



# 2023 Comparison of Electricity Prices in Major North American Cities

Rates in effect April 1, 2023



# TABLE OF CONTENTS

INTRODUCTION	2
METHOD	7
HIGHLIGHTS	9
Residential Customers	9
Small-Power Customers	10
Medium-Power Customer	11
Large-Power Customers	14
DETAILED RESULTS	
1    Summary Tables (excluding taxes)	16
2    Summary Tables (including taxes)	20
3    Detailed Results – Residential Customers	24
4    Detailed Results – Small-Power Customers	28
5    Detailed Results – Medium-Power Customers	32
6    Detailed Results – Large-Power Customers	36
APPENDICES	
A    Rate Adjustments	40
B    Time-of-Use Rates	43
Adjustment Clauses	43
C    Applicable Taxes	48
D    Utilities in the Study	54

# INTRODUCTION

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

This report details the principal conclusions of the comparative analysis of prices in effect on April 1, 2023. 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 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>1,2</sup>

(IN ¢/kWh)<sup>3</sup>



## 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

1) For a monthly consumption of 1,000 kWh; rates in effect April 1, 2023.

2) Average prices excluding taxes.

3) In Canadian currency.

# MAJOR NORTH AMERICAN CITIES

AVERAGE PRICES FOR LARGE-POWER CUSTOMERS<sup>1,2</sup>  
(IN ¢/KWH)<sup>3</sup>



## 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

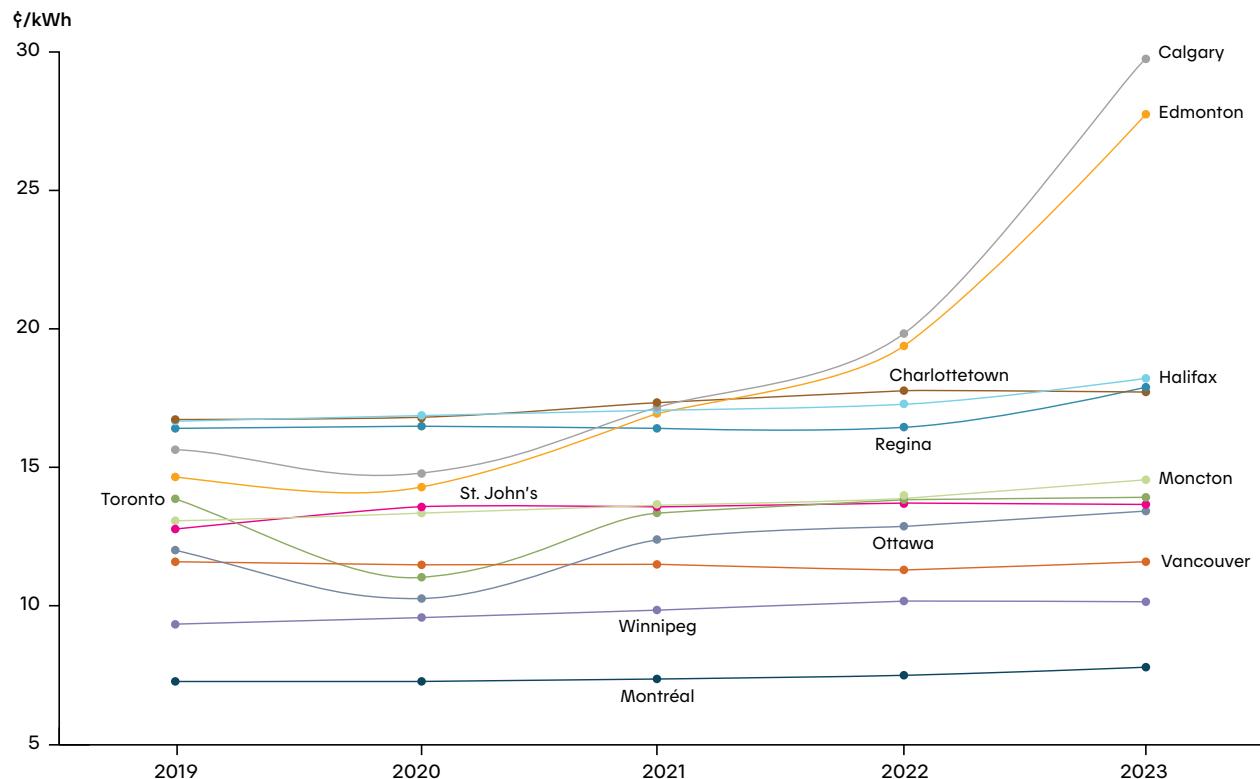
1) For a monthly consumption of 3,060,000 kWh and a power demand of 5,000 kW; rates in effect April 1, 2023.

2) Average prices excluding taxes.

3) In Canadian currency.

# MAJOR CANADIAN CITIES

## OVERVIEW OF CHANGES IN AVERAGE PRICES FOR RESIDENTIAL CUSTOMERS (IN ¢/kWh) - 2019-2023<sup>1, 2, 3, 4</sup>



## AVERAGE PRICES FOR RESIDENTIAL CUSTOMERS (IN ¢/kWh)<sup>1, 2, 3, 4</sup>

Canadian Cities	2019	2020	2021	2022	2023
Montréal, QC	7.30	7.30	7.39	7.59	7.81
Calgary, AB	15.74	14.83	17.26	19.94	29.80
Charlottetown, PE	16.83	16.83	17.38	17.78	17.78
Edmonton, AB	14.68	14.29	16.99	19.48	27.78
Halifax, NS	16.69	16.89	17.09	17.30	18.27
Moncton, NB	13.10	13.42	13.66	13.94	14.61
Ottawa, ON	12.04	10.29	12.45	12.94	13.48
Regina, SK	16.51	16.51	16.51	16.51	17.89
St. John's, NL	12.80	13.60	13.60	13.76	13.73
Toronto, ON	13.89	11.10	13.43	13.88	13.88
Vancouver, BC	11.62	11.51	11.58	11.39	11.62
Winnipeg, MB	9.37	9.60	9.87	10.24	10.24

1) For a monthly consumption of 1,000 kWh.

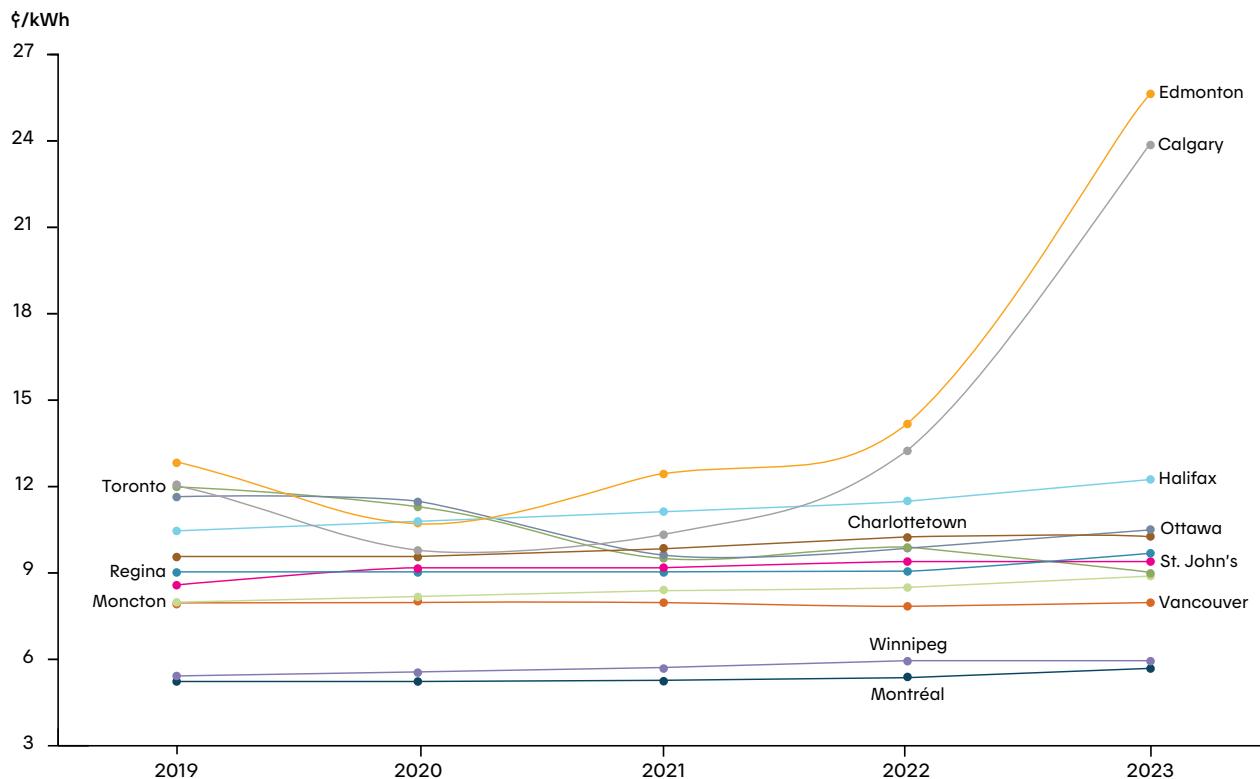
2) In Canadian currency.

3) Data from *Comparison of Electricity Prices in Major North American Cities* publications, Hydro-Québec, 2019-2023.

4) Average prices excluding taxes.

# MAJOR CANADIAN CITIES

## OVERVIEW OF CHANGES IN AVERAGE PRICES FOR LARGE-POWER CUSTOMERS (IN ¢/kWh) - 2019-2023<sup>1, 2, 3, 4</sup>



## AVERAGE PRICES FOR LARGE-POWER CUSTOMERS (IN ¢/kWh)<sup>1, 2, 3, 4</sup>

Canadian Cities	2019	2020	2021	2022	2023
● Montréal, QC	5.20	5.20	5.24	5.33	5.55
● Calgary, AB	11.97	9.73	10.25	13.16	23.77
● Charlottetown, PE	9.51	9.51	9.77	10.17	10.17
● Edmonton, AB	12.80	10.64	12.35	14.08	25.62
● Halifax, NS	10.39	10.72	11.05	11.40	12.13
● Moncton, NB	7.93	8.13	8.28	8.44	8.81
● Ottawa, ON	11.57	11.36	9.57	9.78	10.39
● Regina, SK	8.98	8.98	8.98	8.98	9.57
● St. John's, NL	8.52	9.12	9.12	9.32	9.28
● Toronto, ON	11.91	11.23	9.45	9.76	8.88
● Vancouver, BC	7.91	7.84	7.88	7.76	7.91
● Winnipeg, MB	5.39	5.53	5.68	5.90	5.90

1) For a monthly consumption of 3,060,000 kWh and a power demand of 5,000 kW.

2) In Canadian currency.

3) Data from *Comparison of Electricity Prices in Major North American Cities* publications, Hydro-Québec, 2019-2023.

4) Average prices excluding taxes.

# 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 9 other Canadian provinces, and 10 utilities in American states. The results are based in part on a survey to which 14 utilities responded, and in part on estimates of bills calculated by Hydro-Québec.

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 the rates in effect on April 1, 2023. The most recent rate adjustments applied by the Canadian utilities in the study between April 1, 2022, and April 1, 2023, 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.

## 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 apply 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 rates and taxes are applied uniformly except in territories located north of the 53rd parallel. 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, 2023.

## TIME-OF-USE RATES

The rates applied 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. These utilities and the consumption levels to which time-of-use rates apply are listed in Appendix B.

## ADJUSTMENT CLAUSES

The rates of some distributors include clauses that allow them to adjust their customers' electricity bills according to different variables. Since these adjustments may be applied monthly or over a longer period, the bills issued by a given distributor may have varied between April 1, 2022, and April 1, 2023, even though base rates remained the same. Appendix B lists the adjustment clauses taken into account when calculating bills.

---

## **TAXES**

With the exception of the bills presented in Section 2, taxes are not included in any of the calculations. Appendix C lists the taxes applicable on April 1, 2023, by customer category; those which may be partially or fully refundable are indicated.

---

## **EXCHANGE RATE**

The exchange rate used to convert bills in U.S. dollars into Canadian dollars is \$0.7442 (CA\$1 = US\$0.7442), the rate in effect at noon on April 3, 2023. The Canadian dollar had thus depreciated by 6.88% relative to the U.S. dollar on April 1, 2022.

