴	13.94	13.59	14.15	10.44	9.13	8.48	8.21
San Francisco, CA ⁴	31.05	27.20	32.66	21.59	14.86	13.64	13.56
Seattle, WA	13.62	11.06	10.32	9.42	9.19	9.08	8.52
AVERAGE	15.48	14.67	15.81	11.70	10.30	9.07	7.63

1) In Canadian currency.

2) Supply voltage of 25 kV, customer-owned transformer.

3) Supply voltage of 120 kV, customer-owned transformer.

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

5) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.

6) 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.

COMPARATIVE INDEX ON APRIL 1, 2016

(Hydro-Québec = 100)

Summary Table (excluding taxes)

	Residential	Small Power	Medium Power			Large Power	
Power demand		40 kW	500 kW	1,000 kW	2,500 kW ¹	5,000 kW ¹	50,000 kW ²
Consumption	1,000 kWh	10,000 kWh	100,000 kWh	400,000 kWh	1,170,000 kWh	3,060,000 kWh	30,600,000 kWh
Load factor		35%	28%	56%	65%	85%	85%
Canadian Cities							
Montréal, QC	100	100	100	100	100	100	100
Calgary, AB	144	83	74	79	77	93	98
Charlottetown, PE ³	222	170	147	180	205	176	186
Edmonton, AB ⁴	143	100	117	119	129	131	82
Halifax, NS	220	155	141	160	169	194	205
Moncton, NB	173	134	118	146	167	147	148
Ottawa, ON	224	160	127	167	199	249	92
Regina, SK	203	126	121	135	132	154	137
St. John's, NL ⁵	166	112	96	111	124	152	100
Toronto, ON ³	246	177	148	182	204	252	102
Vancouver, BC	148	114	94	107	118	142	124
Winnipeg, MB	117	84	76	80	80	94	85
American Cities							
Boston, MA	383	290	229	246	269	303	320
Chicago, IL ³	210	130	98	102	106	124	110
Detroit, MI ³	280	152	123	133	131	151	156
Houston, TX ³	156	109	102	125	128	154	154
Miami, FL ³	161	121	112	119	128	151	140
Nashville, TN ³	198	154	142	157	179	214	181
New York, NY ³	409	283	257	279	236	273	288
Portland, OR ³	193	138	118	132	136	164	168
San Francisco, CA ³	430	277	272	273	221	264	277
Seattle, WA	188	113	86	119	137	175	174
AVERAGE	214	149	132	148	153	175	156

1) Supply voltage of 25 kV, customer-owned transformer.

2) Supply voltage of 120 kV, customer-owned transformer.

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

4) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.

5) 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.

02

DETAILED RESULTS SUMMARY TABLES (INCLUDING TAXES)

Monthly Bills

Average Prices

Comparative Index

MONTHLY BILLS ON APRIL 1, 2016
(in CA\$)

Summary Table (including taxes)

	Residential	Small Power	Medium Power			Large Power	
Power demand		40 kW	500 kW	1,000 kW	2,500 kW ¹	5,000 kW ¹	50,000 kW ²
Consumption	1,000 kWh	10,000 kWh	100,000 kWh	400,000 kWh	1,170,000 kWh	3,060,000 kWh	30,600,000 kWh
Load factor		35%	28%	56%	65%	85%	85%
Canadian Cities							
Montréal, QC	83.08	1,130.59	13,797.00	36,420.63	90,278.09	182,025.55	1,722,641.68
Calgary, AB	109.19	859.83	9,303.13	26,138.90	63,813.88	154,921.79	1,542,895.51
Charlottetown, PE ³	182.59	1,903.99	20,130.09	65,063.19	183,708.69	318,117.00	3,181,170.00
Edmonton, AB ⁴	108.87	1,036.65	14,731.41	39,557.34	106,031.16	217,803.88	1,292,020.24
Halifax, NS	166.77	1,749.56	19,457.00	58,214.77	152,421.44	352,627.94	3,526,307.00
Moncton, NB	141.23	1,487.81	15,993.62	52,436.12	148,469.17	262,797.57	2,507,108.40
Ottawa, ON	182.51	1,781.21	17,281.55	59,757.53	176,651.20	446,303.84	1,561,549.13
Regina, SK	168.42	1,494.71	17,477.68	51,348.06	125,346.18	293,791.28	2,473,175.98
St. John's, NL ⁵	135.20	1,246.55	13,036.84	39,846.38	109,604.64	272,493.73	1,648,507.28
Toronto, ON ³	201.23	1,963.04	20,131.85	65,083.02	181,391.88	451,048.48	1,725,202.73
Vancouver, BC	114.38	1,253.31	12,606.58	37,967.02	103,531.16	251,910.68	2,082,889.71
Winnipeg, MB	97.46	977.11	10,815.32	30,114.61	70,356.00	166,044.00	1,430,281.00
American Cities							
Boston, MA	276.87	2,989.24	28,795.06	80,986.21	219,890.35	497,363.28	4,970,675.10
Chicago, IL ³	171.33	1,434.53	13,087.20	37,390.46	97,774.35	232,912.03	1,971,664.50
Detroit, MI ³	224.67	1,655.86	16,398.44	46,830.82	114,481.68	265,925.98	2,587,265.64
Houston, TX ³	113.65	1,160.07	13,192.22	42,261.12	108,713.06	263,340.99	2,498,430.62
Miami, FL ³	133.68	1,460.24	16,467.12	46,163.95	122,584.64	290,254.54	2,529,419.08
Nashville, TN ³	142.81	1,616.39	18,209.34	53,116.12	150,395.76	363,011.21	2,897,407.93
New York, NY ³	321.30	3,103.11	34,471.40	98,599.20	206,687.16	481,677.73	4,815,410.53
Portland, OR ³	141.57	1,380.41	14,372.51	42,391.68	108,451.03	263,435.44	2,553,243.23
San Francisco, CA ³	310.86	2,927.53	35,145.32	92,999.66	187,333.70	449,730.06	4,472,417.54
Seattle, WA	136.17	1,106.39	10,320.18	37,681.16	107,526.55	277,794.35	2,607,258.22
AVERAGE	166.54	1,623.55	17,510.04	51,834.91	133,429.17	307,060.52	2,572,588.23

1) Supply voltage of 25 kV, customer-owned transformer.

2) Supply voltage of 120 kV, customer-owned transformer.

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

4) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.

5) 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.

AVERAGE PRICES ON APRIL 1, 2016

(in ¢/kWh)¹

Summary Table (including taxes)

	Residential	Small Power	Medium Power			Large Power	
Power demand		40 kW	500 kW	1,000 kW	2,500 kW ²	5,000 kW ²	50,000 kW ³
Consumption	1,000 kWh	10,000 kWh	100,000 kWh	400,000 kWh	1,170,000 kWh	3,060,000 kWh	30,600,000 kWh
Load factor		35%	28%	56%	65%	85%	85%
Canadian Cities							
Montréal, QC	8.31	11.31	13.80	9.11	7.72	5.95	5.63
Calgary, AB	10.92	8.60	9.30	6.53	5.45	5.06	5.04
Charlottetown, PE ⁴	18.26	19.04	20.13	16.27	15.70	10.40	10.40
Edmonton, AB ⁵	10.89	10.37	14.73	9.89	9.06	7.12	4.22
Halifax, NS	16.68	17.50	19.46	14.55	13.03	11.52	11.52
Moncton, NB	14.12	14.88	15.99	13.11	12.69	8.59	8.19
Ottawa, ON	18.25	17.81	17.28	14.94	15.10	14.59	5.10
Regina, SK	16.84	14.95	17.48	12.84	10.71	9.60	8.08
St. John's, NL ⁶	13.52	12.47	13.04	9.96	9.37	8.91	5.39
Toronto, ON ⁴	20.12	19.63	20.13	16.27	15.50	14.74	5.64
Vancouver, BC	11.44	12.53	12.61	9.49	8.85	8.23	6.81
Winnipeg, MB	9.75	9.77	10.82	7.53	6.01	5.43	4.67
American Cities							
Boston, MA	27.69	29.89	28.80	20.25	18.79	16.25	16.24
Chicago, IL ⁴	17.13	14.35	13.09	9.35	8.36	7.61	6.44
Detroit, MI ⁴	22.47	16.56	16.40	11.71	9.78	8.69	8.46
Houston, TX ⁴	11.37	11.60	13.19	10.57	9.29	8.61	8.16
Miami, FL ⁴	13.37	14.60	16.47	11.54	10.48	9.49	8.27
Nashville, TN ⁴	14.28	16.16	18.21	13.28	12.85	11.86	9.47
New York, NY ⁴	32.13	31.03	34.47	24.65	17.67	15.74	15.74
Portland, OR ⁴	14.16	13.80	14.37	10.60	9.27	8.61	8.34
San Francisco, CA ⁴	31.09	29.28	35.15	23.25	16.01	14.70	14.62
Seattle, WA	13.62	11.06	10.32	9.42	9.19	9.08	8.52
AVERAGE	16.65	16.24	17.51	12.96	11.40	10.03	8.41

