

Doug Allen Board Chair

Phone: 604-623-3726 Fax: 604-623-4407

Via email: EMLI.Minister@gov.bc.ca

December 23, 2022

Hon. Josie Osborne Minister of Energy, Mines and Low Carbon Innovation PO Box 9060 Stn Prov Govt Victoria BC V8W 9E3

Dear Minister Osborne:

RE: British Columbia Hydro and Power Authority (BC Hydro) Electricity Rate Comparison Annual Report No. 15

BC Hydro writes to file its Electricity Rate Comparison Annual Report (**Report**) which provides a comparison of BC Hydro's monthly bills and average prices for residential, commercial, and industrial customers with other North American utilities as of April 1, 2022 (**Attachment A**). The Report is prepared in response to *Clean Energy Act* section 8(4), which states that:

"The authority must provide to the minister, in accordance with the regulations, an annual report comparing the electricity rates charged by the authority with electricity rates charged by public utilities in other jurisdictions in North America, including an assessment of the extent to which the authority's electricity rates continue to be competitive with those other rates."

This Report adheres to the Province of British Columbia's Rate Comparison Regulation (Ministerial Order No. M167) (**Attachment B**). The Rate Comparison Regulation requires that the Report provide a comparison of BC Hydro's monthly electricity bills with at least one public utility in each of at least 15 other North American jurisdictions, including all of the following: the provinces of Alberta, Quebec, Ontario, and Manitoba; and the states of Washington, Oregon, and California. The comparison is based on rates (in Canadian funds) in effect April 1, 2022, for residential, commercial, and industrial customers. In addition, it provides the current and previous five years of applicable rates for BC Hydro.

The Report consists of information taken from the Hydro-Quebec rate survey report titled "Comparison of Electricity Prices in Major North American Cities". The Hydro-Quebec report is prepared each year. Monthly bills and average prices are calculated and submitted to Hydro-Quebec by the participating utilities, including BC Hydro, using the rates that are in place as of April 1 of that current year. Accordingly,



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some of the rates used may be interim rates that are approved and in effect at that time.¹

BC Hydro continues to be in the first (i.e., best) quartile for all three customer categories used to inform BC Hydro's Affordable Bills Service Plan performance measure. BC Hydro ranked second in the residential category (median consumption of 625 kWh), fourth in the commercial category (median consumption level of 750 kWh; equivalent to the Small Power category in the Hydro-Quebec rate survey report) and third in the industrial category (largest consumption level of 30,600,000 kWh).

For further information, please contact Chris Sandve at 604-974-4641 or by email at bchydroregulatorygroup@bchydro.com.

Yours sincerely,

Doug Allen Board Chair

ds/rh

Enclosure

Copy to: British Columbia Utilities
Commission

DE allen

Attention: Sara Hardgrave
Acting Commission Secretary and

Manager

Commission.secretary@bcuc.com

Ministry of Energy, Mines and Low Carbon Innovation

Electricity & Alternative Energy Division

Attention: Les MacLaren Assistant Deputy Minister Les.MacLaren@gov.bc.ca Ministry of Energy, Mines and Low Carbon Innovation

Deputy Minister's Office Attention: Shannon Baskerville

Deputy Minister

Shannon.Baskerville@gov.bc.ca

The interim rate decrease of 1.4% is the product of an interim rate increase of 0.6% less the Deferral Account Rate Rider of (2.0) percent.



BC Hydro Electricity Rate Comparison Annual Report

Report No. 15

Attachment A

Rates as at April 1, 2022



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Monthly Bills and Average Prices as at April 1, 2022

This is the fifteenth Electricity Rate Comparison Annual Report (**Report**) prepared by BC Hydro in response to the *Clean Energy Act* section 8(4) and adheres to the Province of British Columbia's Rate Comparison Regulation, issued by Ministerial Order No. M167¹. The Report provides a comparison of BC Hydro's monthly bills and average prices for residential, commercial and industrial customers with other North American utilities, including those in Alberta, Quebec, Ontario, Manitoba, Washington, Oregon, and California in Canadian funds.²

Each year BC Hydro participates in the Hydro-Quebec rate comparison survey, submitting bill calculations based on electricity prices that are in place as of April 1 of the current year, and which may reflect approved interim rate increases. Hydro-Quebec compiles the information and provides the monthly bills and average prices for 12 Canadian utilities and 10 American utilities in an annual report. The Report provides survey information taken from the Hydro-Quebec report entitled Comparison of Electricity Prices in Major North American Cities.³

The Hydro-Quebec report provides the monthly bills, excluding taxes and non-utility levies, calculated for specific consumption points for four different customer segments: residential, small power, medium power and large power. The average price is also calculated, for each customer segment and specific consumption point, by dividing the monthly bill by the amount of monthly energy consumption. For example, if an electric bill for 1,000 kWh was calculated to be a monthly amount of \$100, the average price would be \$100 divided by 1,000 kWh, or 10 cents/kWh.