# HIGHLIGHTS

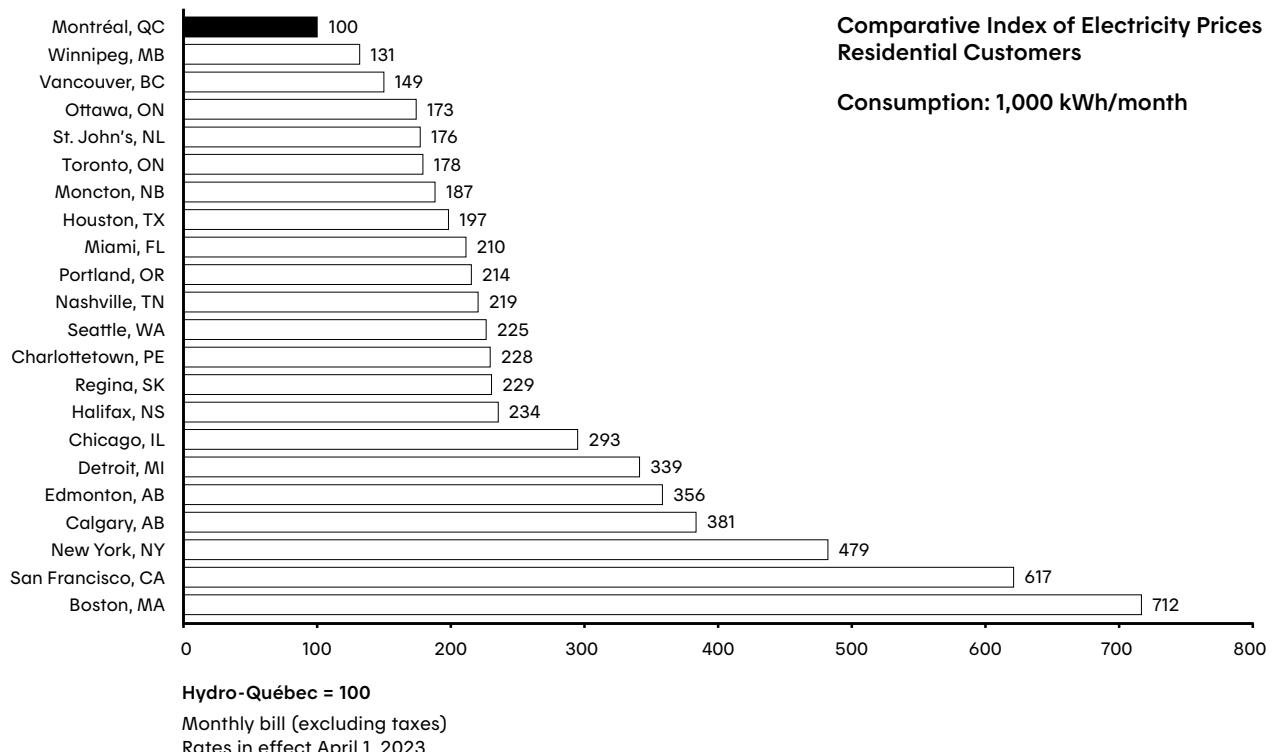
The document *Electricity Rates effective April 1, 2023*, sets out Hydro-Québec's rates established in accordance with Schedule 1 of the *Hydro-Québec Act*. Three types of rates are in effect: domestic rates, for residential and farm customers (hereinafter, "residential customers"); the industrial rate, 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 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 kilowatthours (kWh), Montréal is once again in *first* place. Figure 1 illustrates the results of this comparison.

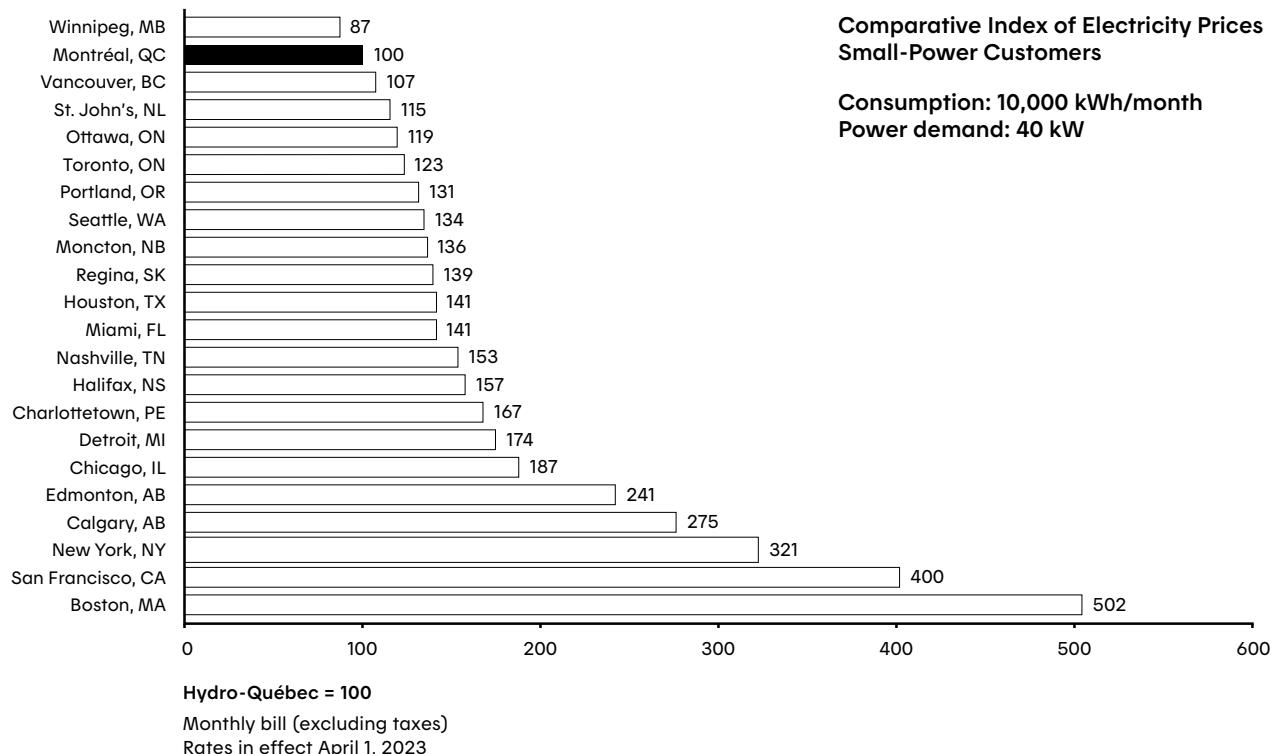
**FIGURE 1**



## 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 kilowatts (kW). Again this year, Montréal is in second place. Figure 2 shows the comparative index of electricity prices.

**FIGURE 2**

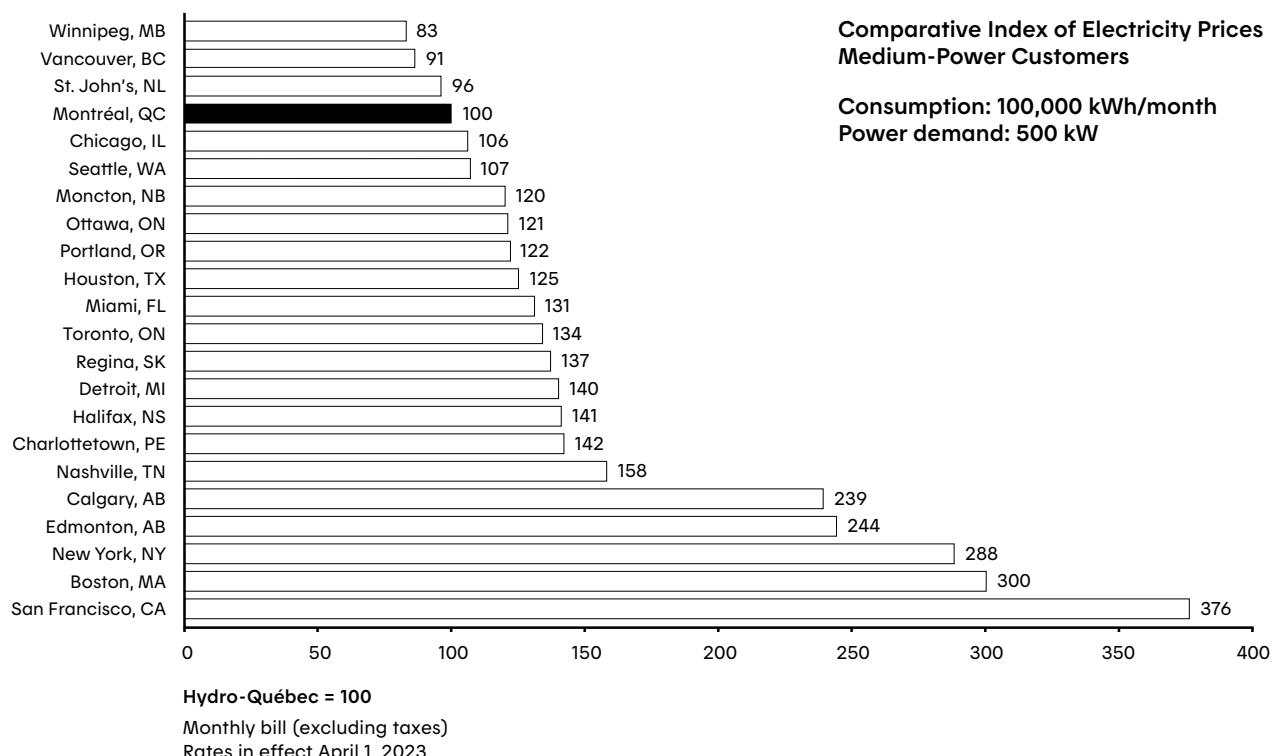


## MEDIUM-POWER CUSTOMERS (100 TO 5,000 kW)

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.

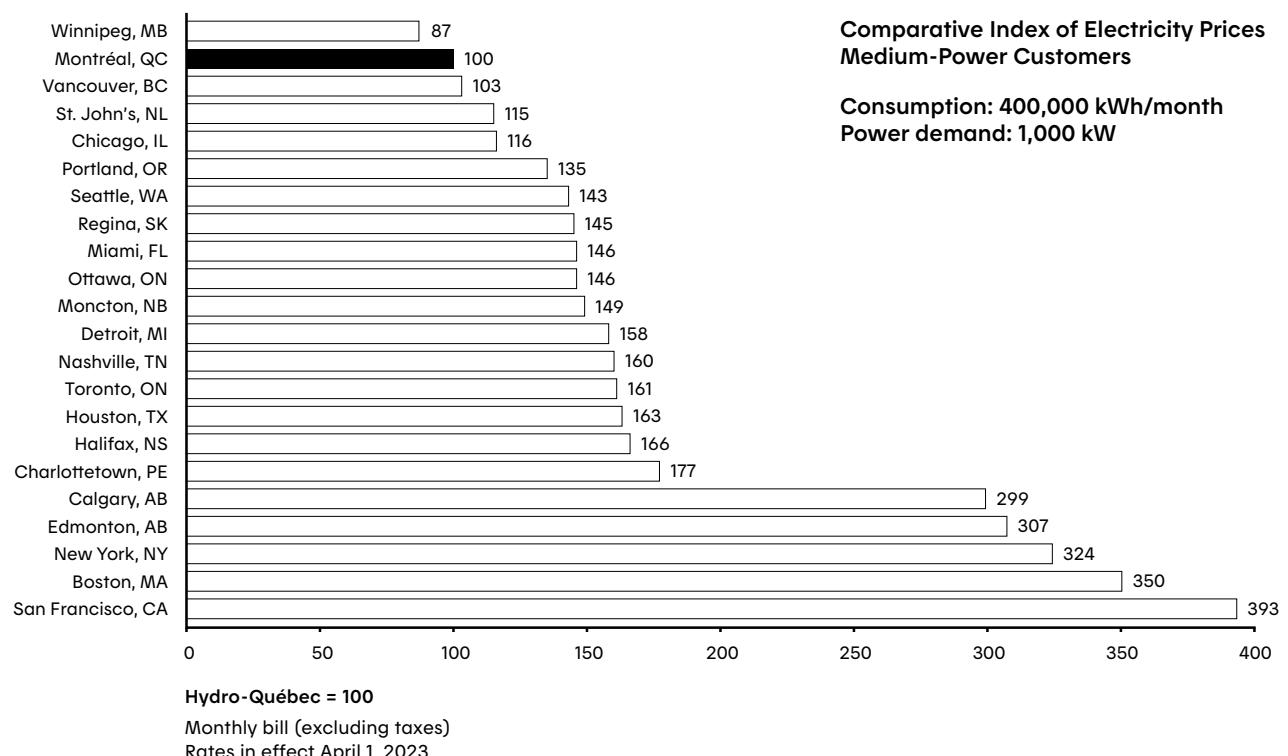
For medium-power customers with a monthly consumption of 100,000 kWh and a power demand of 500 kW, Montréal is in *fourth* place.

**FIGURE 3**



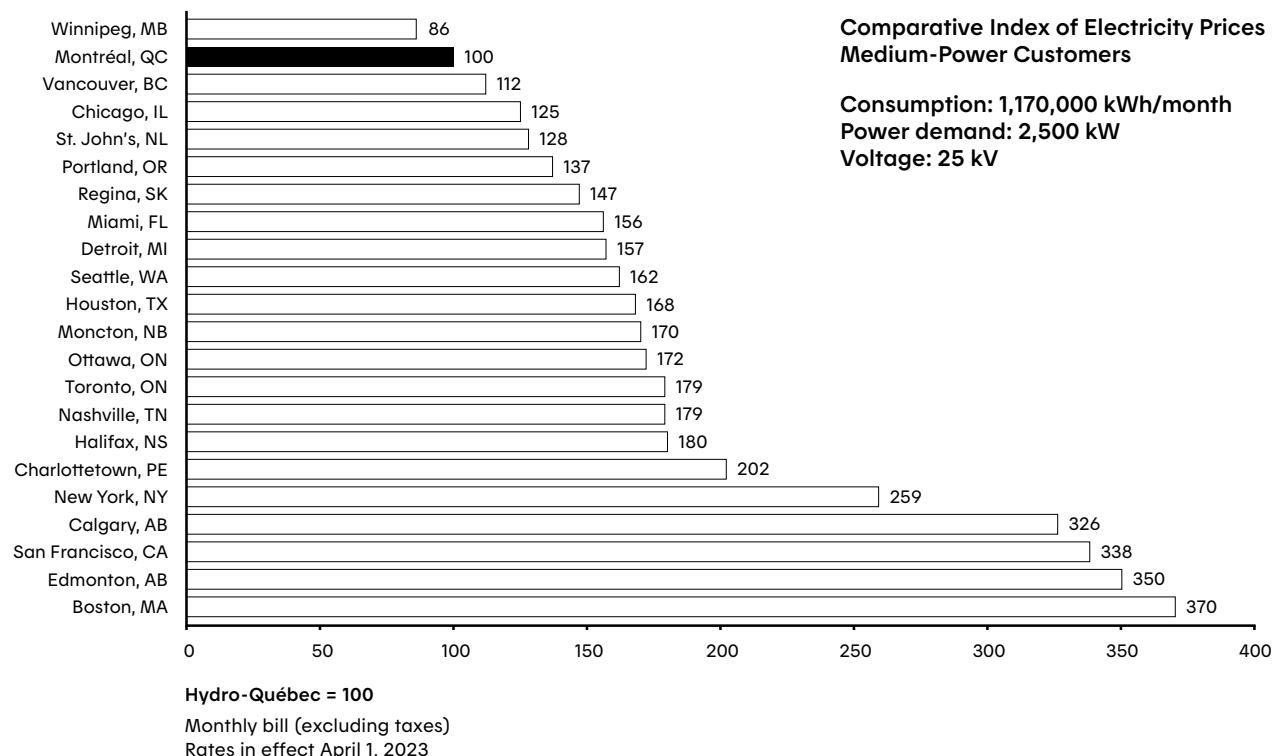
For customers with a monthly consumption of 400,000 kWh and a power demand of 1,000 kW, Montréal ranks *second*.