1) In Canadian currency.

2) Supply voltage of 25 kV, customer-owned transformer.

3) Supply voltage of 120 kV, customer-owned transformer.

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

5) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.

6) 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.

COMPARATIVE INDEX ON APRIL 1, 2016

(Hydro-Québec = 100)

Summary Table (including taxes)

	Residential	Small Power	Medium Power			Large Power	
Power demand		40 kW	500 kW	1,000 kW	2,500 kW ¹	5,000 kW ¹	50,000 kW ²
Consumption	1,000 kWh	10,000 kWh	100,000 kWh	400,000 kWh	1,170,000 kWh	3,060,000 kWh	30,600,000 kWh
Load factor		35%	28%	56%	65%	85%	85%
Canadian Cities							
Montréal, QC	100	100	100	100	100	100	100
Calgary, AB	131	76	67	72	71	85	90
Charlottetown, PE ³	220	168	146	179	203	175	185
Edmonton, AB ⁴	131	92	107	109	117	120	75
Halifax, NS	201	155	141	160	169	194	205
Moncton, NB	170	132	116	144	164	144	146
Ottawa, ON	220	158	125	164	196	245	91
Regina, SK	203	132	127	141	139	161	144
St. John's, NL ⁵	163	110	94	109	121	150	96
Toronto, ON ³	242	174	146	179	201	248	100
Vancouver, BC	138	111	91	104	115	138	121
Winnipeg, MB	117	86	78	83	78	91	83
American Cities							
Boston, MA	333	264	209	222	244	273	289
Chicago, IL ³	206	127	95	103	108	128	114
Detroit, MI ³	270	146	119	129	127	146	150
Houston, TX ³	137	103	96	116	120	145	145
Miami, FL ³	161	129	119	127	136	159	147
Nashville, TN ³	172	143	132	146	167	199	168
New York, NY ³	387	274	250	271	229	265	280
Portland, OR ³	170	122	104	116	120	145	148
San Francisco, CA ³	374	259	255	255	208	247	260
Seattle, WA	164	98	75	103	119	153	151
AVERAGE	200	144	127	142	148	169	149

1) Supply voltage of 25 kV, customer-owned transformer.

2) Supply voltage of 120 kV, customer-owned transformer.

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

4) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.

5) 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.

03

DETAILED RESULTS RESIDENTIAL

Monthly Bills
Average Prices
Comparative Index

RESIDENTIAL

Monthly Bills on April 1, 2016

(in CA\$)

Consumption	625 kWh	750 kWh	1,000 kWh	2,000 kWh	3,000 kWh
Canadian Cities					
Montréal, QC	47.88	55.02	72.26	159.06	245.86
Calgary, AB	73.03	83.35	104.00	186.57	269.15
Charlottetown, PE ¹	109.32	126.27	160.17	295.77	403.67
Edmonton, AB	73.13	83.32	103.69	185.17	266.65
Halifax, NS	103.33	121.83	158.83	306.84	454.84
Moncton, NB	85.91	98.93	124.98	229.18	333.38
Ottawa, ON	106.32	124.72	161.52	308.71	455.91
Regina, SK	99.11	114.89	146.45	272.68	398.91
St. John's, NL ²	80.59	93.61	119.64	223.75	327.87
Toronto, ON ¹	120.20	139.50	178.08	332.43	486.77
Vancouver, BC	60.26	74.40	107.03	237.55	368.06
Winnipeg, MB	55.52	65.11	84.29	161.01	237.73
American Cities					
Boston, MA	176.19	209.78	276.87	545.35	813.83
Chicago, IL ¹	102.23	118.79	151.92	252.79	368.53
Detroit, MI ¹	126.09	151.53	202.40	405.92	609.43
Houston, TX ¹	85.99	99.16	112.53	217.92	323.31
Miami, FL ¹	76.78	90.09	116.69	250.84	384.99
Nashville, TN ¹	95.05	110.97	142.81	270.19	397.57
New York, NY ¹	192.27	226.58	295.22	569.76	844.30
Portland, OR ¹	92.35	108.04	139.43	305.44	471.44
San Francisco, CA ¹	174.53	233.87	310.48	785.25	1,260.01
Seattle, WA	74.67	95.18	136.17	300.17	464.17
AVERAGE	100.49	119.32	154.79	309.20	463.02

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

2) Newfoundland Power rates.

RESIDENTIAL

Average Prices on April 1, 2016

(in ¢/kWh)¹

Consumption	625 kWh	750 kWh	1,000 kWh	2,000 kWh	3,000 kWh
Canadian Cities					
Montréal, QC	7.66	7.34	7.23	7.95	8.20
Calgary, AB	11.68	11.11	10.40	9.33	8.97
Charlottetown, PE ²	17.49	16.84	16.02	14.79	13.46
Edmonton, AB	11.70	11.11	10.37	9.26	8.89
Halifax, NS	16.53	16.24	15.88	15.34	15.16
Moncton, NB	13.75	13.19	12.50	11.46	11.11
Ottawa, ON	17.01	16.63	16.15	15.44	15.20
Regina, SK	15.86	15.32	14.65	13.63	13.30
St. John's, NL ³	12.89	12.48	11.96	11.19	10.93
Toronto, ON ²	19.23	18.60	17.81	16.62	16.23
Vancouver, BC	9.64	9.92	10.70	11.88	12.27
Winnipeg, MB	8.88	8.68	8.43	8.05	7.92
American Cities					
Boston, MA	28.19	27.97	27.69	27.27	27.13
Chicago, IL ²	16.36	15.84	15.19	12.64	12.28
Detroit, MI ²	20.17	20.20	20.24	20.30	20.31
Houston, TX ²	13.76	13.22	11.25	10.90	10.78
Miami, FL ²	12.29	12.01	11.67	12.54	12.83
Nashville, TN ²	15.21	14.80	14.28	13.51	13.25
New York, NY ²	30.76	30.21	29.52	28.49	28.14
Portland, OR ²	14.78	14.41	13.94	15.27	15.71
San Francisco, CA ²	27.92	31.18	31.05	39.26	42.00
Seattle, WA	11.95	12.69	13.62	15.01	15.47
AVERAGE	16.08	15.91	15.48	15.46	15.43

1) In Canadian currency.

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

3) Newfoundland Power rates.