The first Electricity Rate Comparison Annual Report was issued on June 10, 2009 in response to Ministerial Order No. M114, which was subsequently replaced by Ministerial Order No. M167.

Monthly bills and average prices for American utilities have been converted to Canadian dollars using the exchange rate as at 12 p.m. Eastern on April 1, 2022 of \$0.7992 (C\$1 = US\$0.7992). The Canadian dollar had appreciated by 0.41 per cent relative to the U.S. dollar since April 1, 2021.

³ Hydro Quebec Comparison of Electricity Prices in Major North American Cities Report.



The monthly bills for customers are presented in <u>Table 1</u>, <u>Table 2</u>, <u>Table 3</u>, and <u>Table 4</u>. The average prices for customers are presented in <u>Table 5</u>, <u>Table 6</u>, <u>Table 7</u>, and <u>Table 8</u>. BC Hydro's monthly bills and average prices over the past five years are summarized in <u>Table 9</u> and <u>Table 10</u>.

The Hydro-Quebec residential segment includes calculations for BC Hydro's residential customers. The Hydro-Quebec small power segment includes calculations for BC Hydro's general service under 100 kW customers, while the medium power segment includes calculations for BC Hydro's general service 100 kW to 5,000 kW customers. Lastly, the Hydro-Quebec large power segment includes calculations for BC Hydro's general service and transmission service customers who are 5,000 kW and over. Table 11 shows the specific BC Hydro rate schedules that have been included in each Hydro Quebec segment. Table 12 summarizes BC Hydro's relative rankings in each rate class in the current and the last five years of participation in the survey.

Based on the data from the Hydro-Quebec survey, BC Hydro's monthly bills and average prices for the residential, small, medium and large power categories are in the first (i.e., lowest rate) quartile of the public utilities surveyed. These low rates provide a competitive advantage to these customer segments in BC Hydro's service area. The rankings of BC Hydro in comparison to the top five participating utilities with the lowest monthly bills and average prices are noted in Tables 1 to 8. Of the 22 utilities providing data, BC Hydro's monthly bills and average price rankings against the other utilities are as follows:



Rate Class & Usage	Ranking at April 1, 2022
Residential	·
Residential - 625 kWh	2
Residential - 750 kWh	3
Residential - 1,000 kWh	3
Residential - 2,000 kWh	5
Residential - 3,000 kWh	7
Small Power	
Small Power - 750 kWh/6 kW	4
Small Power - 2,000 kWh/14 kW	3
Small Power - 10,000 kWh/40 kW	3
Small Power - 14,000 kWh/100 kW	1
Small Power - 25,000 kWh/100 kW	3
Medium Power	
Medium Power - 100,000 kWh/500 kW	2
Medium Power - 200,000 kWh/500 kW	2
Medium Power - 200,000 kWh/1,000 kW	2
Medium Power - 400,000 kWh/1,000 kW	3
Medium Power - 1,170,000 kWh/2,500 kW	4
Large Power	
Large Power - 2,340 MWh/5,000 kW/25 kV	4
Large Power - 3,060 MWh/5,000 kW/25 kV	4
Large Power - 5,760 MWh/10,000 kW/120 kV	3
Large Power - 17,520 MWh//30,000 kW/120 kV	3
Large Power - 23,400 MWh/50,000 kW/120 kV	3
Large Power - 30,600 MWh/50,000 kW /120 kV	3



Table 1 Residential Monthly Bills

Hydro-Quebec Electricity Prices Comparison Report – Residential Monthly Bills as of April 1, 2022
CDN \$/Month