**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 remains in second place.

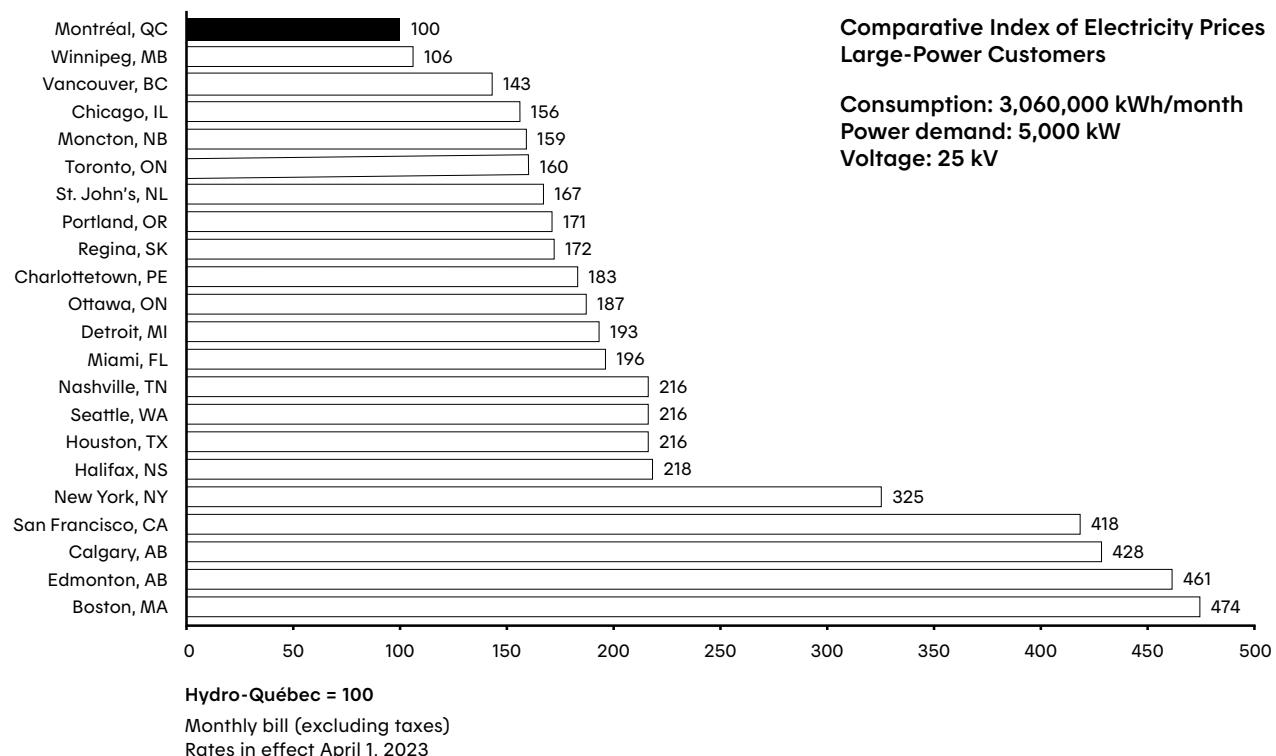
**FIGURE 5**



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

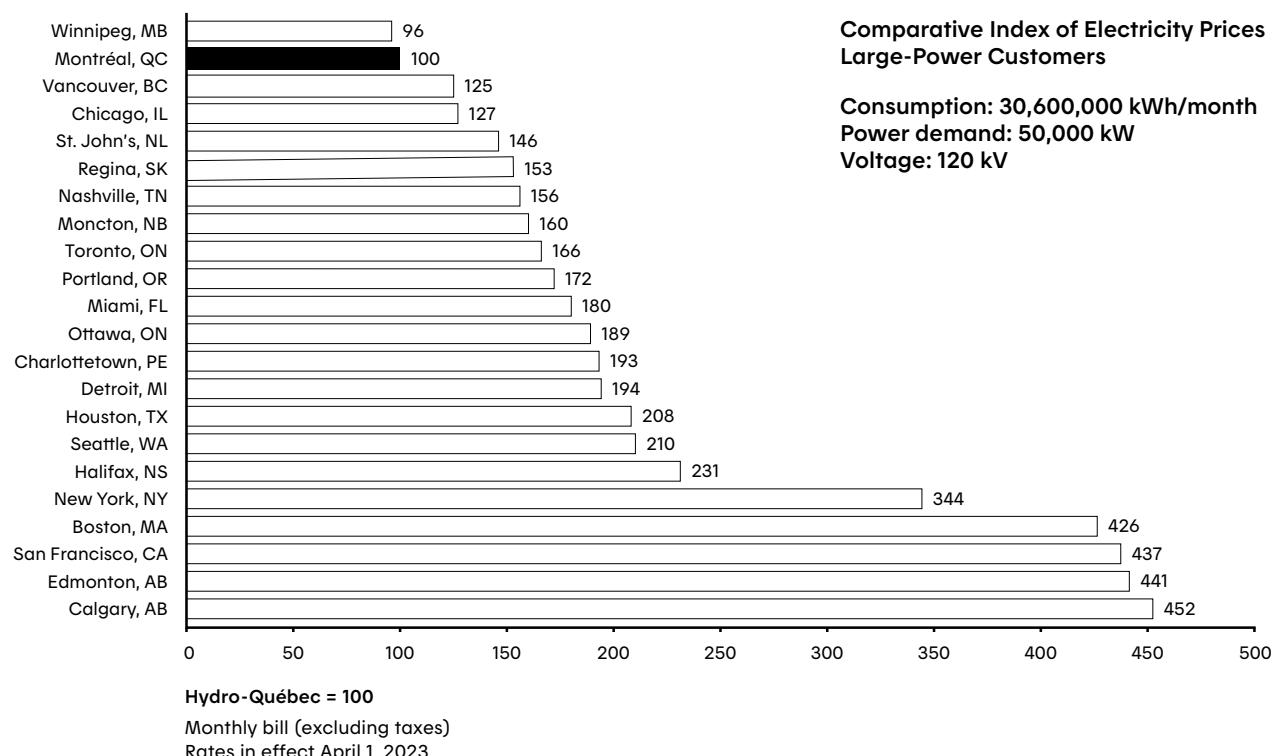
Figure 6 illustrates the comparative index of electricity prices for large-power customers with a monthly consumption of 3,060,000 kWh and a power demand of 5,000 kW. Montréal ranks *first*.

**FIGURE 6**



For industrial customers with a power demand of 50,000 kW and a load factor of 85%, Montréal is in second place, coming in just behind Winnipeg.

**FIGURE 7**



# 01

## Detailed Results

### **Summary Tables (excluding taxes)**

Monthly Bills

Average Prices

Comparative Index

## MONTHLY BILLS ON APRIL 1, 2023

(in C\$)

### Summary Table (excluding taxes)

	Residential Customers	Small-Power Customers	Medium-Power Customers			Large-Power Customers	
			500 kW	1,000 kW	2,500 kW <sup>1</sup>	5,000 kW <sup>1</sup>	50,000 kW <sup>2</sup>
Power demand		40 kW	500 kW	1,000 kW	2,500 kW <sup>1</sup>	5,000 kW <sup>1</sup>	50,000 kW <sup>2</sup>
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	78.14	1,109.55	13,498.00	35,672.90	88,573.23	169,899.25	1,608,302.50
Calgary, AB	298.03	3,054.71	32,240.33	106,777.54	288,785.92	727,269.31	7,265,025.42
Charlottetown, PE <sup>3</sup>	177.77	1,849.17	19,195.97	63,140.97	178,842.97	311,180.00	3,111,800.00
Edmonton, AB <sup>4</sup>	277.81	2,677.91	32,891.06	109,651.48	310,078.30	784,033.88	7,086,820.07
Halifax, NS	182.71	1,737.94	19,094.00	59,230.00	159,732.15	371,217.46	3,712,199.83
Moncton, NB	146.07	1,510.65	16,244.65	53,164.65	150,482.65	269,721.65	2,571,800.00
Ottawa, ON	134.80	1,323.89	16,285.70	52,229.46	152,765.84	317,974.46	3,042,660.49
Regina, SK	178.94	1,542.78	18,549.00	51,770.10	129,917.75	292,824.48	2,461,848.10
St. John's, NL <sup>5</sup>	137.27	1,272.22	12,905.27	41,122.04	113,776.15	284,067.48	2,347,714.00
Toronto, ON <sup>3</sup>	138.76	1,368.86	18,055.74	57,599.93	158,158.43	271,742.09	2,676,116.54
Vancouver, BC	116.19	1,191.57	12,234.62	36,578.72	99,589.82	242,140.64	2,016,114.17
Winnipeg, MB	102.44	969.24	11,140.77	31,010.37	76,447.80	180,415.65	1,539,767.52
American Cities							
Boston, MA	556.28	5,567.19	40,546.90	124,912.66	327,681.13	805,395.59	6,856,234.88
Chicago, IL	228.63	2,079.43	14,259.92	41,401.49	110,815.36	265,328.70	2,044,727.72
Detroit, MI <sup>3</sup>	264.56	1,925.67	18,962.17	56,287.14	138,753.02	327,115.72	3,126,342.70
Houston, TX <sup>3</sup>	153.98	1,562.51	16,923.38	58,277.68	148,830.12	367,612.77	3,346,720.10
Miami, FL <sup>3</sup>	164.16	1,565.55	17,636.39	51,996.78	138,183.82	333,541.92	2,893,894.91
Nashville, TN	170.99	1,701.12	21,324.36	57,187.48	158,217.79	366,603.44	2,510,345.40
New York, NY <sup>3</sup>	373.94	3,560.85	38,883.99	115,499.95	229,557.91	553,011.14	5,528,365.44
Portland, OR <sup>3</sup>	167.04	1,452.47	16,470.57	48,106.65	120,954.16	290,630.95	2,771,249.41
San Francisco, CA <sup>3</sup>	481.80	4,433.47	50,722.53	140,030.08	299,259.17	709,477.74	7,022,847.58
Seattle, WA	175.73	1,491.00	14,386.46	51,007.71	143,712.90	366,666.34	3,372,915.80
<b>AVERAGE</b>	<b>213.91</b>	<b>2,043.08</b>	<b>21,475.08</b>	<b>65,575.26</b>	<b>169,232.56</b>	<b>391,266.85</b>	<b>3,586,991.48</b>

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, 2023

(in ¢/kWh)<sup>1</sup>

### Summary Table (excluding taxes)

	Residential Customers	Small-Power Customers	Medium-Power Customers			Large-Power Customers	
			500 kW	1,000 kW	2,500 kW <sup>2</sup>	5,000 kW <sup>2</sup>	50,000 kW <sup>3</sup>
Power demand		40 kW	500 kW	1,000 kW	2,500 kW <sup>2</sup>	5,000 kW <sup>2</sup>	50,000 kW <sup>3</sup>
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	7.81	11.10	13.50	8.92	7.57	5.55	5.26
Calgary, AB	29.80	30.55	32.24	26.69	24.68	23.77	23.74
Charlottetown, PE <sup>4</sup>	17.78	18.49	19.20	15.79	15.29	10.17	10.17
Edmonton, AB <sup>5</sup>	27.78	26.78	32.89	27.41	26.50	25.62	23.16
Halifax, NS	18.27	17.38	19.09	14.81	13.65	12.13	12.13
Moncton, NB	14.61	15.11	16.24	13.29	12.86	8.81	8.40
Ottawa, ON	13.48	13.24	16.29	13.06	13.06	10.39	9.94
Regina, SK	17.89	15.43	18.55	12.94	11.10	9.57	8.05
St. John's, NL <sup>6</sup>	13.73	12.72	12.91	10.28	9.72	9.28	7.67
Toronto, ON <sup>4</sup>	13.88	13.69	18.06	14.40	13.52	8.88	8.75
Vancouver, BC	11.62	11.92	12.23	9.14	8.51	7.91	6.59
Winnipeg, MB	10.24	9.69	11.14	7.75	6.53	5.90	5.03
American Cities							
Boston, MA	55.63	55.67	40.55	31.23	28.01	26.32	22.41
Chicago, IL	22.86	20.79	14.26	10.35	9.47	8.67	6.68
Detroit, MI <sup>4</sup>	26.46	19.26	18.96	14.07	11.86	10.69	10.22
Houston, TX <sup>4</sup>	15.40	15.63	16.92	14.57	12.72	12.01	10.94
Miami, FL <sup>4</sup>	16.42	15.66	17.64	13.00	11.81	10.90	9.46
Nashville, TN	17.10	17.01	21.32	14.30	13.52	11.98	8.20
New York, NY <sup>4</sup>	37.39	35.61	38.88	28.87	19.62	18.07	18.07
Portland, OR <sup>4</sup>	16.70	14.52	16.47	12.03	10.34	9.50	9.06
San Francisco, CA <sup>4</sup>	48.18	44.33	50.72	35.01	25.58	23.19	22.95
Seattle, WA	17.57	14.91	14.39	12.75	12.28	11.98	11.02
<b>AVERAGE</b>	<b>21.39</b>	<b>20.43</b>	<b>21.48</b>	<b>16.39</b>	<b>14.46</b>	<b>12.79</b>	<b>11.72</b>