RESIDENTIAL

Comparative Index on April 1, 2016

(Hydro-Québec = 100)

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	153	151	144	117	109
Charlottetown, PE ¹	228	229	222	186	164
Edmonton, AB	153	151	143	116	108
Halifax, NS	216	221	220	193	185
Moncton, NB	179	180	173	144	136
Ottawa, ON	222	227	224	194	185
Regina, SK	207	209	203	171	162
St. John's, NL ²	168	170	166	141	133
Toronto, ON ¹	251	254	246	209	198
Vancouver, BC	126	135	148	149	150
Winnipeg, MB	116	118	117	101	97
American Cities					
Boston, MA	368	381	383	343	331
Chicago, IL ¹	214	216	210	159	150
Detroit, MI ¹	263	275	280	255	248
Houston, TX ¹	180	180	156	137	132
Miami, FL ¹	160	164	161	158	157
Nashville, TN ¹	199	202	198	170	162
New York, NY ¹	402	412	409	358	343
Portland, OR ¹	193	196	193	192	192
San Francisco, CA ¹	365	425	430	494	512
Seattle, WA	156	173	188	189	189
AVERAGE	210	217	214	194	188

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

2) Newfoundland Power rates.

04

DETAILED RESULTS SMALL POWER

Monthly Bills
Average Prices
Comparative Index

SMALL POWER

Monthly Bills on April 1, 2016

(in CA\$)

Power demand	6 kW	14 kW	40 kW	100 kW	100 kW
Consumption	750 kWh	2,000 kWh	10,000 kWh	14,000 kWh	25,000 kWh
Load factor	17%	20%	35%	19%	35%
Canadian Cities					
Montréal, QC	85.16	206.53	983.33	1,806.00	2,669.50
Calgary, AB	98.01	194.84	818.88	1,328.52	1,766.37
Charlottetown, PE ¹	149.37	357.37	1,670.17	2,911.97	4,110.97
Edmonton, AB	87.46	209.05	987.29	1,971.20	2,547.93
Halifax, NS	118.37	288.51	1,521.36	2,683.59	3,803.41
Moncton, NB	117.85	277.35	1,316.65	2,290.65	3,286.15
Ottawa, ON	135.12	329.88	1,576.30	2,584.37	3,781.29
Regina, SK	118.58	270.18	1,240.42	2,384.54	3,238.75
St. John's, NL ²	99.43	258.40	1,103.14	1,988.72	2,826.97
Toronto, ON ¹	164.02	379.24	1,737.21	2,939.18	4,181.74
Vancouver, BC	95.38	241.86	1,119.03	1,911.99	2,768.55
Winnipeg, MB	80.95	181.67	826.31	1,651.16	2,161.89
American Cities					
Boston, MA	210.92	540.84	2,852.54	5,570.59	7,552.07
Chicago, IL ¹	113.84	261.34	1,282.88	2,104.43	3,093.65
Detroit, MI ¹	123.54	311.18	1,491.77	2,082.06	3,705.37
Houston, TX ¹	91.60	303.36	1,074.99	1,957.02	2,640.04
Miami, FL ¹	97.20	242.35	1,190.33	2,254.08	2,936.21
Nashville, TN ¹	149.80	340.36	1,510.64	3,074.13	4,001.85
New York, NY ¹	238.85	804.07	2,780.54	5,416.47	6,880.82
Portland, OR ¹	127.76	301.83	1,359.42	2,287.05	3,339.16
San Francisco, CA ¹	221.45	569.11	2,719.77	4,549.99	6,529.37
Seattle, WA	82.98	221.28	1,106.39	1,535.63	2,504.37
AVERAGE	127.62	322.30	1,466.79	2,603.79	3,651.20

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

2) Newfoundland Power rates.

SMALL POWER

Average Prices on April 1, 2016

(in ¢/kWh)¹

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	11.35	10.33	9.83	12.90	10.68
Calgary, AB	13.07	9.74	8.19	9.49	7.07
Charlottetown, PE ²	19.92	17.87	16.70	20.80	16.44
Edmonton, AB	11.66	10.45	9.87	14.08	10.19
Halifax, NS	15.78	14.43	15.21	19.17	15.21
Moncton, NB	15.71	13.87	13.17	16.36	13.14
Ottawa, ON	18.02	16.49	15.76	18.46	15.13
Regina, SK	15.81	13.51	12.40	17.03	12.95
St. John's, NL ³	13.26	12.92	11.03	14.21	11.31
Toronto, ON ²	21.87	18.96	17.37	20.99	16.73
Vancouver, BC	12.72	12.09	11.19	13.66	11.07
Winnipeg, MB	10.79	9.08	8.26	11.79	8.65
American Cities					
Boston, MA	28.12	27.04	28.53	39.79	30.21
Chicago, IL ²	15.18	13.07	12.83	15.03	12.37
Detroit, MI ²	16.47	15.56	14.92	14.87	14.82
Houston, TX ²	12.21	15.17	10.75	13.98	10.56
Miami, FL ²	12.96	12.12	11.90	16.10	11.74
Nashville, TN ²	19.97	17.02	15.11	21.96	16.01
New York, NY ²	31.85	40.20	27.81	38.69	27.52
Portland, OR ²	17.03	15.09	13.59	16.34	13.36
San Francisco, CA ²	29.53	28.46	27.20	32.50	26.12
Seattle, WA	11.06	11.06	11.06	10.97	10.02
AVERAGE	17.02	16.11	14.67	18.60	14.60

1) In Canadian currency.

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

3) Newfoundland Power rates.

SMALL POWER

Comparative Index on April 1, 2016

(Hydro-Québec = 100)

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	115	94	83	74	66
Charlottetown, PE ¹	175	173	170	161	154
Edmonton, AB	103	101	100	109	95
Halifax, NS	139	140	155	149	142
Moncton, NB	138	134	134	127	123
Ottawa, ON	159	160	160	143	142
Regina, SK	139	131	126	132	121
St. John's, NL ²	117	125	112	110	106
Toronto, ON ¹	193	184	177	163	157
Vancouver, BC	112	117	114	106	104
Winnipeg, MB	95	88	84	91	81
American Cities					
Boston, MA	248	262	290	308	283
Chicago, IL ¹	134	127	130	117	116
Detroit, MI ¹	145	151	152	115	139
Houston, TX ¹	108	147	109	108	99
Miami, FL ¹	114	117	121	125	110
Nashville, TN ¹	176	165	154	170	150
New York, NY ¹	280	389	283	300	258
Portland, OR ¹	150	146	138	127	125
San Francisco, CA ¹	260	276	277	252	245
Seattle, WA	97	107	113	85	94
AVERAGE	150	156	149	144	137

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

2) Newfoundland Power rates.

05

DETAILED RESULTS MEDIUM POWER

Monthly Bills
Average Prices
Comparative Index

MEDIUM POWER

Monthly Bills on April 1, 2016

(in CA\$)

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 kW ¹ 1,170,000 kWh 65%
Canadian Cities					
Montréal, QC	12,000.00	17,045.00	24,000.00	31,677.00	78,519.75
Calgary, AB	8,860.12	12,722.98	17,168.47	24,894.19	60,775.12
Charlottetown, PE ²	17,657.97	28,557.97	35,272.97	57,072.97	161,147.97
Edmonton, AB ³	14,029.91	19,893.61	25,946.26	37,673.66	100,982.06
Halifax, NS	16,919.13	25,310.77	33,838.27	50,621.54	132,540.38
Moncton, NB	14,153.65	23,203.65	28,303.65	46,403.65	131,388.65
Ottawa, ON	15,293.41	26,541.51	30,386.56	52,882.77	156,328.50
Regina, SK	14,504.30	21,313.30	28,994.50	42,612.50	104,021.73
St. John's, NL ⁴	11,537.03	18,713.74	21,391.51	35,262.28	96,995.26
Toronto, ON ²	17,815.79	29,111.76	35,215.57	57,595.60	160,523.79
Vancouver, BC	11,255.87	16,883.87	22,643.12	33,899.12	92,438.53
Winnipeg, MB	9,146.15	12,838.15	18,082.90	25,466.90	62,902.00
American Cities					
Boston, MA	27,492.64	39,002.70	54,767.84	77,787.96	211,535.12
Chicago, IL ²	11,729.48	16,181.06	23,696.16	32,263.46	83,333.09
Detroit, MI ²	14,773.37	21,302.43	29,530.70	42,189.93	103,136.65
Houston, TX ²	12,294.85	18,462.55	27,127.85	39,463.27	100,483.50
Miami, FL ²	13,399.05	18,934.89	26,717.42	37,789.11	100,527.16
Nashville, TN ²	17,018.08	24,946.74	33,783.91	49,641.23	140,556.79
New York, NY ²	30,887.92	44,200.16	61,728.81	88,353.30	185,213.17
Portland, OR ²	14,153.18	21,804.60	27,076.02	41,748.39	106,779.54
San Francisco, CA ²	32,658.12	45,664.58	62,329.74	86,370.53	173,852.10
Seattle, WA	10,320.18	19,126.90	20,197.47	37,681.16	107,526.55
AVERAGE	15,813.64	23,716.50	31,281.80	46,788.66	120,523.06

1) Supply voltage of 25 kV, customer-owned transformer.