Utility	City	625	kWh	750	kWh	1,000	kWh	2,000 kWh		3,000 kWh	
Hydro-Quebec	Montreal, QC	(1st)	52	(1st)	60	(1st)	76	(1st)	166	(1st)	264
Manitoba Hydro	Winnipeg, MB	(3rd)	67	(2nd)	79	(2nd)	102	(2nd)	196	(2nd)	289
BC Hydro	Vancouver, BC	(2nd)	64	(3rd)	79	(3rd)	114	(5th)	252	(7th)	390
Hydro Ottawa	Ottawa, ON	(5th)	91	(5th)	104	(5th)	129	(3rd)	233	(3rd)	336
Pacific Power and Light	Portland, OR	(4th)	84	(4th)	98	(4th)	126		266		405
Newfoundland Power	St. John's, NL		92		107		138		260		381
Toronto Hydro	Toronto, ON		99		112		139	(4th)	245	(4th)	350
NB Power	Moncton, NB		96		110		139		255	(5th)	372
Florida Power and Light	Miami, FL		96		113		147		308		469
CenterPoint Energy	Houston, TX		106		124		147		289		430
Nashville Electric Service	Nashville, TN		108		124		156		285		419
Seattle City Light	Seattle, WA		97		118		159		322		486
SaskPower	Regina, SK		112		130		165		307		450
Nova Scotia Power	Halifax, NS		112		132		173		335		497
Maritime Electric	Charlottetown, PE		120		139		178		331		454
Commonwealth Edison	Chicago, IL		122		142		183		347		510
EPCOR Energy	Edmonton, AB		132		153		195		361		528
Enmax	Calgary, AB		135		157		199		371		542
DTE Electric	Detroit, MI		143		172		230		462		695
Consolidated Edison	New York, NY		233		275		360		700		1,039
NSTAR Electric & Gas	Boston, MA		239		285		377		746		1,114
Pacific Gas and Electric	San Francisco, CA		236		298		413		976		1,593



Table 2 Small Power Monthly Bills

Hydro-Quebec Electricity Prices Comparison Report – Small Power Monthly Bills as of April 1, 2022 CDN \$/Month

CDN \$/Month	Ι.						ı .		<u> </u>		
			kW		kW	40 kW 10,000 kWh		100 kW		100 kW	
	Cit.	_	0 kWh		0 kWh	· ·		14,000 kWh		25,000 kWh 35% load factor	
Utility	City		oad factor	20% load factor		35% load factor		19% load factor			load factor
Manitoba Hydro	Winnipeg, MB	(2nd)	92	(1st)	210	(1st)	969	(4th)	1,985	(1st)	2,632
Hydro-Quebec	Montreal, QC	(1st)	90	(2nd)	219	(2nd)	1,042	(2nd)	1,906	(2nd)	2,822
BC Hydro	Vancouver, BC	(4th)	103	(3rd)	256	(3rd)	1,169	(1st)	1,866	(3rd)	2,910
Seattle City Light	Seattle, WA	(3rd)	101	(5th)	269		1,345	(3rd)	1,949	(5th)	3,071
Pacific Power and Light	Portland, OR		116		274	(4th)	1,216		2,099	(4th)	2,993
Hydro Ottawa	Ottawa, ON	(5th)	112	(4th)	268	(5th)	1,269	(5th)	2,084		3,501
Newfoundland Power	St. John's, NL		112		295		1,276		2,200		3,173
Toronto Hydro	Toronto, ON		133		299		1,365		2,261		3,766
Florida Power and Light	Miami, FL		122		301		1,438		2,655		3,541
NB Power	Moncton, NB		129		304		1,441		2,507		3,596
SaskPower	Regina, SK		134		305		1,398		2,688		3,650
DTE Electric	Detroit, MI		136		352		1,640		2,284		4,054
Nova Scotia Power	Halifax, NS		126		310		1,636		2,845		4,091
CenterPoint Energy	Houston, TX		125		422		1,700		2,904		4,231
Commonwealth Edison	Chicago, IL		185		418		1,612		2,761		3,983
Enmax	Calgary, AB		178		386		1,825		3,042		4,187
Maritime Electric	Charlottetown, PE		165		399		1,849		3,151		4,516
Nashville Electric Service	Nashville, TN		181		393		1,585		3,646		4,474
EPCOR Energy	Edmonton, AB		161		400		1,928		3,804		5,324
Consolidated Edison	New York, NY		298		929		3,270		6,136		8,067
NSTAR Electric & Gas	Boston, MA		266		681		3,630		7,030		9,610
Pacific Gas and Electric	San Francisco, CA		301		781		3,765		6,116		9,080