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, 2023

(Hydro-Québec = 100)

Summary Table (excluding taxes)

	Residential Customers	Small-Power Customers	Medium-Power Customers			Large-Power Customers	
			500 kW	1,000 kW	2,500 kW <sup>1</sup>	5,000 kW <sup>1</sup>	50,000 kW <sup>2</sup>
Power demand		40 kW	500 kW	1,000 kW	2,500 kW <sup>1</sup>	5,000 kW <sup>1</sup>	50,000 kW <sup>2</sup>
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	381	275	239	299	326	428	452
Charlottetown, PE <sup>3</sup>	228	167	142	177	202	183	193
Edmonton, AB <sup>4</sup>	356	241	244	307	350	461	441
Halifax, NS	234	157	141	166	180	218	231
Moncton, NB	187	136	120	149	170	159	160
Ottawa, ON	173	119	121	146	172	187	189
Regina, SK	229	139	137	145	147	172	153
St. John's, NL <sup>5</sup>	176	115	96	115	128	167	146
Toronto, ON <sup>3</sup>	178	123	134	161	179	160	166
Vancouver, BC	149	107	91	103	112	143	125
Winnipeg, MB	131	87	83	87	86	106	96
American Cities							
Boston, MA	712	502	300	350	370	474	426
Chicago, IL	293	187	106	116	125	156	127
Detroit, MI <sup>3</sup>	339	174	140	158	157	193	194
Houston, TX <sup>3</sup>	197	141	125	163	168	216	208
Miami, FL <sup>3</sup>	210	141	131	146	156	196	180
Nashville, TN	219	153	158	160	179	216	156
New York, NY <sup>3</sup>	479	321	288	324	259	325	344
Portland, OR <sup>3</sup>	214	131	122	135	137	171	172
San Francisco, CA <sup>3</sup>	617	400	376	393	338	418	437
Seattle, WA	225	134	107	143	162	216	210
<b>AVERAGE</b>	<b>274</b>	<b>184</b>	<b>159</b>	<b>184</b>	<b>191</b>	<b>230</b>	<b>223</b>

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, 2023

(in C\$)

### Summary Table (including taxes)

	Residential Customers	Small-Power Customers	Medium-Power Customers			Large-Power Customers	
			500 kW	1,000 kW	2,500 kW <sup>1</sup>	5,000 kW <sup>1</sup>	50,000 kW <sup>2</sup>
Power demand		40 kW	500 kW	1,000 kW	2,500 kW <sup>1</sup>	5,000 kW <sup>1</sup>	50,000 kW <sup>2</sup>
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	89.84	1,275.71	15,519.33	41,014.92	101,837.07	195,341.66	1,849,145.80
Calgary, AB	312.93	3,207.45	33,852.35	112,116.42	303,225.22	763,632.78	7,628,276.69
Charlottetown, PE <sup>3</sup>	204.44	2,126.55	22,075.37	72,612.12	205,669.42	357,857.00	3,578,570.00
Edmonton, AB <sup>4</sup>	291.70	2,811.81	34,535.61	115,134.06	325,582.21	823,235.57	7,441,161.07
Halifax, NS	191.85	1,998.63	21,958.10	68,114.50	183,691.97	426,900.08	4,269,029.80
Moncton, NB	167.98	1,737.25	18,681.35	61,139.35	173,055.05	310,179.90	2,957,570.00
Ottawa, ON	154.64	1,518.80	18,402.85	59,019.29	172,625.40	359,311.14	3,438,206.36
Regina, SK	216.41	1,982.01	23,615.45	67,191.92	169,590.54	386,440.64	3,297,267.92
St. John's, NL <sup>5</sup>	157.86	1,463.05	14,841.06	47,290.35	130,842.57	326,677.60	2,699,871.10
Toronto, ON <sup>3</sup>	159.19	1,570.40	20,402.98	65,087.92	178,719.03	307,068.57	3,024,011.69
Vancouver, BC	124.00	1,251.15	12,846.36	38,407.66	104,569.31	254,247.67	2,116,919.88
Winnipeg, MB	117.42	1,136.44	13,062.55	36,359.66	85,353.97	201,434.07	1,719,150.45
American Cities							
Boston, MA	556.28	5,905.71	42,986.76	132,342.45	347,057.75	852,846.86	7,255,889.88
Chicago, IL	241.50	2,183.75	15,209.98	45,004.07	120,945.75	290,679.20	2,265,024.74
Detroit, MI <sup>3</sup>	288.38	2,137.49	21,048.01	62,478.73	154,015.86	363,098.45	3,470,240.40
Houston, TX <sup>3</sup>	155.52	1,687.67	18,264.71	62,975.98	161,016.46	397,756.56	3,620,980.78
Miami, FL <sup>3</sup>	191.34	1,953.38	22,063.75	64,570.55	171,161.74	412,077.67	3,536,110.77
Nashville, TN	170.99	1,820.20	22,817.06	61,190.60	169,293.04	392,265.68	2,686,069.58
New York, NY <sup>3</sup>	406.32	3,970.19	43,353.96	128,777.36	255,946.96	616,582.94	6,163,882.70
Portland, OR <sup>3</sup>	169.33	1,472.53	16,700.47	48,773.85	122,708.03	294,858.93	2,811,647.98
San Francisco, CA <sup>3</sup>	482.21	4,659.18	53,298.97	147,192.83	314,693.78	746,185.17	7,386,325.36
Seattle, WA	175.73	1,491.00	14,386.46	51,007.71	143,712.90	366,666.34	3,372,915.80
<b>AVERAGE</b>	<b>228.45</b>	<b>2,243.65</b>	<b>23,632.89</b>	<b>72,172.83</b>	<b>186,150.64</b>	<b>429,333.84</b>	<b>3,935,830.40</b>

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, 2023

(in ¢/kWh)<sup>1</sup>

### Summary Table (including taxes)

	Residential Customers	Small-Power Customers	Medium-Power Customers			Large-Power Customers	
			500 kW	1,000 kW	2,500 kW <sup>2</sup>	5,000 kW <sup>2</sup>	50,000 kW <sup>3</sup>
Power demand		40 kW	500 kW	1,000 kW	2,500 kW <sup>2</sup>	5,000 kW <sup>2</sup>	50,000 kW <sup>3</sup>
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	8.98	12.76	15.52	10.25	8.70	6.38	6.04
Calgary, AB	31.29	32.07	33.85	28.03	25.92	24.96	24.93
Charlottetown, PE <sup>4</sup>	20.44	21.27	22.08	18.15	17.58	11.69	11.69
Edmonton, AB <sup>5</sup>	29.17	28.12	34.54	28.78	27.83	26.90	24.32
Halifax, NS	19.19	19.99	21.96	17.03	15.70	13.95	13.95
Moncton, NB	16.80	17.37	18.68	15.28	14.79	10.14	9.67
Ottawa, ON	15.46	15.19	18.40	14.75	14.75	11.74	11.24
Regina, SK	21.64	19.82	23.62	16.80	14.49	12.63	10.78
St. John's, NL <sup>6</sup>	15.79	14.63	14.84	11.82	11.18	10.68	8.82
Toronto, ON <sup>4</sup>	15.92	15.70	20.40	16.27	15.28	10.03	9.88
Vancouver, BC	12.40	12.51	12.85	9.60	8.94	8.31	6.92
Winnipeg, MB	11.74	11.36	13.06	9.09	7.30	6.58	5.62
American Cities							
Boston, MA	55.63	59.06	42.99	33.09	29.66	27.87	23.71
Chicago, IL	24.15	21.84	15.21	11.25	10.34	9.50	7.40
Detroit, MI <sup>4</sup>	28.84	21.37	21.05	15.62	13.16	11.87	11.34
Houston, TX <sup>4</sup>	15.55	16.88	18.26	15.74	13.76	13.00	11.83
Miami, FL <sup>4</sup>	19.13	19.53	22.06	16.14	14.63	13.47	11.56
Nashville, TN	17.10	18.20	22.82	15.30	14.47	12.82	8.78
New York, NY <sup>4</sup>	40.63	39.70	43.35	32.19	21.88	20.15	20.14
Portland, OR <sup>4</sup>	16.93	14.73	16.70	12.19	10.49	9.64	9.19
San Francisco, CA <sup>4</sup>	48.22	46.59	53.30	36.80	26.90	24.39	24.14
Seattle, WA	17.57	14.91	14.39	12.75	12.28	11.98	11.02
<b>AVERAGE</b>	<b>22.84</b>	<b>22.44</b>	<b>23.63</b>	<b>18.04</b>	<b>15.91</b>	<b>14.03</b>	<b>12.86</b>

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, 2023

(Hydro-Québec = 100)

### Summary Table (including taxes)

	Residential Customers	Small-Power Customers	Medium-Power Customers			Large-Power Customers	
			500 kW	1,000 kW	2,500 kW <sup>1</sup>	5,000 kW <sup>1</sup>	50,000 kW <sup>2</sup>
Power demand		40 kW	500 kW	1,000 kW	2,500 kW <sup>1</sup>	5,000 kW <sup>1</sup>	50,000 kW <sup>2</sup>
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	348	251	218	273	298	391	413
Charlottetown, PE <sup>3</sup>	228	167	142	177	202	183	194
Edmonton, AB <sup>4</sup>	325	220	223	281	320	421	402
Halifax, NS	214	157	141	166	180	219	231
Moncton, NB	187	136	120	149	170	159	160
Ottawa, ON	172	119	119	144	170	184	186
Regina, SK	241	155	152	164	167	198	178
St. John's, NL <sup>5</sup>	176	115	96	115	128	167	146
Toronto, ON <sup>3</sup>	177	123	131	159	175	157	164
Vancouver, BC	138	98	83	94	103	130	114
Winnipeg, MB	131	89	84	89	84	103	93
American Cities							
Boston, MA	619	463	277	323	341	437	392
Chicago, IL	269	171	98	110	119	149	122
Detroit, MI <sup>3</sup>	321	168	136	152	151	186	188
Houston, TX <sup>3</sup>	173	132	118	154	158	204	196
Miami, FL <sup>3</sup>	213	153	142	157	168	211	191
Nashville, TN	190	143	147	149	166	201	145
New York, NY <sup>3</sup>	452	311	279	314	251	316	333
Portland, OR <sup>3</sup>	188	115	108	119	120	151	152
San Francisco, CA <sup>3</sup>	537	365	343	359	309	382	399
Seattle, WA	196	117	93	124	141	188	182
<b>AVERAGE</b>	<b>254</b>	<b>176</b>	<b>152</b>	<b>176</b>	<b>183</b>	<b>220</b>	<b>213</b>

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 Customers**

Monthly Bills

Average Prices

Comparative Index

## RESIDENTIAL CUSTOMERS

### Monthly Bills on April 1, 2023

(in C\$)

Consumption	625 kWh	750 kWh	1,000 kWh	2,000 kWh	3,000 kWh
<b>Canadian Cities</b>					
Montréal, QC	53.73	61.87	78.14	171.49	271.90
Calgary, AB	197.21	230.82	298.03	566.89	835.74
Charlottetown, PE <sup>1</sup>	120.32	139.47	177.77	330.97	453.77
Edmonton, AB	183.49	214.94	277.81	529.34	780.87
Halifax, NS	121.38	141.83	182.71	346.25	509.79
Moncton, NB	100.51	115.70	146.07	267.57	389.07
Ottawa, ON	95.21	108.41	134.80	240.42	346.04
Regina, SK	123.08	141.70	178.94	327.89	476.84
St. John's, NL <sup>2</sup>	91.67	106.87	137.27	258.86	380.45
Toronto, ON <sup>1</sup>	100.16	113.03	138.76	241.70	344.63
Vancouver, BC	65.69	81.00	116.19	256.97	397.75
Winnipeg, MB	67.48	79.13	102.44	195.68	288.92
<b>American Cities</b>					
Boston, MA	352.71	420.59	556.28	1,099.11	1,641.95
Chicago, IL	150.26	176.37	228.63	437.67	646.72
Detroit, MI <sup>1</sup>	165.10	198.25	264.56	529.81	795.05
Houston, TX <sup>1</sup>	111.82	130.33	153.98	302.06	450.14
Miami, FL <sup>1</sup>	107.38	126.31	164.16	342.35	520.55
Nashville, TN	118.74	136.16	170.99	310.33	460.41
New York, NY <sup>1</sup>	242.12	286.06	373.94	725.45	1,076.96
Portland, OR <sup>1</sup>	110.55	129.38	167.04	317.67	481.38
San Francisco, CA <sup>1</sup>	280.68	352.10	481.80	1,053.10	1,624.40
Seattle, WA	109.88	131.82	175.73	351.36	526.98
<b>AVERAGE</b>	<b>139.51</b>	<b>164.64</b>	<b>213.91</b>	<b>418.31</b>	<b>622.74</b>

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

2) Newfoundland Power rates.