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

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 Power rates.

MEDIUM POWER

Average Prices on April 1, 2016

(in ¢/kWh)¹

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 kW ² 1,170,000 kWh 65%
Canadian Cities					
Montréal, QC	12.00	8.52	12.00	7.92	6.71
Calgary, AB	8.86	6.36	8.58	6.22	5.19
Charlottetown, PE ³	17.66	14.28	17.64	14.27	13.77
Edmonton, AB ⁴	14.03	9.95	12.97	9.42	8.63
Halifax, NS	16.92	12.66	16.92	12.66	11.33
Moncton, NB	14.15	11.60	14.15	11.60	11.23
Ottawa, ON	15.29	13.27	15.19	13.22	13.36
Regina, SK	14.50	10.66	14.50	10.65	8.89
St. John's, NL ⁵	11.54	9.36	10.70	8.82	8.29
Toronto, ON ³	17.82	14.56	17.61	14.40	13.72
Vancouver, BC	11.26	8.44	11.32	8.47	7.90
Winnipeg, MB	9.15	6.42	9.04	6.37	5.38
American Cities					
Boston, MA	27.49	19.50	27.38	19.45	18.08
Chicago, IL ³	11.73	8.09	11.85	8.07	7.12
Detroit, MI ³	14.77	10.65	14.77	10.55	8.82
Houston, TX ³	12.29	9.23	13.56	9.87	8.59
Miami, FL ³	13.40	9.47	13.36	9.45	8.59
Nashville, TN ³	17.02	12.47	16.89	12.41	12.01
New York, NY ³	30.89	22.10	30.86	22.09	15.83
Portland, OR ³	14.15	10.90	13.54	10.44	9.13
San Francisco, CA ³	32.66	22.83	31.16	21.59	14.86
Seattle, WA	10.32	9.56	10.10	9.42	9.19
AVERAGE	15.81	11.86	15.64	11.70	10.30

1) In Canadian currency.

2) Supply voltage of 25 kV, customer-owned transformer.

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

4) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.

5) Newfoundland Power rates.

MEDIUM POWER

Comparative Index on April 1, 2016

(Hydro-Québec = 100)

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 kW ¹ 1,170,000 kWh 65%
Canadian Cities					
Montréal, QC	100	100	100	100	100
Calgary, AB	74	75	72	79	77
Charlottetown, PE ²	147	168	147	180	205
Edmonton, AB ³	117	117	108	119	129
Halifax, NS	141	148	141	160	169
Moncton, NB	118	136	118	146	167
Ottawa, ON	127	156	127	167	199
Regina, SK	121	125	121	135	132
St. John's, NL ⁴	96	110	89	111	124
Toronto, ON ²	148	171	147	182	204
Vancouver, BC	94	99	94	107	118
Winnipeg, MB	76	75	75	80	80
American Cities					
Boston, MA	229	229	228	246	269
Chicago, IL ²	98	95	99	102	106
Detroit, MI ²	123	125	123	133	131
Houston, TX ²	102	108	113	125	128
Miami, FL ²	112	111	111	119	128
Nashville, TN ²	142	146	141	157	179
New York, NY ²	257	259	257	279	236
Portland, OR ²	118	128	113	132	136
San Francisco, CA ²	272	268	260	273	221
Seattle, WA	86	112	84	119	137
AVERAGE	132	139	130	148	153

1) Supply voltage of 25 kV, customer-owned transformer.

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

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 Power rates.

06

DETAILED RESULTS

LARGE POWER

Monthly Bills

Average Prices

Comparative Index

LARGE POWER

Monthly Bills on April 1, 2016

(in CA\$)

Power demand	5,000 kW	5,000 kW	10,000 kW	30,000 kW	50,000 kW	50,000 kW
Consumption	2,340,000 kWh	3,060,000 kWh	5,760,000 kWh	17,520,000 kWh	23,400,000 kWh	30,600,000 kWh
Voltage ¹	25 kV	25 kV	120 kV	120 kV	120 kV	120 kV
Load factor	65%	85%	80%	81%	65%	85%
Canadian Cities						
Montréal, QC	134,845.50	158,317.50	287,919.00	871,581.00	1,263,555.00	1,498,275.00
Calgary, AB	119,369.64	147,544.56	280,331.48	849,050.87	1,187,675.02	1,469,424.30
Charlottetown, PE ²	230,450.00	279,050.00	533,800.00	1,617,600.00	2,304,500.00	2,790,500.00
Edmonton, AB ³	173,954.46	207,432.27	244,071.33	726,780.22	1,093,191.66	1,230,495.47
Halifax, NS	249,338.10	306,632.99	584,618.54	1,772,965.90	2,493,404.95	3,066,353.91
Moncton, NB	195,804.98	232,564.22	425,628.00	1,288,956.00	1,856,520.00	2,218,680.00
Ottawa, ON	313,994.31	394,959.15	558,558.24	955,926.67	1,225,864.91	1,381,901.88
Regina, SK	199,717.39	243,810.19	396,372.70	1,188,621.85	1,662,116.20	2,052,428.20
St. John's, NL ⁴	191,210.12	241,144.89	451,284.22	867,180.00	1,226,350.00	1,498,150.00
Toronto, ON ²	320,081.69	399,157.95	579,325.46	1,040,454.58	1,389,576.86	1,526,728.08
Vancouver, BC	185,006.48	224,920.25	355,026.26	1,076,363.55	1,521,420.52	1,859,722.96
Winnipeg, MB	123,454.00	148,452.00	244,487.00	740,973.00	1,053,534.00	1,278,750.00
American Cities						
Boston, MA	399,644.31	480,083.77	919,638.50	2,785,110.04	3,993,659.39	4,798,053.91
Chicago, IL ²	165,949.85	196,792.14	336,831.49	955,186.13	1,342,730.72	1,651,153.67
Detroit, MI ²	205,727.89	239,572.95	450,040.05	1,360,076.18	1,999,464.66	2,330,869.94
Houston, TX ²	198,384.26	243,180.66	440,937.20	1,333,317.22	1,865,897.51	2,306,468.61
Miami, FL ²	200,768.31	238,569.12	404,355.94	1,220,004.28	1,762,082.08	2,097,066.41
Nashville, TN ²	282,758.87	339,262.82	544,031.20	1,581,347.02	2,325,622.53	2,707,857.88
New York, NY ²	370,290.34	431,632.98	832,458.63	2,517,551.44	3,701,679.39	4,315,105.75
Portland, OR ²	212,113.87	259,365.83	483,060.78	1,458,195.95	2,075,175.42	2,513,733.42
San Francisco, CA ²	344,369.06	417,276.53	795,527.43	2,405,741.00	3,420,543.59	4,149,618.26
Seattle, WA	215,184.76	277,794.35	492,670.01	1,496,862.79	2,020,825.17	2,607,258.22
AVERAGE	228,746.28	277,614.41	483,680.61	1,368,629.35	1,944,790.44	2,334,027.08

1) Customer-owned transformer.