Table 3 Medium Power Monthly Bills

Hydro-Quebec Electricity Prices Comparison Report – Medium Power Monthly Bills as of April 1, 2022

CDN \$/Month												
			0 kW		00 kW		L000 kW		000 kW		00 kW ¹	
I IAIIIA.	Cit.	100,000 kWh 28% load factor		200,000 kWh 56% load factor		200,000 kWh 28% load factor		400,000 kWh 56% load factor		1,170,000 kWh 65% load factor		
Utility	City	(1st)		44.0		(4.1)		44.13		(1st)		
Manitoba Hydro	Winnipeg, MB		11,141		15,633		22,026		31,010		76,448	
Hydro-Quebec	Montreal, QC	(3rd)	12,674	(3rd)	18,031	(5th)	25,348	(2nd)	33,495	(2nd)	83,102	
BC Hydro	Vancouver, BC	(2nd)	11,993	(2nd)	17,932	(2nd)	23,979	(3rd)	35,856	(4th)	97,617	
Pacific Power and Light	Portland, OR		13,536	(4th)	19,596		26,998	(4th)	38,880	(3rd)	93,683	
Newfoundland Power	St. John's, NL	(5th)	12,941	(5th)	21,321	(3rd)	24,655	(5th)	41,256		114,174	
Seattle City Light	Seattle, WA	(4th)	12,807		23,004	(4th)	25,171		45,336		128,659	
Hydro Ottawa	Ottawa, ON		14,454		23,450		28,708		46,699		134,155	
DTE Electric	Detroit, MI		16,124		23,568		32,218		46,896	(5th)	113,304	
Toronto Hydro	Toronto, ON		16,262		25,738		32,140		50,904		139,023	
SaskPower	Regina, SK		16,348		24,022		32,680		48,028		117,239	
Florida Power and Light	Miami, FL		16,466		23,862		32,827		47,619		126,202	
NB Power	Moncton, NB		15,489		25,389		30,974		50,774		143,759	
Commonwealth Edison	Chicago, IL		17,763		25,656		35,346		51,131		137,933	
Nova Scotia Power	Halifax, NS		18,069		27,610		36,137		55,219		147,638	
Nashville Electric Service	Nashville, TN		19,703		26,696		39,176		53,163		146,755	
Enmax	Calgary, AB		20,135		30,279		39,574		59,862		163,539	
CenterPoint Energy	Houston, TX		17,978		30,043		40,062		64,191		172,427	
Maritime Electric	Charlottetown, PE		19,196		31,606		38,321		63,141		178,843	
EPCOR Energy	Edmonton, AB		23,136		36,022		43,592		69,364		191,298	
Consolidated Edison	New York, NY		35,654		53,205		71,236		106,337		227,657	
NSTAR Electric & Gas	Boston, MA		35,177		52,872		70,154		105,545		277,421	
Pacific Gas and Electric	San Francisco, CA		42,741		59,877		84,539		117,151		239,254	