## RESIDENTIAL CUSTOMERS

### Average Prices on April 1, 2023

(in ¢/kWh)<sup>1</sup>

Consumption	625 kWh	750 kWh	1,000 kWh	2,000 kWh	3,000 kWh
<b>Canadian Cities</b>					
Montréal, QC	8.60	8.25	7.81	8.57	9.06
Calgary, AB	31.55	30.78	29.80	28.34	27.86
Charlottetown, PE <sup>2</sup>	19.25	18.60	17.78	16.55	15.13
Edmonton, AB	29.36	28.66	27.78	26.47	26.03
Halifax, NS	19.42	18.91	18.27	17.31	16.99
Moncton, NB	16.08	15.43	14.61	13.38	12.97
Ottawa, ON	15.23	14.45	13.48	12.02	11.53
Regina, SK	19.69	18.89	17.89	16.39	15.89
St. John's, NL <sup>3</sup>	14.67	14.25	13.73	12.94	12.68
Toronto, ON <sup>2</sup>	16.03	15.07	13.88	12.08	11.49
Vancouver, BC	10.51	10.80	11.62	12.85	13.26
Winnipeg, MB	10.80	10.55	10.24	9.78	9.63
<b>American Cities</b>					
Boston, MA	56.43	56.08	55.63	54.96	54.73
Chicago, IL	24.04	23.52	22.86	21.88	21.56
Detroit, MI <sup>2</sup>	26.42	26.43	26.46	26.49	26.50
Houston, TX <sup>2</sup>	17.89	17.38	15.40	15.10	15.00
Miami, FL <sup>2</sup>	17.18	16.84	16.42	17.12	17.35
Nashville, TN	19.00	18.15	17.10	15.52	15.35
New York, NY <sup>2</sup>	38.74	38.14	37.39	36.27	35.90
Portland, OR <sup>2</sup>	17.69	17.25	16.70	15.88	16.05
San Francisco, CA <sup>2</sup>	44.91	46.95	48.18	52.66	54.15
Seattle, WA	17.58	17.58	17.57	17.57	17.57
<b>AVERAGE</b>	<b>22.32</b>	<b>21.95</b>	<b>21.39</b>	<b>20.92</b>	<b>20.76</b>

1) In Canadian currency.

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

3) Newfoundland Power rates.

## RESIDENTIAL CUSTOMERS

### Comparative Index on April 1, 2023

(Hydro-Québec = 100)

Consumption	625 kWh	750 kWh	1,000 kWh	2,000 kWh	3,000 kWh
<b>Canadian Cities</b>					
Montréal, QC	100	100	100	100	100
Calgary, AB	367	373	381	331	307
Charlottetown, PE <sup>1</sup>	224	225	228	193	167
Edmonton, AB	342	347	356	309	287
Halifax, NS	226	229	234	202	187
Moncton, NB	187	187	187	156	143
Ottawa, ON	177	175	173	140	127
Regina, SK	229	229	229	191	175
St. John's, NL <sup>2</sup>	171	173	176	151	140
Toronto, ON <sup>1</sup>	186	183	178	141	127
Vancouver, BC	122	131	149	150	146
Winnipeg, MB	126	128	131	114	106
<b>American Cities</b>					
Boston, MA	656	680	712	641	604
Chicago, IL	280	285	293	255	238
Detroit, MI <sup>1</sup>	307	320	339	309	292
Houston, TX <sup>1</sup>	208	211	197	176	166
Miami, FL <sup>1</sup>	200	204	210	200	191
Nashville, TN	221	220	219	181	169
New York, NY <sup>1</sup>	451	462	479	423	396
Portland, OR <sup>1</sup>	206	209	214	185	177
San Francisco, CA <sup>1</sup>	522	569	617	614	597
Seattle, WA	204	213	225	205	194
<b>AVERAGE</b>	<b>260</b>	<b>266</b>	<b>274</b>	<b>244</b>	<b>229</b>

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

2) Newfoundland Power rates.

# 04

Detailed Results

**Small-Power Customers**

Monthly Bills

Average Prices

Comparative Index

## SMALL-POWER CUSTOMERS

### Monthly Bills on April 1, 2023

(in C\$)

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	95.84	232.83	1,109.55	2,030.18	3,005.65
Calgary, AB	243.47	555.94	3,054.71	4,823.11	7,225.11
Charlottetown, PE <sup>1</sup>	164.90	398.77	1,849.17	3,151.37	4,516.47
Edmonton, AB	222.92	554.67	2,677.91	4,826.86	7,070.48
Halifax, NS	138.42	327.89	1,737.94	2,989.78	4,344.85
Moncton, NB	135.45	318.45	1,510.65	2,632.25	3,769.65
Ottawa, ON	117.69	280.68	1,323.89	2,491.47	3,913.80
Regina, SK	153.80	341.50	1,542.78	2,955.12	3,867.60
St. John's, NL <sup>2</sup>	111.99	293.97	1,272.22	2,194.97	3,163.87
Toronto, ON <sup>1</sup>	136.59	303.12	1,368.86	2,639.74	4,206.78
Vancouver, BC	105.00	261.55	1,191.57	1,902.79	2,966.74
Winnipeg, MB	91.88	210.44	969.24	1,985.12	2,632.42

#### American Cities

Boston, MA	333.93	1,038.51	5,567.19	10,097.53	14,600.85
Chicago, IL	221.98	514.11	2,079.43	3,429.68	5,150.27
Detroit, MI <sup>1</sup>	158.90	411.31	1,925.67	2,682.84	4,765.08
Houston, TX <sup>1</sup>	111.87	402.20	1,562.51	2,760.79	3,885.29
Miami, FL <sup>1</sup>	136.19	334.78	1,565.55	2,842.57	3,853.44
Nashville, TN	197.15	424.41	1,701.12	3,991.33	4,869.55
New York, NY <sup>1</sup>	317.66	1,013.61	3,560.85	6,705.12	8,784.69
Portland, OR <sup>1</sup>	143.53	343.32	1,452.47	2,440.44	3,582.07
San Francisco, CA <sup>1</sup>	351.33	914.81	4,433.47	7,198.74	10,668.25
Seattle, WA	120.03	305.29	1,491.00	2,235.69	3,463.99
<b>AVERAGE</b>	<b>173.21</b>	<b>444.64</b>	<b>2,043.08</b>	<b>3,591.25</b>	<b>5,195.77</b>

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

2) Newfoundland Power rates.

## SMALL-POWER CUSTOMERS

### Average Prices on April 1, 2023

(in ¢/kWh)<sup>1</sup>

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%
<b>Canadian Cities</b>					
Montréal, QC	12.78	11.64	11.10	14.50	12.02
Calgary, AB	32.46	27.80	30.55	34.45	28.90
Charlottetown, PE <sup>2</sup>	21.99	19.94	18.49	22.51	18.07
Edmonton, AB	29.72	27.73	26.78	34.48	28.28
Halifax, NS	18.46	16.39	17.38	21.36	17.38
Moncton, NB	18.06	15.92	15.11	18.80	15.08
Ottawa, ON	15.69	14.03	13.24	17.80	15.66
Regina, SK	20.51	17.08	15.43	21.11	15.47
St. John's, NL <sup>3</sup>	14.93	14.70	12.72	15.68	12.66
Toronto, ON <sup>2</sup>	18.21	15.16	13.69	18.86	16.83
Vancouver, BC	14.00	13.08	11.92	13.59	11.87
Winnipeg, MB	12.25	10.52	9.69	14.18	10.53
<b>American Cities</b>					
Boston, MA	44.52	51.93	55.67	72.13	58.40
Chicago, IL	29.60	25.71	20.79	24.50	20.60
Detroit, MI <sup>2</sup>	21.19	20.57	19.26	19.16	19.06
Houston, TX <sup>2</sup>	14.92	20.11	15.63	19.72	15.54
Miami, FL <sup>2</sup>	18.16	16.74	15.66	20.30	15.41
Nashville, TN	26.29	21.22	17.01	28.51	19.48
New York, NY <sup>2</sup>	42.35	50.68	35.61	47.89	35.14
Portland, OR <sup>2</sup>	19.14	17.17	14.52	17.43	14.33
San Francisco, CA <sup>2</sup>	46.84	45.74	44.33	51.42	42.67
Seattle, WA	16.00	15.26	14.91	15.97	13.86
<b>AVERAGE</b>	<b>23.09</b>	<b>22.23</b>	<b>20.43</b>	<b>25.65</b>	<b>20.78</b>

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 CUSTOMERS

### Comparative Index on April 1, 2023

(Hydro-Québec = 100)

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%
<b>Canadian Cities</b>					
Montréal, QC	100	100	100	100	100
Calgary, AB	254	239	275	238	240
Charlottetown, PE <sup>1</sup>	172	171	167	155	150
Edmonton, AB	233	238	241	238	235
Halifax, NS	144	141	157	147	145
Moncton, NB	141	137	136	130	125
Ottawa, ON	123	121	119	123	130
Regina, SK	160	147	139	146	129
St. John's, NL <sup>2</sup>	117	126	115	108	105
Toronto, ON <sup>1</sup>	143	130	123	130	140
Vancouver, BC	110	112	107	94	99
Winnipeg, MB	96	90	87	98	88
<b>American Cities</b>					
Boston, MA	348	446	502	497	486
Chicago, IL	232	221	187	169	171
Detroit, MI <sup>1</sup>	166	177	174	132	159
Houston, TX <sup>1</sup>	117	173	141	136	129
Miami, FL <sup>1</sup>	142	144	141	140	128
Nashville, TN	206	182	153	197	162
New York, NY <sup>1</sup>	331	435	321	330	292
Portland, OR <sup>1</sup>	150	147	131	120	119
San Francisco, CA <sup>1</sup>	367	393	400	355	355
Seattle, WA	125	131	134	110	115
<b>AVERAGE</b>	<b>181</b>	<b>191</b>	<b>184</b>	<b>177</b>	<b>173</b>

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

2) Newfoundland Power rates.

# 05

## Detailed Results

### **Medium-Power Customers**

Monthly Bills

Average Prices

Comparative Index

## MEDIUM-POWER CUSTOMERS

### Monthly Bills on April 1, 2023

(in C\$)

Power demand	500 kW	500 kW	1,000 kW	1,000 kW	2,500 kW <sup>1</sup>
Consumption	100,000 kWh	200,000 kWh	200,000 kWh	400,000 kWh	1,170,000 kWh
Load factor	28%	56%	28%	56%	65%
<b>Canadian Cities</b>					
Montréal, QC	13,498.00	19,203.50	26,996.00	35,672.90	88,573.23
Calgary, AB	32,240.33	53,768.27	63,721.66	106,777.54	288,785.92
Charlottetown, PE <sup>2</sup>	19,195.97	31,605.97	38,320.97	63,140.97	178,842.97
Edmonton, AB <sup>3</sup>	32,891.06	55,856.02	63,721.57	109,651.48	310,078.30
Halifax, NS	19,094.00	29,615.00	38,188.00	59,230.00	159,732.15
Moncton, NB	16,244.65	26,584.65	32,484.65	53,164.65	150,482.65
Ottawa, ON	16,285.70	26,214.85	32,371.16	52,229.46	152,765.84
Regina, SK	18,549.00	25,771.00	37,326.10	51,770.10	129,917.75
St. John's, NL <sup>4</sup>	12,905.27	21,248.22	24,593.74	41,122.04	113,776.15
Toronto, ON <sup>2</sup>	18,055.74	29,121.83	35,689.06	57,599.93	158,158.43
Vancouver, BC	12,234.62	18,293.42	24,461.12	36,578.72	99,589.82
Winnipeg, MB	11,140.77	15,632.77	22,026.37	31,010.37	76,447.80
<b>American Cities</b>					
Boston, MA	40,546.90	62,563.83	80,878.80	124,912.66	327,681.13
Chicago, IL	14,259.92	20,789.80	28,341.71	41,401.49	110,815.36
Detroit, MI <sup>2</sup>	18,962.17	28,272.86	37,891.63	56,287.14	138,753.02
Houston, TX <sup>2</sup>	16,923.38	27,146.06	37,832.33	58,277.68	148,830.12
Miami, FL <sup>2</sup>	17,636.39	26,057.51	35,154.53	51,996.78	138,183.82
Nashville, TN	21,324.36	28,739.93	42,356.34	57,187.48	158,217.79
New York, NY <sup>2</sup>	38,883.99	57,789.12	77,689.68	115,499.95	229,557.91
Portland, OR <sup>2</sup>	16,470.57	23,804.51	31,663.78	48,106.65	120,954.16
San Francisco, CA <sup>2</sup>	50,722.53	70,500.19	101,978.28	140,030.08	299,259.17
Seattle, WA	14,386.46	25,552.81	28,802.70	51,007.71	143,712.90
<b>AVERAGE</b>	<b>21,475.08</b>	<b>32,915.10</b>	<b>42,840.46</b>	<b>65,575.26</b>	<b>169,232.56</b>