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

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.

LARGE POWER

Average Prices on April 1, 2016

(in ¢/kWh)¹

Power demand	5,000 kW	5,000 kW	10,000 kW	30,000 kW	50,000 kW	50,000 kW
Consumption	2,340,000 kWh	3,060,000 kWh	5,760,000 kWh	17,520,000 kWh	23,400,000 kWh	30,600,000 kWh
Voltage ²	25 kV	25 kV	120 kV	120 kV	120 kV	120 kV
Load factor	65%	85%	80%	81%	65%	85%

Canadian Cities

Montréal, QC	5.76	5.17	5.00	4.97	5.40	4.90
Calgary, AB	5.10	4.82	4.87	4.85	5.08	4.80
Charlottetown, PE ³	9.85	9.12	9.27	9.23	9.85	9.12
Edmonton, AB ⁴	7.43	6.78	4.24	4.15	4.67	4.02
Halifax, NS	10.66	10.02	10.15	10.12	10.66	10.02
Moncton, NB	8.37	7.60	7.39	7.36	7.93	7.25
Ottawa, ON	13.42	12.91	9.70	5.46	5.24	4.52
Regina, SK	8.53	7.97	6.88	6.78	7.10	6.71
St. John's, NL ⁵	8.17	7.88	7.83	4.95	5.24	4.90
Toronto, ON ³	13.68	13.04	10.06	5.94	5.94	4.99
Vancouver, BC	7.91	7.35	6.16	6.14	6.50	6.08
Winnipeg, MB	5.28	4.85	4.24	4.23	4.50	4.18

American Cities

Boston, MA	17.08	15.69	15.97	15.90	17.07	15.68
Chicago, IL ³	7.09	6.43	5.85	5.45	5.74	5.40
Detroit, MI ³	8.79	7.83	7.81	7.76	8.54	7.62
Houston, TX ³	8.48	7.95	7.66	7.61	7.97	7.54
Miami, FL ³	8.58	7.80	7.02	6.96	7.53	6.85
Nashville, TN ³	12.08	11.09	9.44	9.03	9.94	8.85
New York, NY ³	15.82	14.11	14.45	14.37	15.82	14.10
Portland, OR ³	9.06	8.48	8.39	8.32	8.87	8.21
San Francisco, CA ³	14.72	13.64	13.81	13.73	14.62	13.56
Seattle, WA	9.20	9.08	8.55	8.54	8.64	8.52
AVERAGE	9.78	9.07	8.40	7.81	8.31	7.63

1) In Canadian currency.

2) Customer-owned transformer.

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

4) Bills corresponding to consumption levels of 500 kW or more have been estimated by Hydro-Québec based on the applicable general rate.

5) 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.

LARGE POWER

Comparative Index on April 1, 2016

(Hydro-Québec = 100)

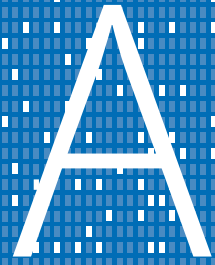
Power demand	5,000 kW	5,000 kW	10,000 kW	30,000 kW	50,000 kW	50,000 kW
Consumption	2,340,000 kWh	3,060,000 kWh	5,760,000 kWh	17,520,000 kWh	23,400,000 kWh	30,600,000 kWh
Voltage ¹	25 kV	25 kV	120 kV	120 kV	120 kV	120 kV
Load factor	65%	85%	80%	81%	65%	85%
Canadian Cities						
Montréal, QC	100	100	100	100	100	100
Calgary, AB	89	93	97	97	94	98
Charlottetown, PE ²	171	176	185	186	182	186
Edmonton, AB ³	129	131	85	83	87	82
Halifax, NS	185	194	203	203	197	205
Moncton, NB	145	147	148	148	147	148
Ottawa, ON	233	249	194	110	97	92
Regina, SK	148	154	138	136	132	137
St. John's, NL ⁴	142	152	157	99	97	100
Toronto, ON ²	237	252	201	119	110	102
Vancouver, BC	137	142	123	123	120	124
Winnipeg, MB	92	94	85	85	83	85
American Cities						
Boston, MA	296	303	319	320	316	320
Chicago, IL ²	123	124	117	110	106	110
Detroit, MI ²	153	151	156	156	158	156
Houston, TX ²	147	154	153	153	148	154
Miami, FL ²	149	151	140	140	139	140
Nashville, TN ²	210	214	189	181	184	181
New York, NY ²	275	273	289	289	293	288
Portland, OR ²	157	164	168	167	164	168
San Francisco, CA ²	255	264	276	276	271	277
Seattle, WA	160	175	171	172	160	174
AVERAGE	170	175	168	157	154	156

1) Customer-owned transformer.

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

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.



APPENDIX RATE ADJUSTMENTS

Average Adjustments

Adjustments by
Customer Category

RATE ADJUSTMENTS

All Categories

	Before April 2015		Between April 1, 2015 and April 1, 2016	
	Year	%	Date	%
Canadian Utilities				
Hydro-Québec, QC	2015	2.8	April 1, 2016	0.6
ENMAX, AB	2015	3.1	April 1, 2016	n.a.
Maritime Electric, PE	2015	2.2	March 1, 2016	2.3
EPCOR, AB	2015	n.a.	January 1, 2016	n.a.
Nova Scotia Power, NS	2015	0.0	January 1, 2016	-1.0
NB Power, NB	2014	2.0	October 1, 2015	1.63
Hydro Ottawa, ON	2015	n.a.	January 1, 2016	5.8
SaskPower, SK	2015	3.0	September 1, 2015	2.0
Newfoundland Power, NL ¹	2014	2.0	July 1, 2015	-5.25
Newfoundland and Labrador Hydro, NL ¹	—	—	July 1, 2015	2.7
Toronto Hydro, ON	2014	n.a.	March 1, 2016	n.a.
BC Hydro, BC	2015	6.0	April 1, 2016	4.0
Manitoba Hydro, MB	2014	2.8	August 1, 2015	3.95

Data concerning American utilities not available.

n.a.: Not available.

1) 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, 2015, and April 1, 2016)

Adjustments by Customer Category

	Date	Residential %	General %	Industrial %	Average %
Canadian Utilities					
Hydro-Québec, QC	April 1, 2016	0.7	0.7 ¹ 0.6 ² 0.7 ³	—	0.6
ENMAX, AB	April 1, 2016	n.a.	n.a.	n.a.	n.a.
Maritime Electric, PE	March 1, 2016	2.3	2.3	2.3	2.3
EPCOR, AB	January 1, 2016	n.a.	n.a.	n.a.	n.a.
Nova Scotia Power, NS	January 1, 2016	-0.9	-2.2 ¹ -1.3 ² — ³	-1.8 ⁴ — ⁵ — ⁶	-1.0
NB Power, NB	October 1, 2015	1.63	1.63	1.63	1.63
Hydro Ottawa, ON	January 1, 2016	5.7	10.6	1.2	5.8
SaskPower, SK	September 1, 2015	1.8	2.2	2.3	2.0
Newfoundland Power, NL ⁷	July 1, 2015	-4.88	-6.28	-8.15	-5.25
Newfoundland and Labrador Hydro, NL ⁷	July 1, 2015	n.a.	n.a.	2.7	n.a.
Toronto Hydro, ON	March 1, 2016	n.a.	n.a.	n.a.	n.a.
BC Hydro, BC	April 1, 2016	4.0	4.0	4.0	4.0
Manitoba Hydro, MB	August 1, 2015	3.95	3.94	3.96	3.95

Data concerning American utilities not available.

n.a.: Not available.

- 1) Small power.
- 2) Medium power.
- 3) Large power.
- 4) Small industrial.
- 5) Medium industrial.
- 6) Large industrial.
- 7) 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.