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 CUSTOMERS

### Average Prices on April 1, 2023

(in ¢/kWh)<sup>1</sup>

Power demand	500 kW	500 kW	1,000 kW	1,000 kW	2,500 kW <sup>2</sup>
Consumption	100,000 kWh	200,000 kWh	200,000 kWh	400,000 kWh	1,170,000 kWh
Load factor	28%	56%	28%	56%	65%
<b>Canadian Cities</b>					
Montréal, QC	13.50	9.60	13.50	8.92	7.57
Calgary, AB	32.24	26.88	31.86	26.69	24.68
Charlottetown, PE <sup>3</sup>	19.20	15.80	19.16	15.79	15.29
Edmonton, AB <sup>4</sup>	32.89	27.93	31.86	27.41	26.50
Halifax, NS	19.09	14.81	19.09	14.81	13.65
Moncton, NB	16.24	13.29	16.24	13.29	12.86
Ottawa, ON	16.29	13.11	16.19	13.06	13.06
Regina, SK	18.55	12.89	18.66	12.94	11.10
St. John's, NL <sup>5</sup>	12.91	10.62	12.30	10.28	9.72
Toronto, ON <sup>3</sup>	18.06	14.56	17.84	14.40	13.52
Vancouver, BC	12.23	9.15	12.23	9.14	8.51
Winnipeg, MB	11.14	7.82	11.01	7.75	6.53
<b>American Cities</b>					
Boston, MA	40.55	31.28	40.44	31.23	28.01
Chicago, IL	14.26	10.39	14.17	10.35	9.47
Detroit, MI <sup>3</sup>	18.96	14.14	18.95	14.07	11.86
Houston, TX <sup>3</sup>	16.92	13.57	18.92	14.57	12.72
Miami, FL <sup>3</sup>	17.64	13.03	17.58	13.00	11.81
Nashville, TN	21.32	14.37	21.18	14.30	13.52
New York, NY <sup>3</sup>	38.88	28.89	38.84	28.87	19.62
Portland, OR <sup>3</sup>	16.47	11.90	15.83	12.03	10.34
San Francisco, CA <sup>3</sup>	50.72	35.25	50.99	35.01	25.58
Seattle, WA	14.39	12.78	14.40	12.75	12.28
<b>AVERAGE</b>	<b>21.48</b>	<b>16.46</b>	<b>21.42</b>	<b>16.39</b>	<b>14.46</b>

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 CUSTOMERS

### Comparative Index on April 1, 2023

(Hydro-Québec = 100)

Power demand	500 kW	500 kW	1,000 kW	1,000 kW	2,500 kW <sup>1</sup>
Consumption	100,000 kWh	200,000 kWh	200,000 kWh	400,000 kWh	1,170,000 kWh
Load factor	28%	56%	28%	56%	65%
<b>Canadian Cities</b>					
Montréal, QC	100	100	100	100	100
Calgary, AB	239	280	236	299	326
Charlottetown, PE <sup>2</sup>	142	165	142	177	202
Edmonton, AB <sup>3</sup>	244	291	236	307	350
Halifax, NS	141	154	141	166	180
Moncton, NB	120	138	120	149	170
Ottawa, ON	121	137	120	146	172
Regina, SK	137	134	138	145	147
St. John's, NL <sup>4</sup>	96	111	91	115	128
Toronto, ON <sup>2</sup>	134	152	132	161	179
Vancouver, BC	91	95	91	103	112
Winnipeg, MB	83	81	82	87	86
<b>American Cities</b>					
Boston, MA	300	326	300	350	370
Chicago, IL	106	108	105	116	125
Detroit, MI <sup>2</sup>	140	147	140	158	157
Houston, TX <sup>2</sup>	125	141	140	163	168
Miami, FL <sup>2</sup>	131	136	130	146	156
Nashville, TN	158	150	157	160	179
New York, NY <sup>2</sup>	288	301	288	324	259
Portland, OR <sup>2</sup>	122	124	117	135	137
San Francisco, CA <sup>2</sup>	376	367	378	393	338
Seattle, WA	107	133	107	143	162
<b>AVERAGE</b>	<b>159</b>	<b>171</b>	<b>159</b>	<b>184</b>	<b>191</b>

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 Customers**

Monthly Bills

Average Prices

Comparative Index

## LARGE-POWER CUSTOMERS

### Monthly Bills on April 1, 2023

(in C\$)

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 <sup>1</sup>	25 kV	25 kV	120 kV	120 kV	120 kV	120 kV
Load factor	65%	85%	80%	81%	65%	85%

#### Canadian Cities

Montréal, QC	144,677.65	169,899.25	309,049.70	935,556.30	1,356,086.50	1,608,302.50
Calgary, AB	572,819.71	727,269.31	1,376,458.90	4,179,163.35	5,720,529.35	7,265,025.42
Charlottetown, PE <sup>2</sup>	255,020.00	311,180.00	594,280.00	1,801,560.00	2,550,200.00	3,111,800.00
Edmonton, AB <sup>3</sup>	617,091.23	784,033.88	1,349,662.96	4,083,453.09	5,586,728.15	7,086,820.07
Halifax, NS	299,476.66	371,217.46	706,564.53	2,143,619.78	2,994,791.83	3,712,199.83
Moncton, NB	227,335.25	269,721.65	493,480.00	1,494,360.00	2,154,200.00	2,571,800.00
Ottawa, ON	261,976.72	317,974.46	592,718.48	1,766,358.23	2,482,683.10	3,042,660.49
Regina, SK	247,802.88	292,824.48	477,397.99	1,429,858.04	2,028,048.10	2,461,848.10
St. John's, NL <sup>4</sup>	224,565.60	284,067.48	532,289.08	1,358,908.80	1,921,546.00	2,347,714.00
Toronto, ON <sup>2</sup>	254,084.47	271,742.09	530,064.51	1,586,904.37	2,499,540.30	2,676,116.54
Vancouver, BC	199,171.63	242,140.64	384,882.58	1,166,880.94	1,649,378.57	2,016,114.17
Winnipeg, MB	150,038.85	180,415.65	294,392.96	892,224.64	1,268,615.52	1,539,767.52

#### American Cities

Boston, MA	654,865.09	805,395.59	1,299,857.57	3,946,436.44	5,420,491.80	6,856,234.88
Chicago, IL	220,635.43	265,328.70	389,042.25	1,175,140.16	1,597,795.01	2,044,727.72
Detroit, MI <sup>2</sup>	276,837.62	327,115.72	601,022.20	1,818,250.47	2,630,721.10	3,126,342.70
Houston, TX <sup>2</sup>	294,355.85	367,612.77	634,093.59	1,923,796.55	2,620,062.30	3,346,720.10
Miami, FL <sup>2</sup>	276,025.13	333,541.92	555,156.93	1,676,795.20	2,373,196.17	2,893,894.91
Nashville, TN	312,224.51	366,603.44	461,350.78	1,352,159.24	2,030,708.17	2,510,345.40
New York, NY <sup>2</sup>	458,921.83	553,011.14	1,058,783.63	3,207,326.01	4,587,472.41	5,528,365.44
Portland, OR <sup>2</sup>	236,708.38	290,630.95	530,810.14	1,603,430.87	2,251,988.62	2,771,249.41
San Francisco, CA <sup>2</sup>	589,740.05	709,477.74	1,351,094.44	4,077,211.46	5,825,470.69	7,022,847.58
Seattle, WA	287,149.57	366,666.34	640,762.71	1,940,997.66	2,645,783.32	3,372,915.80
<b>AVERAGE</b>	<b>320,978.37</b>	<b>391,266.85</b>	<b>689,237.09</b>	<b>2,070,926.89</b>	<b>2,918,001.68</b>	<b>3,586,991.48</b>

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 CUSTOMERS

### Average Prices on April 1, 2023

(in ¢/kWh)<sup>1</sup>

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 <sup>2</sup>	25 kV	25 kV	120 kV	120 kV	120 kV	120 kV
Load factor	65%	85%	80%	81%	65%	85%

#### Canadian Cities

Montréal, QC	6.18	5.55	5.37	5.34	5.80	5.26
Calgary, AB	24.48	23.77	23.90	23.85	24.45	23.74
Charlottetown, PE <sup>3</sup>	10.90	10.17	10.32	10.28	10.90	10.17
Edmonton, AB <sup>4</sup>	26.37	25.62	23.43	23.31	23.87	23.16
Halifax, NS	12.80	12.13	12.27	12.24	12.80	12.13
Moncton, NB	9.72	8.81	8.57	8.53	9.21	8.40
Ottawa, ON	11.20	10.39	10.29	10.08	10.61	9.94
Regina, SK	10.59	9.57	8.29	8.16	8.67	8.05
St. John's, NL <sup>5</sup>	9.60	9.28	9.24	7.76	8.21	7.67
Toronto, ON <sup>3</sup>	10.86	8.88	9.20	9.06	10.68	8.75
Vancouver, BC	8.51	7.91	6.68	6.66	7.05	6.59
Winnipeg, MB	6.41	5.90	5.11	5.09	5.42	5.03

#### American Cities

Boston, MA	27.99	26.32	22.57	22.53	23.16	22.41
Chicago, IL	9.43	8.67	6.75	6.71	6.83	6.68
Detroit, MI <sup>3</sup>	11.83	10.69	10.43	10.38	11.24	10.22
Houston, TX <sup>3</sup>	12.58	12.01	11.01	10.98	11.20	10.94
Miami, FL <sup>3</sup>	11.80	10.90	9.64	9.57	10.14	9.46
Nashville, TN	13.34	11.98	8.01	7.72	8.68	8.20
New York, NY <sup>3</sup>	19.61	18.07	18.38	18.31	19.60	18.07
Portland, OR <sup>3</sup>	10.12	9.50	9.22	9.15	9.62	9.06
San Francisco, CA <sup>3</sup>	25.20	23.19	23.46	23.27	24.90	22.95
Seattle, WA	12.27	11.98	11.12	11.08	11.31	11.02
<b>AVERAGE</b>	<b>13.72</b>	<b>12.79</b>	<b>11.97</b>	<b>11.82</b>	<b>12.47</b>	<b>11.72</b>

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 CUSTOMERS

### Comparative Index on April 1, 2023

(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 <sup>1</sup>	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	396	428	445	447	422	452
Charlottetown, PE <sup>2</sup>	176	183	192	193	188	193
Edmonton, AB <sup>3</sup>	427	461	437	436	412	441
Halifax, NS	207	218	229	229	221	231
Moncton, NB	157	159	160	160	159	160
Ottawa, ON	181	187	192	189	183	189
Regina, SK	171	172	154	153	150	153
St. John's, NL <sup>4</sup>	155	167	172	145	142	146
Toronto, ON <sup>2</sup>	176	160	172	170	184	166
Vancouver, BC	138	143	125	125	122	125
Winnipeg, MB	104	106	95	95	94	96

#### American Cities

Boston, MA	453	474	421	422	400	426
Chicago, IL	153	156	126	126	118	127
Detroit, MI <sup>2</sup>	191	193	194	194	194	194
Houston, TX <sup>2</sup>	203	216	205	206	193	208
Miami, FL <sup>2</sup>	191	196	180	179	175	180
Nashville, TN	216	216	149	145	150	156
New York, NY <sup>2</sup>	317	325	343	343	338	344
Portland, OR <sup>2</sup>	164	171	172	171	166	172
San Francisco, CA <sup>2</sup>	408	418	437	436	430	437
Seattle, WA	198	216	207	207	195	210
AVERAGE	222	230	223	221	215	223

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.

# A

## Appendix

### **Rate Adjustments**

Across-the-Board Adjustments

Adjustments by  
Customer Category

## RATE ADJUSTMENTS

### Across-the-Board Adjustments

	Before April 2022		Between April 1, 2022 and April 1, 2023		Comments
	Year	%	Date	%	
<b>Canadian Utilities</b>					
Hydro-Québec, QC	2022	2.60	April 1, 2023	3.00	Applicable to residential customers
ENMAX, AB	2022	-1.97	January 1, 2023	7.53	Average of distribution (9.26%) and transmission (5.80%) components
Maritime Electric, PE	2022	2.00	March 1, 2023	—	
EPCOR, AB	2022	—	—	—	
Nova Scotia Power, NS	2022	n.a.	February 2, 2023	6.90	
NB Power, NB	2022	2.00	April 1, 2023	5.61	Rate increase of 5.70% and variance account credit of -0.09%
Hydro Ottawa, ON	2022	n.a.	May 1, 2022	n.a.	
			November 1, 2022	n.a.	
			January 1, 2023	n.a.	
SaskPower, SK	2022	n.a.	September 1, 2022	4.00	
			April 1, 2023	4.00	
Newfoundland Power, NL <sup>1</sup>	2022	-1.10	July 1, 2022	-0.30	
Newfoundland and Labrador Hydro, NL <sup>1</sup>	2022	12.70	July 1, 2022	n.a.	
			January 1, 2023	n.a.	
Toronto Hydro, ON	2022	n.a.	January 1, 2023	n.a.	
BC Hydro, BC	2022	0.62	April 1, 2023	0.97	
Manitoba Hydro, MB	2022	3.60	—	—	

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, 2022, and April 1, 2023)

### Adjustments by Customer Category

	Date	Residential Customers %	General-Rate Customers %	Industrial Customers %	Average %
<b>Canadian Utilities</b>					
Hydro-Québec, QC	April 1, 2023	3.00	6.50 <sup>1</sup> 6.50 <sup>2</sup> 6.50 <sup>3</sup>	4.20	4.75
ENMAX, AB	January 1, 2023	8.92 <sup>4</sup>	0.38 <sup>1</sup> 10.77 <sup>2</sup> 8.79 <sup>3</sup>	n.a.	7.53 <sup>4</sup>
Maritime Electric, PE	—	—	—	—	—
EPCOR, AB	—	—	—	—	—
Nova Scotia Power, NS	February 2, 2023	6.90	8.40 <sup>1</sup> 7.10 <sup>2</sup> 8.30 <sup>3</sup>	8.10 <sup>5</sup> 7.90 <sup>6</sup>	6.90
NB Power, NB	April 1, 2023	5.61	5.61	5.61	5.61
Hydro Ottawa, ON	May 1, 2022	-0.12	-0.04	—	n.a.
	November 1, 2022	-0.78	-1.07	—	n.a.
	January 1, 2023	4.88	5.01	0.66	n.a.
SaskPower, SK	September 1, 2022	n.a.	n.a.	n.a.	4.00
	April 1, 2023	n.a.	n.a.	n.a.	4.00
Newfoundland Power, NL <sup>7</sup>	July 1, 2022	-0.20	-0.30	-0.40	-0.30
Newfoundland and Labrador Hydro, NL <sup>7</sup>	July 1, 2022	—	—	0.01	—
	January 1, 2023	—	—	15.40	—
Toronto Hydro, ON	January 1, 2023	n.a.	n.a.	n.a.	n.a.
BC Hydro, BC	April 1, 2023	0.97	0.97	0.97	0.97
Manitoba Hydro, MB	—	—	—	—	—

Data concerning American utilities not available.

n.a.: Not available.