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.

B

APPENDIX
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 2016 was used.

CenterPoint Energy, TX	All levels
Commonwealth Edison, IL	All levels
Consolidated Edison, NY	All levels
DTE Electric, MI	500–50,000 kW
ENMAX, AB	All levels
EPCOR, AB	All levels
Eversource Energy, MA	General: 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	Residential General: 1,000–50,000 kW
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
CenterPoint Energy, TX	Accumulated Deferred Federal Income Tax Credit Advanced Metering System Surcharge Distribution Cost Recovery Factor Energy Efficiency Cost Recovery Factor Nuclear Decommissioning Charge Rate Case Expenses Surcharge Remand of Energy Efficiency Cost Recovery Factor Surcharge System Benefit Fund Charge Transition Charges Transmission Cost Recovery Factor
Commonwealth Edison, IL	Capacity Charge Energy Assistance Charge for the Supplemental Low-Income Energy Assistance Fund Energy Efficiency and Demand Response Adjustments Environmental Cost Recovery Adjustment Hourly Purchased Electricity Adjustment Factor Miscellaneous Procurement Components Charge PJM Services Charges Purchased Electricity Adjustment Factor Purchased Electricity Charges Renewable Energy Resources and Coal Technology Development Assistance Charge Residential Real Time Pricing Program Cost Recovery Charges Uncollectible Cost Factors
Consolidated Edison, NY	Adjustment Factors – MSC and MAC Billing and Payment Processing Delivery Revenue Surcharge Market Supply Charge Merchant Function Charge Monthly Adjustment Clause Renewable Portfolio Standard Program Revenue Decoupling Mechanism Adjustment Surcharge to Collect Assessments under Section 18-a of the Public Service Law System Benefits Charge Temporary Rate Adjustment
DTE Electric, MI	Energy Optimization Surcharge Low Income Energy Assistance Fund Factor Nuclear Surcharge Power Supply Cost Recovery Clause Renewable Energy Plan Surcharge Securitization Bond Charge and Securitization Bond Tax Charge Transitional Recovery Mechanism Vulnerable Household Warmth Fund/Low Income Energy Efficiency Fund Refund

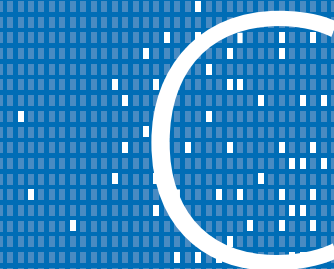
ENMAX, AB	Balancing Pool Allocation Refund Rider Local Access Fee Transmission Access Charge Deferral Account Rider
EPCOR, AB	Balancing Pool Rider Local Access Fee Transmission Charge Deferral Account True-Up Rider
Eversource Energy, MA	Attorney General Consultant Expenses Provision Default Service Adjustment Demand-Side Management Charge Energy Conservation Charge Energy Efficiency Reconciliation Factor Long Term Renewable Contract Adjustment Net Metering Recovery Surcharge Pension Adjustment Renewable Energy Charge Residential Assistance Adjustment Clause Smart Grid Adjustment Factor Storm Cost Recovery Adjustment Transition Cost Adjustment Transmission Service Cost Adjustment
Florida Power and Light, FL	Energy Conservation Cost Recovery Clause Capacity Payment Recovery Clause Environmental Cost Recovery Clause Fuel Cost and Purchase Power Recovery Clause Storm Bond Repayment Charge and Storm Bond Tax Charge
Hydro Ottawa, ON	Debt Retirement Charge Disposition of Deferral/Variance Accounts (2016) Disposition of Global Adjustment Account (2016) Lost Revenue Adjustment Mechanism Ontario Electricity Support Program Charge Rural or Remote Electricity Rate Protection Charge Smart Metering Entity Charge
Maritime Electric, PE	Energy Cost Adjustment Mechanism
Nashville Electric Service, TN	TVA Fuel Cost Adjustment
Newfoundland and Labrador Hydro, NL	Municipal Tax Adjustment Rate Stabilization Adjustment
Nova Scotia Power, NS	Base Cost of Fuel Demand Side Management Cost Recovery Rider Fuel Adjustment Mechanism (AA/BA)
Pacific Gas and Electric, CA	California Climate Credit Competition Transition Charges DWR Bond Energy Cost Recovery Amount New System Generation Charge Nuclear Decommissioning Public Purpose Programs Reliability Services Transmission Rate Adjustments

Pacific Power and Light, OR

Adjustment Associated with the Pacific Northwest Electric
Power Planning Conservation Act
Energy Conservation Charge
Adjustment to Remove Deer Creek Mine Investment from Rate Base
Deer Creek Mine Undepreciated Investment Adjustment
Generation Investment Adjustment
Independent Evaluator Cost Adjustment
Intervenor Funding Adjustment
Klamath Dam Removal Surcharges
Low Income Bill Payment Assistance Fund
Oregon Solar Incentive Program Deferral
Property Sales Balancing Account Adjustment
Public Purpose Charge
Rate Mitigation Adjustment
Renewable Adjustment Clause
Renewable Resource Deferral
TAM Adjustment for Other Revenues

Toronto Hydro, ON

Application of IFRS – 2014 Derecognition
Application of Operations Center Consolidation Plan Sharing
Debt Retirement Charge
Disposition of PILS and Tax Variance
Disposition of PILS and Tax Variance – HST
Disposition of LRAM Variance Account
Disposition of Post Employment Benefit – Tax Savings
Disposition of Residual Regulatory Asset Recovery Account
Ontario Electricity Support Program Charge
Recovery of 2008-2010 Smart Meter Costs
Recovery of Foregone Revenue
Recovery of Hydro One Capital Contributions Variance
Recovery of Incremental Capital Module Costs
Recovery of Incremental Smart Meter Revenue Requirement
Recovery of Low Voltage Variance
Recovery of Stranded Meter Assets
Recovery of the Gain on the Sale of Named Properties
Recovery of 2015 Foregone Revenue
Recovery of 2016 Foregone Revenue
Rural or Remote Electricity Rate Protection Charge
Smart Metering Entity Charge



APPENDIX APPLICABLE TAXES

Residential Sector

General Sector

Industrial Sector

TAXES APPLICABLE TO RESIDENTIAL SERVICE

On April 1, 2016

	Tax	% (or other)	Applicable
Canadian Cities			
Montréal, QC	Goods and services tax	5	To base amount of bill
	Québec sales tax	9.975	To base amount of bill
Calgary, AB	Goods and services tax	5	To base amount of bill
Charlottetown, PE	Harmonized sales tax	14	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	Municipal tax	10	To base amount of bill
	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
	Regional transit levy	\$1.90	Monthly
Vancouver, BC	Goods and services tax	5	To base amount of bill + regional transit levy
	Provincial sales tax	8	To base amount of bill (heating other than electric)
	Municipal tax	1.4	To base amount of bill (electric heating)
	Goods and services tax	2.5	To base amount of bill (heating other than electric)
Winnipeg, MB	Municipal tax	0.5	To base amount of bill (electric heating)
	Goods and services tax	5	To base amount of bill + municipal tax
American Cities			
Boston, MA	None		
Chicago, IL	State tax	¢/kWh	Tax varies by energy block
	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	2.5641	To base amount of bill
	Franchise fee	3	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	5.1073	To other components
	Sales tax	4.5	To base amount of bill + gross receipts tax
Portland, OR	Multnomah County business income tax	0.15	To a portion of base amount of bill
	City of Portland franchise tax	1.5	To a portion of base amount of bill
San Francisco, CA	Energy Commission tax	0.029¢	To energy consumption
Seattle, WA	State utility tax	3.8734	Tax included in rate schedule prices
	Seattle occupation tax	6	Tax included in rate schedule prices

TAXES APPLICABLE TO GENERAL SERVICE

On April 1, 2016

	Tax	% (or other)	Applicable
Canadian Cities			
Montréal, QC	Goods and services tax	5	To base amount of bill (tax refundable)
	Québec sales tax	9.975	To base amount of bill (tax refundable) ¹
Calgary, AB	Goods and services tax	5	To base amount of bill
Charlottetown, PE	Harmonized sales tax	14	To base amount of bill (tax refundable)
Edmonton, AB	Goods and services tax	5	To base amount of bill
Halifax, NS	Harmonized sales tax	15	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
Regina, SK	Municipal tax	10	To base amount of bill
	Provincial sales tax	5	To base amount of bill + municipal tax
	Goods and services tax	5	To base amount of bill
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	Goods and services tax	5	To base amount of bill
	Provincial sales tax	7	To base amount of bill
Winnipeg, MB	Provincial sales tax	8	To base amount of bill (companies other than mining and manufacturing)
		1.6	To base amount of bill (mining and manufacturing companies)
	Municipal tax	5	To base amount of bill (heating other than electric)
		1	To base amount of bill (electric heating)
	Goods and services tax	5	To base amount of bill + municipal tax (tax refundable)
American Cities			
Boston, MA	State sales tax	6.25	To a portion of base amount of bill
Chicago, IL	State tax	¢/kWh	Tax varies by energy block
	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	State tax	6.25	To base amount of bill
	Municipal tax	1	To base amount of bill
	Transit tax	1	To base amount of bill
	County tax	0.5	To base amount of bill
Miami, FL	Gross receipts tax	2.5641	To base amount of bill
	Franchise fee	3	To base amount of bill + gross receipts tax
	Municipal tax	10	To a portion of base amount of bill
	State sales tax	7	To base amount of bill + gross receipts tax + franchise fee
	Local tax	1	To base amount of bill + gross receipts tax + franchise fee
Nashville, TN	State sales tax	7	To base amount of bill

1) Commercial customers with revenue below \$10 million and customers in the manufacturing sector are entitled to a refund of this tax.

TAXES APPLICABLE TO GENERAL SERVICE (cont'd)

On April 1, 2016

	Tax	% (or other)	Applicable
New York, NY	Commodity gross receipts tax	2.4066	To commodity component
	Delivery gross receipts tax	2.5642	To other components
	Sales tax	8.875	To base amount of bill + gross receipts tax
Portland, OR	Multnomah County business income tax	0.15	To a portion of base amount of bill
	City of Portland franchise tax	1.5	To a portion of base amount of bill
San Francisco, CA	Energy Commission tax	0.029¢	To energy consumption
	San Francisco utility users' tax	7.5	To base amount of bill
Seattle, WA	State utility tax	3.8734	Tax included in rate schedule prices
	Seattle occupation tax	6	Tax included in rate schedule prices

TAXES APPLICABLE TO INDUSTRIAL SERVICE

On April 1, 2016

	Tax	% (or other)	Applicable
Canadian Cities			
Montréal, QC	Goods and services tax	5	To base amount of bill (tax refundable)
	Québec sales tax	9.975	To base amount of bill (tax refundable) ¹
Calgary, AB	Goods and services tax	5	To base amount of bill
Charlottetown, PE	Harmonized sales tax	14	To base amount of bill (tax refundable)
Edmonton, AB	Goods and services tax	5	To base amount of bill
Halifax, NS	Harmonized sales tax	15	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
Regina, SK	Municipal tax	10	To base amount of bill
	Provincial sales tax	5	To base amount of bill + municipal tax
	Goods and services tax	5	To base amount of bill
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	Goods and services tax	5	To base amount of bill
	Provincial sales tax	7	To base amount of bill
Winnipeg, MB	Provincial sales tax	8	To base amount of bill (companies other than mining and manufacturing)
		1.6	To base amount of bill (mining and manufacturing companies)
	Municipal tax	5	To base amount of bill (heating other than electric)
		1	To base amount of bill (electric heating)
	Goods and services tax	5	To base amount of bill + municipal tax (tax refundable)
American Cities			
Boston, MA	State sales tax	6.25	To a portion of base amount of bill
Chicago, IL	State tax	¢/kWh	Tax varies by energy block
	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	State tax	6.25	To base amount of bill
	Municipal tax	1	To base amount of bill
	Transit tax	1	To base amount of bill
	County tax	0.5	To base amount of bill
Miami, FL	Gross receipts tax	2.5641	To base amount of bill
	Franchise fee	3	To base amount of bill + gross receipts tax
	Municipal tax	10	To a portion of base amount of bill
	State sales tax	7	To base amount of bill + gross receipts tax + franchise fee
	Local tax	1	To base amount of bill + gross receipts tax + franchise fee

1) Commercial customers with revenue below \$10 million and customers in the manufacturing sector are entitled to a refund of this tax.

TAXES APPLICABLE TO INDUSTRIAL SERVICE (cont'd)