1) Small-power customers.

2) Medium-power customers.

3) Large-power customers.

4) Average of distribution and transmission components.

5) Small industrial companies.

6) Midsize industrial companies.

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 2023 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-rate customers: All levels
Hydro Ottawa, ON	All levels
Nashville Electric Service, TN	All levels
Newfoundland Power, NL	Residential customers General-rate customers: 14–10,000 kW
Pacific Gas and Electric, CA	All levels
PacifiCorp, OR	1,000–50,000 kW
Seattle City Light, WA	Residential customers General-rate customers: 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 Rate Rider
CenterPoint Energy, TX	Accumulated Deferred Federal Income Tax Credit Distribution Cost Recovery Factor Energy Efficiency Cost Recovery Factor Nuclear Decommissioning Charge Rate Case Expenses Surcharge Transition Charges Transmission Cost Recovery Factor Unprotected Excess Deferred Income Tax
Commonwealth Edison, IL	Carbon-Free Resource Adjustment Energy Efficiency Pricing & Performance Energy Transition Assistance Charge Environmental Cost Recovery Adjustment Excess Deferred Income Tax Adjustment Franchise Cost Additions Renewable Energy Adjustment Renewable Energy Distributed Generation Rebate Retail Customer Assessments Zero Emission Adjustment
Consolidated Edison, NY	Adjustment Factors – MSC Billing and Payment Processing Charge Clean Energy Standard Delivery Surcharge Clean Energy Standard Supply Surcharge Delivery Revenue Surcharge Dynamic Load Management Surcharge Market Supply Charge Merchant Function Charge Monthly Adjustment Clause Revenue Decoupling Mechanism Adjustment System Benefits Charge Tax Sur-Credit Value of Distributed Energy Resources Cost Recovery
DTE Electric, MI	Energy Waste Reduction Surcharge Low Income Energy Assistance Fund Factor Nuclear Surcharge Power Supply Cost Recovery Clause Renewable Energy Plan Surcharge
ENMAX, AB	Balancing Pool Allocation Rider Local Access Fee Regulated Rate Option Rider Transmission Access Charge Deferral Account Rider Adjustment

EPCOR, AB	Balancing Pool Allocation Rider DAS True-Up Rider Deferral Rate Local Access Fee SAS True-Up Rider Transmission Charge Deferral Account True-Up Rider
Eversource Energy, MA	Advanced Metering Infrastructure Factor Attorney General Consultant Expense Basic Service Cost Adjustment Electronic Payment Recovery Factor Energy Efficiency Charge Farm Discount Grid Modernization Factor Long Term Renewable Contract Adjustment Low Income Discount Miscellaneous Charges Net Metering Recovery Surcharge Pension Adjustment Mechanism Performance Based Revenue Adjustment Renewable Energy Charge Residential Assistance Adjustment Clause Revenue Decoupling Adjustment Mechanism Solar Expansion Cost Recovery Mechanism Solar Massachusetts Renewable Target Solar Program Cost Adjustment Storm Cost Recovery Adjustment Storm Reserve Adjustment Mechanism Transition Cost Adjustment Transmission Service Cost Adjustment Vegetation Management 2017 Tax Act Credit
Florida Power and Light, FL	Capacity Payment Recovery Clause Consolidated Interim Storm Restoration Recovery Surcharge Energy Conservation Cost Recovery Clause Environmental Cost Recovery Clause Fuel Cost and Purchase Power Recovery Clause Storm Protection Charge Transition Rider Credit
Hydro Ottawa, ON	Capacity Based Recovery Charge Disposition of Deferral/Variance Accounts Disposition of Global Adjustment Account (2023) Lost Revenue Adjustment Mechanism Recovery Rate Rider for Disposition of Class B Rural or Remote Electricity Rate Protection Charge Smart Metering Entity Charge
Maritime Electric, PE	Energy Cost Adjustment Mechanism
Nashville Electric Service, TN	COVID-19 Relief Credit Small Manufacturing Credit Tax Exemption Status

Newfoundland and Labrador Hydro, NL	CDM Cost Recovery Adjustment Rider Rate Stabilization Plan Adjustment Rider
Nova Scotia Power, NS	Fuel Adjustment Mechanism (AA/BA)
Pacific Gas and Electric, CA	Bundled Power Charge Indifference Adjustment California Climate Credit Competition Transition Charges Energy Cost Recovery Amount New System Generation Charge Nuclear Decommissioning Public Purpose Programs Recovery Bond Charge/Credit Reliability Services Transmission Rate Adjustments Wildfire Fund Charge Wildfire Hardening Charge
PacifiCorp, OR	Adjustment Associated with the Pacific Northwest Electric Power Planning and Conservation Act Base Supply Service Community Solar Start-Up Cost Recovery Adjustment Deer Creek Mine Closure Deferred Amounts Adjustment Deferred Accounting Adjustment Independent Evaluator Cost Adjustment Intervenor Funding Adjustment Net Power Costs, Cost-Based Supply Service Oregon Solar Incentive Program Deferral Power Cost Adjustment Mechanism Property Sales Balancing Account Adjustment Public Purpose Charge Rate Mitigation Adjustment Renewable Adjustment Clause Renewable Resource Deferral Adjustment Replaced Meter Deferred Amounts Adjustment System Benefits Charge TAM Adjustment for Other Revenues Wildfire Mitigation and Vegetation Management Cost Recovery Adjustment Wildfire Protection Plan Cost Recovery Adjustment
Toronto Hydro, ON	Capacity Based Recovery (CBR) Disposition of Accounts Receivable Credits Disposition of Derecognition Variance Account Disposition of Expansion Deposits Disposition of Stranded Meter Assets Disposition of Wireless Pole Attachment Revenue Recovery of Monthly Billing Transition Costs Rural or Remote Electricity Rate Protection Charge Smart Metering Entity Charge

# C

## Appendix

### **Applicable Taxes**

Residential Customers

General-Rate Customers

Industrial Customers

## TAXES APPLICABLE TO RESIDENTIAL CUSTOMERS

On April 1, 2023

Tax	% (or other)	Applicable
<b>Canadian Cities</b>		
Montréal, QC	Goods and services tax	5
	Québec sales tax	9.975
Calgary, AB	Goods and services tax	5
Charlottetown, PE	Harmonized sales tax	15
Edmonton, AB	Goods and services tax	5
Halifax, NS	Harmonized sales tax	5
Moncton, NB	Harmonized sales tax	15
Ottawa, ON	Harmonized sales tax	13
Regina, SK	Municipal tax	10
	Carbon levy	¢/kWh
	Goods and services tax	5
St. John's, NL	Harmonized sales tax	15
Toronto, ON	Harmonized sales tax	13
Vancouver, BC	Regional transit levy	\$1.90
	Goods and services tax	5
Winnipeg, MB	Provincial sales tax	1.4
		7
	Municipal tax	0.5
		2.5
	Goods and services tax	5
<b>American Cities</b>		
Boston, MA	None	
Chicago, IL	State tax	¢/kWh
	Municipal tax	¢/kWh
	State tax on electricity distribution	\$/kWh
Detroit, MI	State sales tax	4
	City of Detroit utility users' tax	5
Houston, TX	Municipal tax	1
Miami, FL	Gross receipts tax/ Regulatory assessment fee	2.6381
	Franchise fee	5.473
	Municipal tax	10
Nashville, TN	None	
New York, NY	Commodity gross receipts tax	2.4066
	Delivery gross receipts tax	4.9097
	Sales tax	4.5
Portland, OR	Multnomah County business income tax	-0.02
	City of Portland franchise tax	1.5
San Francisco, CA	Energy Commission tax	¢/kWh
Seattle, WA	State utility tax	3.8734
	City of Seattle occupation tax	6

## TAXES APPLICABLE TO GENERAL-RATE CUSTOMERS

On April 1, 2023

Tax	% (or other)	Applicable
<b>Canadian Cities</b>		
Montréal, QC	Goods and services tax	5
	Québec sales tax	9.975
Calgary, AB	Goods and services tax	5
Charlottetown, PE	Harmonized sales tax	15
Edmonton, AB	Goods and services tax	5
Halifax, NS	Harmonized sales tax	15
Moncton, NB	Harmonized sales tax	15
Ottawa, ON	Harmonized sales tax	13
Regina, SK	Municipal tax	10
	Provincial sales tax	6
	Carbon levy	¢/kWh
	Goods and services tax	5
St. John's, NL	Harmonized sales tax	15
Toronto, ON	Harmonized sales tax	13
Vancouver, BC	Goods and services tax	5
Winnipeg, MB	Provincial sales tax	1.4
		(mining and manufacturing companies)
		7
	Municipal tax	1
		To base amount of bill (industries other than mining and manufacturing)
		5
	Goods and services tax	5
		To base amount of bill + municipal tax (tax refundable)
<b>American Cities</b>		
Boston, MA	State sales tax	6.25
Chicago, IL	State tax	¢/kWh
	Municipal tax	¢/kWh
	State tax on electricity distribution	\$/kWh
Detroit, MI	State sales tax	6
	City of Detroit utility users' tax	5
Houston, TX	State tax	6.25
	Municipal tax	1
	Transit tax	1

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

## TAXES APPLICABLE TO GENERAL-RATE CUSTOMERS (cont'd)

On April 1, 2023

	Tax	% (or other)	Applicable
Miami, FL	Gross receipts tax/ Regulatory assessment fee	2.6381	To base amount of bill
	Franchise fee	5.473	To base amount of bill + gross receipts tax
	Municipal tax	10	To a portion of base amount of bill
	State sales tax	6.95	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
New York, NY	Commodity gross receipts tax	2.4066	To commodity component
	Delivery gross receipts tax	2.4073	To other components
	Sales tax	8.875	To base amount of bill + gross receipts tax
Portland, OR	Multnomah County business income tax	-0.02	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	¢/kWh	To energy consumption
	San Francisco utility users' tax	5	To base amount of bill
Seattle, WA	State utility tax	3.8734	Tax included in rate schedule prices
	City of Seattle occupation tax	6	Tax included in rate schedule prices

## TAXES APPLICABLE TO INDUSTRIAL CUSTOMERS

On April 1, 2023

Tax	% (or other)	Applicable
<b>Canadian Cities</b>		
Montréal, QC	Goods and services tax	5
	Québec sales tax	9.975
Calgary, AB	Goods and services tax	5
Charlottetown, PE	Harmonized sales tax	15
Edmonton, AB	Goods and services tax	5
Halifax, NS	Harmonized sales tax	15
Moncton, NB	Harmonized sales tax	15
Ottawa, ON	Harmonized sales tax	13
Regina, SK	Municipal tax	10
	Provincial sales tax	6
	Carbon levy	¢/kWh
	Goods and services tax	5
St. John's, NL	Harmonized sales tax	15
Toronto, ON	Harmonized sales tax	13
Vancouver, BC	Goods and services tax	5
Winnipeg, MB	Provincial sales tax	1.4
		(mining and manufacturing companies)
		7
	Municipal tax	1
		To base amount of bill (industries other than mining and manufacturing)
		5
	Goods and services tax	5
		To base amount of bill + municipal tax (tax refundable)
<b>American Cities</b>		
Boston, MA	State sales tax	6.25
Chicago, IL	State tax	¢/kWh
	Municipal tax	¢/kWh
	State tax on electricity distribution	\$/kWh
Detroit, MI	State sales tax	6
	City of Detroit utility users' tax	5
Houston, TX	State tax	6.25
	Municipal tax	1
	Transit tax	1

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

## TAXES APPLICABLE TO INDUSTRIAL CUSTOMERS (cont'd)

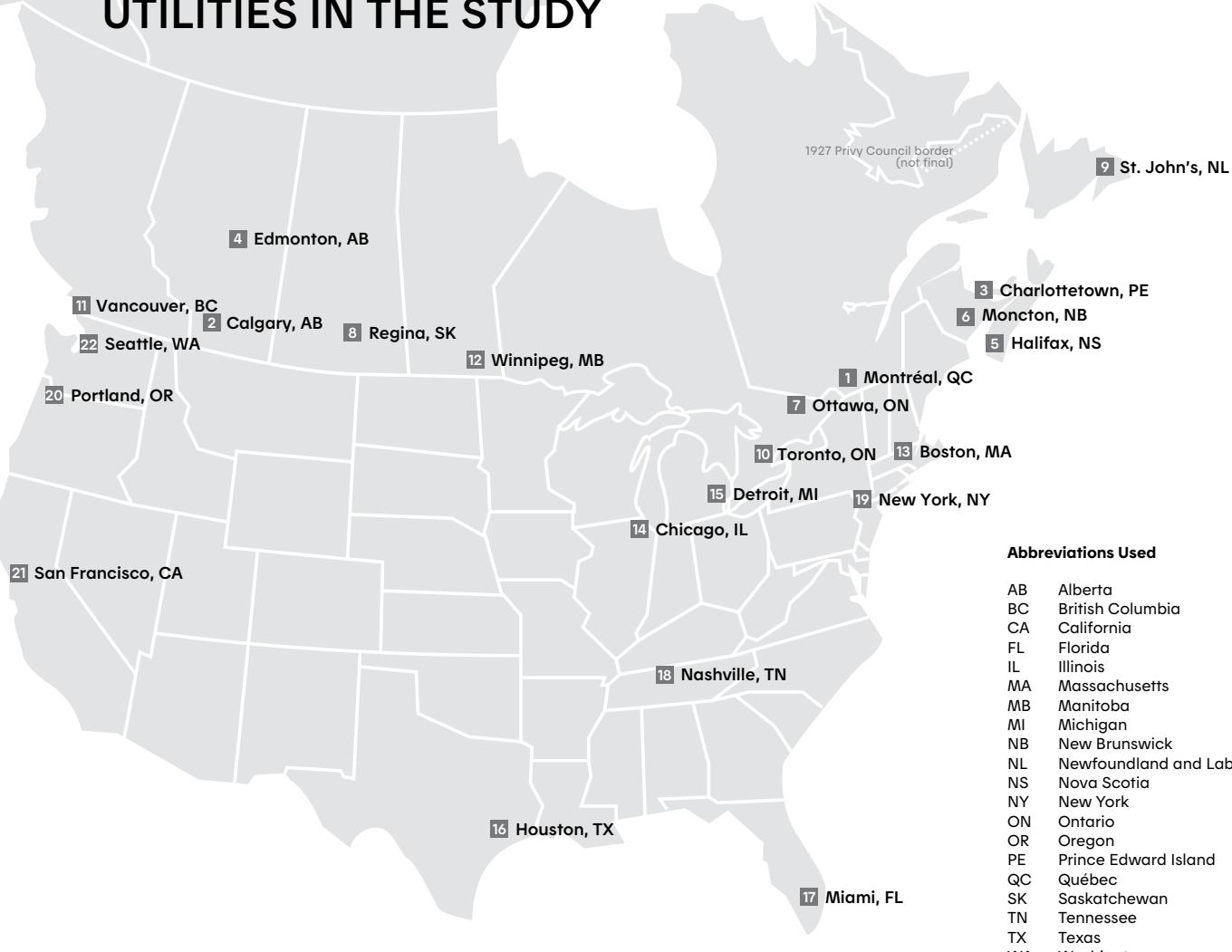
On April 1, 2023

	Tax	% (or other)	Applicable
Miami, FL	Gross receipts tax/ Regulatory assessment fee	2.6381	To base amount of bill
	Franchise fee	5.473	To base amount of bill + gross receipts tax
	Municipal tax	10	To a portion of base amount of bill
	State sales tax	6.95	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
New York, NY	Commodity gross receipts tax	2.4066	To commodity component
	Delivery gross receipts tax	2.4073	To other components
	Sales tax	8.875	To base amount of bill + gross receipts tax
Portland, OR	Multnomah County business income tax	-0.02	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	¢/kWh	To energy consumption
	San Francisco utility users' tax	5	To base amount of bill
Seattle, WA	State utility tax	3.8734	Tax included in rate schedule prices
	City of 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)
- 10- Newfoundland Power  
(all other customer categories)
- 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- PacifiCorp
- 21- Pacific Gas and Electric
- 22- Seattle City Light

# CANADIAN UTILITIES

## HYDRO-QUÉBEC

Montréal, Québec

Hydro-Québec, a government-owned company, is one of the largest electric utilities in North America. In accordance with the *Act respecting the Régie de l'énergie* [Québec energy board], it provides a maximum of 165 TWh of heritage pool electricity per year to the Québec market and also purchases power on the markets to meet its customers' needs. The average supply cost of heritage pool electricity, set at 2.79¢/kWh in 1998, has been indexed annually on January 1 since 2014 at a rate corresponding to the annual variation in the average overall Consumer Price Index for Québec. The large-power industrial rate (Rate L) is exempt from this indexation.

Pursuant to *An Act mainly to cap the indexation rate for Hydro-Québec domestic distribution rate prices and to further regulate the obligation to distribute electricity*, the company's distribution rates were increased as follows on April 1, 2023:

- 3,0% for residential customers;
- 6.5% for all other customers except large-power industrial customers;
- 4.2% for large-power industrial customers (6.5% increase multiplied by an adjustment factor of 0.65 set by the Régie de l'énergie).

**Activities:** Generation, transmission and distribution

**Installed capacity:** 37,439 MW

**Main sources:** Hydropower generating stations and wind power purchases (more than 99% of power supplied is clean and renewable)

**Number of accounts:** About 4.5 million residential, commercial, institutional and industrial customer accounts, nine municipal systems and one regional cooperative

**Distribution regulator:** Régie de l'énergie

**Wholesale market:** Open

**Retail market:** –

## ENMAX

Calgary, Alberta

**Activities:** Generation, transmission and distribution

**Installed capacity:** 1,638 MW

**Main sources:** Natural gas (91%) and wind (9%)

**Number of accounts:** More than 725,000

**Distribution regulator:** Alberta Utilities Commission

**Wholesale market:** Open

**Retail market:** Open

## MARITIME ELECTRIC

Charlottetown, Prince Edward Island

**Activities:** Distribution

**Installed capacity:** 129 MW

**Main sources:** Purchases from NB Power and PEI Energy Corporation

**Number of accounts:** About 86,000

**Distribution regulator:** Island Regulatory and Appeals Commission

**Wholesale market:** –

**Retail market:** –

## EPCOR

Edmonton, Alberta

**Activities:** Transmission and distribution

**Installed capacity:** –

**Main sources:** Market purchases

**Number of accounts:** About 435,000 customers in Edmonton

**Distribution regulator:** Alberta Utilities Commission

**Wholesale market:** Open

**Retail market:** Open

---

**NOVA SCOTIA POWER**

Halifax, Nova Scotia

**Activities:** Generation, transmission and distribution

**Installed capacity:** 2,420 MW

**Main sources:** Thermal (coal, natural gas, petroleum and petroleum coke), hydropower, wind and other

**Number of accounts:** More than 541,000 residential, commercial and industrial customers

**Distribution regulator:** Nova Scotia Utility and Review Board

**Wholesale market:** –

**Retail market:** –

---

**NB POWER**

Moncton, New Brunswick

**Activities:** Generation, transmission and distribution

**Installed capacity:** 3,790 MW

**Main sources:** Thermal (1,716 MW), hydropower (889 MW), nuclear (660 MW) and combustion turbines (525 MW)

**Number of accounts:** More than 400,000

**Distribution regulator:** New Brunswick Energy and Utilities Board

**Wholesale market:** –

**Retail market:** –

---

**HYDRO OTTAWA**

Ottawa, Ontario

**Activities:** Generation and distribution

**Installed capacity:** 131 MW (renewable energy)

**Main sources:** Purchases from Ontario Power Generation

**Number of accounts:** About 359,000

**Distribution regulator:** Ontario Energy Board

**Wholesale market:** Open

**Retail market:** Open, but electricity supply rate regulated by the Ontario Energy Board

---

**SASKPOWER**

Regina, Saskatchewan

**Activities:** Generation, transmission and distribution

**Installed capacity:** 5,246 MW

**Main sources:** Natural gas (41%), coal (26%), hydropower (19%), wind (12%), solar (1%) and other (1%)

**Number of accounts:** About 550,000

**Distribution regulator:** Saskatchewan Rate Review Panel

**Wholesale market:** Partially open

**Retail market:** Partially open

---

**NEWFOUNDLAND AND LABRADOR HYDRO**

(customers with a power demand of 30,000 kW or more)  
St. John's, Newfoundland and Labrador

**Activities:** Generation, transmission and distribution

**Installed capacity:** 2,378 MW

**Main sources:** Hydropower (87%) and thermal (13%)

**Number of accounts:** More than 38,000

**Distribution regulator:** Newfoundland and Labrador Board of Commissioners of Public Utilities

**Wholesale market:** –

**Retail market:** –

---

**NEWFOUNDLAND POWER**

(all other customer categories)  
St. John's, Newfoundland and Labrador

**Activities:** Generation, transmission and distribution

**Installed capacity:** 140 MW

**Main sources:** Purchases from Newfoundland and Labrador Hydro (93%)

**Number of accounts:** More than 274,000 customers throughout the island of Newfoundland

**Distribution regulator:** Newfoundland and Labrador Board of Commissioners of Public Utilities

**Wholesale market:** –

**Retail market:** –

# AMERICAN UTILITIES

## TORONTO HYDRO

Toronto, Ontario

**Activities:** Distribution

**Installed capacity:** -

**Main sources:** Purchases from Ontario Power Generation

**Number of accounts:** About 790,000

**Distribution regulator:** Ontario Energy Board

**Wholesale market:** Open

**Retail market:** Open, but electricity supply rate regulated by the Ontario Energy Board

## BC HYDRO

Vancouver, British Columbia

**Activities:** Generation, transmission and distribution

**Installed capacity:** About 12,204 MW

**Main sources:** Hydropower (about 98%)

**Number of accounts:** Nearly 2.2 million

**Distribution regulator:** British Columbia Utilities Commission

**Wholesale market:** Open

**Retail market:** -

## MANITOBA HYDRO

Winnipeg, Manitoba

**Activities:** Generation, transmission and distribution

**Installed capacity:** 5,860 MW

**Main sources:** Hydropower (about 96%), natural gas and diesel

**Number of accounts:** About 609,000

**Distribution regulator:** Manitoba Public Utilities Board

**Wholesale market:** -

**Retail market:** -

## EVERSOURCE ENERGY

Boston, Massachusetts

**Activities:** Transmission and distribution

**Installed capacity:** -

**Main sources:** Purchases from ISO New England

**Number of accounts:** Nearly 3.3 million residential, commercial and industrial customers in Massachusetts, Connecticut and New Hampshire

**Distribution regulator:** Massachusetts Department of Public Utilities

**Wholesale market:** Open

**Retail market:** Open

## COMMONWEALTH EDISON (ComEd)

Chicago, Illinois

**Activities:** Transmission and distribution

**Installed capacity:** -

**Main sources:** Purchases from Midcontinent Independent System Operator

**Number of accounts:** Nearly 4 million customers in northern Illinois

**Distribution regulator:** Illinois Commerce Commission

**Wholesale market:** Open

**Retail market:** Open

**DTE ELECTRIC**

Detroit, Michigan

**Activities:** Generation, transmission and distribution

**Installed capacity:** 11,717 MW

**Main sources:** Coal, nuclear, natural gas, hydropower and other (wind and solar)

**Number of accounts:** 2.3 million customers in southeastern Michigan

**Distribution regulator:** Michigan Public Service Commission

**Wholesale market:** Open

**Retail market:** Partially open

**CENTERPOINT ENERGY**

Houston, Texas

**Activities:** Generation, transmission and distribution

**Installed capacity:** About 1,300 MW in Indiana

**Main sources:** Purchases from the Electric Reliability Council of Texas

**Number of accounts:** Nearly 2.9 million

**Distribution regulator:** Public Utility Commission of Texas

**Wholesale market:** Open

**Retail market:** Open

**FLORIDA POWER AND LIGHT (FPL)**

Miami, Florida

**Activities:** Generation, transmission and distribution

**Installed capacity:** Over 30,800 MW

**Main sources:** Natural gas, nuclear, solar and coal

**Number of accounts:** More than 5.8 million

**Distribution regulator:** Florida Public Service Commission

**Wholesale market:** Open

**Retail market:** -

**NASHVILLE ELECTRIC SERVICE**

Nashville, Tennessee

**Activities:** Distribution

**Installed capacity:** -

**Main sources:** Purchases from Tennessee Valley Authority

**Number of accounts:** More than 430,000

**Distribution regulator:** Tennessee Valley Authority

**Wholesale market:** -

**Retail market:** -

**CONSOLIDATED EDISON (ConEd)**

New York, New York

**Activities:** Distribution

**Installed capacity:** -

**Main sources:** Purchases from New York Independent System Operator

**Number of accounts:** About 3.6 million customers in the New York metropolitan area and 0.3 million customers in Westchester County

**Distribution regulator:** New York State Public Service Commission

**Wholesale market:** Open

**Retail market:** Open

**PACIFICORP**

Portland, Oregon

**Activities:** Generation, transmission and distribution

**Installed capacity:** 11,504 MW

**Main sources:** Natural gas, hydropower, wind, solar, geothermal, natural gas and coal

**Number of accounts:** 800,000 customers across three states (Oregon, Washington and California)

**Distribution regulator:** Public Utility Commission of Oregon

**Wholesale market:** Open

**Retail market:** Partially open

---

**PACIFIC GAS AND ELECTRIC (PG&E)**

San Francisco, California

**Activities:** Generation, transmission and distribution

**Installed capacity:** 7,832 MW

**Main sources:** Purchases from California ISO and fuel-fired, hydropower, solar and other generating stations

**Number of accounts:** 5.5 million

**Distribution regulator:** California Public Utilities Commission

**Wholesale market:** Open

**Retail market:** Partially open

---

**SEATTLE CITY LIGHT**

Seattle, Washington

**Activities:** Generation, transmission and distribution

**Installed capacity:** 2,006.4 MW

**Main sources:** Hydropower, wind, biogas and other generating stations, agreement with BC Hydro and purchases from Bonneville Power Administration

**Number of accounts:** Nearly 480,000 customers in Seattle and surrounding communities

**Distribution regulator:** City of Seattle

**Wholesale market:** Open

**Retail market:** -

---

**Information sources**

Annual reports and websites of the Canadian and American utilities in the study.

Legal deposit – 3rd quarter 2023  
Bibliothèque et Archives nationales du Québec  
ISBN 978-2-550-95426-2 (PDF)

For more information, please call Hydro-Québec's Direction –  
Affaires réglementaires et tarifaires et services de transport d'électricité:

Tel.: 514 798-1223, ext. 879-2081

This publication is available online at  
[www.hydroquebec.com/documents-data/official-publications](http://www.hydroquebec.com/documents-data/official-publications).

Original document written in French.  
Ce document est également publié en français.

2023G459A