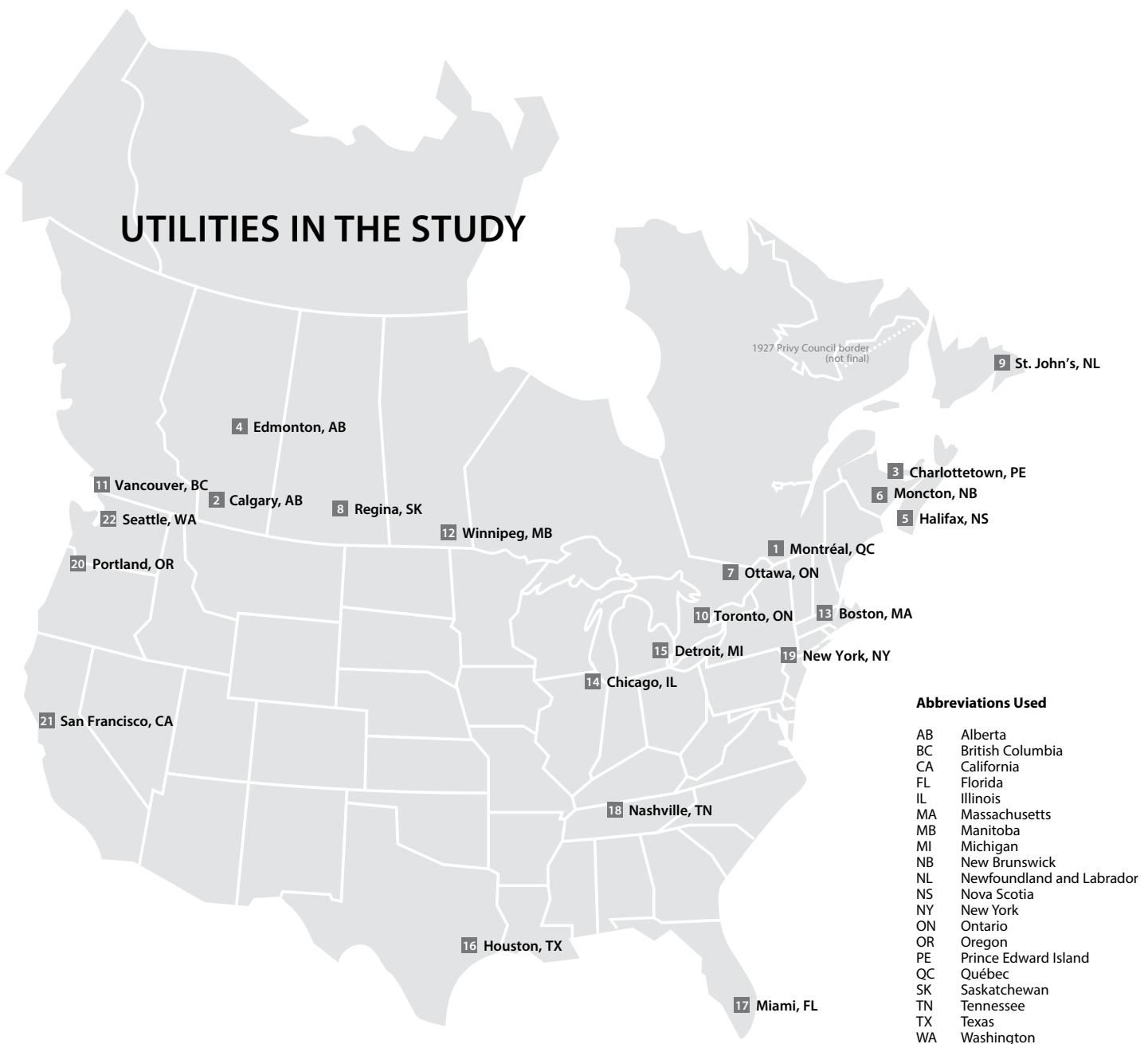
On April 1, 2016

	Tax	% (or other)	Applicable
Nashville, TN	State sales tax	7	To base amount of bill (companies other than manufacturing)
	State sales tax	1.5	To base amount of bill (manufacturing companies)
New York, NY	Commodity gross receipts tax	2.4066	To commodity component
	Delivery gross receipts tax	2.5642	To other components
	Sales tax	8.875	To base amount of bill + gross receipts tax
Portland, OR	Multnomah County business income tax	0.15	To a portion of base amount of bill
	City of Portland franchise tax	1.5	To a portion of base amount of bill
San Francisco, CA	Energy Commission tax	0.029¢	To energy consumption
	San Francisco utility users' tax	7.5	To base amount of bill
Seattle, WA	State utility tax	3.8734	Tax included in rate schedule prices
	Seattle occupation tax	6	Tax included in rate schedule prices

D

APPENDIX UTILITIES IN THE STUDY

UTILITIES IN THE STUDY



Abbreviations Used

AB	Alberta
BC	British Columbia
CA	California
FL	Florida
IL	Illinois
MA	Massachusetts
MB	Manitoba
MI	Michigan
NB	New Brunswick
NL	Newfoundland and Labrador
NS	Nova Scotia
NY	New York
ON	Ontario
OR	Oregon
PE	Prince Edward Island
QC	Québec
SK	Saskatchewan
TN	Tennessee
TX	Texas
WA	Washington

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- Eversource Energy
- 14- Commonwealth Edison
- 15- DTE Electric
- 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-QUÉBEC

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 36,912 MW; 99% of electricity is generated using waterpower. Its transmission and distribution activities are regulated. The utility distributes electricity to more than 4.2 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. The division also purchases electricity on the market, primarily through calls for tenders. The average supply cost of heritage pool electricity, set at a fixed price of 2.79¢/kWh since 1998, is indexed on January 1 since 2014 at a rate corresponding to the annual variation in the all-item consumer price index for Québec, with the exception of the large-power industrial rate (Rate L), which is exempt from the indexation of heritage pool electricity.

The Régie de l'énergie approved an average increase of 0.7% in the rates of Hydro-Québec Distribution, effective April 1, 2016, with the exception of Rate L, which remains the same.

MARITIME ELECTRIC

Charlottetown, Prince Edward Island

A subsidiary of Fortis Inc., Maritime Electric is the principal supplier of electricity on Prince Edward Island, with about 78,000 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 (IRAC). The IRAC has approved a 2.3% annual rate increase for each of the next three years.

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 nearly 835,000 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 nearly 369,000 residential and business customers in Edmonton. It also supplies more than 600,000 customers throughout the province who are eligible for both rate regulated and contract electricity services.

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 500,000 customers. Its generating facilities have an installed capacity in excess of 2,400 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 349,000 customers and sells electricity to the province's municipal systems, which together supply nearly 42,000 customers. NB Power has a generating capacity of about 3,500 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. Other retail market customers continue to be served by NB Power.

SASKPOWER

Regina, Saskatchewan

Crown utility SaskPower serves nearly 522,000 customers and sells wholesale electricity to municipal systems in Saskatchewan. The utility operates 17 power plants and also buys power from third parties, such that its total available generating capacity exceeds 4,400 MW.

In Saskatchewan, the wholesale electricity market has been open to competition since 2001.

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 Inc., serves about 259,000 customers on the island of Newfoundland. Since it operates only small generating stations with a total installed capacity of nearly 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 1,626 MW and a transmission system that serves the whole province. NLH also supplies remote regions, Labrador and large industrial customers. Aside from Newfoundland and Labrador Hydro, Nalcor Energy operates generating facilities with an installed capacity in excess of 5,600 MW.

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 more than 315,000 customers. Toronto Hydro-Electric System is a subsidiary of city-owned Toronto Hydro Corporation and serves about 740,000 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 given the mandate to regulate the supply of electricity and has produced a plan in this regard (Regulated Price Plan or RPP). Prices have been reviewed on May 1 each year since 2006 and adjusted six months later, if necessary. With advanced metering, the vast majority of residential customers are now billed according to a time-of-use rate.

BC HYDRO

Vancouver, British Columbia

BC Hydro, a provincial Crown corporation, operates generating facilities with a total capacity of more than 12,000 MW. About 90% of electricity is generated using waterpower. The utility distributes electricity to about 1.9 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 were made into separate entities. The *Clean Energy Act* grouped transmission and distribution in July 2010 to ensure coordinated supply planning for the province. In November 2013, the government published a 10-year plan which provides for upgrading aging infrastructure, implementing new generation projects to meet growing demand and minimizing the impact of these activities on electricity rates.

MANITOBA HYDRO

Winnipeg, Manitoba

Manitoba Hydro is a Crown utility serving nearly 562,000 customers throughout the province. Virtually all the electricity it generates and distributes comes from its 15 hydropower plants, which have a total capacity of 5,700 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

EVERSOURCE ENERGY

Boston, Massachusetts

Eversource, a merger between NSTAR Electric & Gas and Northeast Utilities, serves 3.1 million residential, commercial and industrial customers in the states of Massachusetts, Connecticut and New Hampshire. The utility purchases electricity on the market and concentrates on transmission and distribution.

Since March 1, 2005, the basic service rates are applied to 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 about 70% of the state's population.

Since May 1, 2002, the retail market has been fully open for residential, commercial and industrial customers. However, it is only since 2011 that residential customers have actually exercised their right to choose distributors other than the two companies that were in place when deregulation was implemented: ComEd and Ameren.

DTE ELECTRIC

Detroit, Michigan

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

Under the June 2000 legislation that restructured 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 about 2.3 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.

FLORIDA POWER AND LIGHT (FPL)

Miami, Florida

FPL’s vast transmission and distribution system supplies more than 4.8 million customers. A subsidiary of NextEra Energy, the utility operates generating facilities with an installed capacity of 25,000 MW.

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. In April 2016, FPL submitted its Ten Year Power Plant Site Plan for the years 2016–2025 in which it maintains its commitment to modernize its generating stations.

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 370,000 customers. A federal agency, the TVA supplies 155 distributors and nearly 60 large industrial and federal customers.

Close to 40% of the electricity produced by the TVA comes from its 10 coal-fired plants, with the rest from gas, nuclear and hydro plants. The TVA has also included renewables, including solar, wind and biomass, into its generation portfolio.

CONSOLIDATED EDISON (ConEd)

New York, New York

ConEd of New York delivers electricity to 3.3 million customers and natural gas to about 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 about 740,000 customers across three states, including more than 567,000 in Oregon. PacifiCorp operates generating facilities with an installed capacity of about 10,900 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 415,000 customers in the city of Seattle and certain surrounding communities. It produces nearly 50% 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 Communications avec la clientèle
for Direction – Tarifs et conditions de service

Legal deposit – 3rd quarter 2016
Bibliothèque et Archives nationales du Québec
National Library of Canada
ISBN 978-2-550-76244-7 (print version)
ISBN 978-2-550-76245-4 (PDF)

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

Ce document est également publié en français.