Table 4 Large Power Monthly Bills

Hydro-Quebec Electricity	Prices Comparison	n Report – Large Pow	er				
Monthly Bills as of April	1, 2022						
CDN \$000/Month		5,000 kW	5,000 kW	10,000 kW	30,000 kW	50,000 kW	50,000 kW
		2,340,000 kWh	3,060,000 kWh	5,760,000 kWh	17,520,000 kWh	23,400,000 kWh	30,600,000 kWh
Hailia	Cit.	25 kV	25 kV	120 kV	120 kV	120 kV	120 kV
Utility	City	65% load factor	85% load factor (1st) 162.1	80% load factor	81% load factor	65% load factor (2nd) 1 201 5	85% load factor (2nd) 1.542.6
Hydro-Quebec	Montreal, QC	150.9	105.1	290.0	697.9	1,301.3	1,343.0
Manitoba Hydro	Winnipeg, MB	130.0	100.4	254.4	692.2	1,208.0	1,335.6
BC Hydro	Vancouver, BC	(4th) 195.2	(4th) 237.3	(3rd) 377.4	(3rd) 1,144.1	(3rd) 1,617.1	(3rd) 1,976.7
Pacific Power and Light	Portland, OR	(3rd) 184.4	(3rd) 220.9	(4th) 397.2	(5th) 1,197.0	(5th) 1,719.3	(5th) 2,059.1
Newfoundland Power	St. John's, NL	225.4	285.1	534.3	(4th) 1,167.4	(4th) 1,665.8	(4th) 2,013.3
SaskPower	Regina, SK	225.1	274.8	(5th) 446.7	1,339.5	1,873.1	2,313.0
NB Power	Moncton, NB	(5th) 217.6	(5th) 258.4	472.9	1,432.1	2,062.6	2,465.0
DTE Electric	Detroit, MI	226.0	263.4	486.0	1,468.9	2,151.7	2,519.2
Nashville Electric Service	Nashville, TN	290.2	341.4	449.9	1,327.3	1,976.8	2,483.8
Florida Power and Light	Miami, FL	252.1	302.6	501.3	1,513.6	2,154.6	2,609.2
Commonwealth Edison	Chicago, IL	274.9	329.9	521.8	1,576.2	2,183.6	2,733.2
Hydro Ottawa	Ottawa, ON	244.5	299.3	556.0	1,655.8	2,307.9	2,856.2
Seattle City Light	Seattle, WA	257.5	329.7	582.7	1,769.6	2,406.8	3,078.0
Toronto Hydro	Toronto, ON	275.2	298.5	581.1	1,742.3	2,713.0	2,946.3
Maritime Electric	Charlottetown, PE	255.0	311.2	594.3	1,801.6	2,550.2	3,111.8
Nova Scotia Power	Halifax, NS	281.5	348.7	663.8	2,013.9	2,815.2	3,487.2
EPCOR Energy	Edmonton, AB	348.2	430.9	720.5	2,170.3	3,027.6	3,746.7
Enmax	Calgary, AB	322.8	402.7	764.7	2,319.2	3,221.2	4,020.1
CenterPoint Energy	Houston, TX	341.5	429.4	754.3	2,289.1	3,119.9	3,981.9
Consolidated Edison	New York, NY	455.1	552.3	1,055.8	3,199.4	4,549.7	5,521.0
Pacific Gas and Electric	San Francisco, CA	476.4	576.6	1,101.8	3,335.9	4,751.7	5,753.8
NSTAR Electric & Gas	Boston, MA	554.5	675.7	1,082.0	3,283.4	4,554.4	5,693.7



Table 5 Residential Average Prices

Hydro-Quebec Electricity Prices Comparison Report – Residential Average Prices as of April 1, 2022 CDN c/kWh

CDN ¢/kWh	City	(2)	· las/b	750	kWh	1.000	2 Lak/b	2.00	O lawb	2.00	O lawb
Utility	City		kWh		KWN		kWh		0 kWh	<u> </u>	0 kWh
Hydro-Quebec	Montreal, QC	(1st)	8.35	(1st)	8.01	(1st)	7.59	(1st)	8.32	(1st)	8.80
Manitoba Hydro	Winnipeg, MB	(3rd)	10.80	(2nd)	10.55	(2nd)	10.24	(2nd)	9.78	(2nd)	9.63
BC Hydro	Vancouver, BC	(2nd)	10.31	(3rd)	10.59	(3rd)	11.39	(5th)	12.60	(7th)	13.00
Hydro Ottawa	Ottawa, ON	(5th)	14.50	(5th)	13.81	(5th)	12.94	(3rd)	11.64	(3rd)	11.21
Pacific Power and Light	Portland, OR	(4th)	13.42	(4th)	13.06	(4th)	12.61		13.27		13.50
Newfoundland Power	St. John's, NL		14.70		14.28		13.76		12.98		12.72
Toronto Hydro	Toronto, ON		15.87		14.99		13.88	(4th)	12.23	(4th)	11.68
NB Power	Moncton, NB		15.33		14.71		13.94		12.77	(5th)	12.39
Florida Power and Light	Miami, FL		15.39		15.09		14.71		15.40		15.63
CenterPoint Energy	Houston, TX		17.02		16.54		14.70		14.43		14.34
Nashville Electric Service	Nashville, TN		17.21		16.49		15.59		14.24		13.96
Seattle City Light	Seattle, WA		15.58		15.71		15.87		16.11		16.19
SaskPower	Regina, SK		17.87		17.27		16.51		15.37		14.99
Nova Scotia Power	Halifax, NS		17.95		17.66		17.30		16.76		16.58
Maritime Electric	Charlottetown, PE		19.25		18.60		17.78		16.55		15.13
Commonwealth Edison	Chicago, IL		19.46		18.94		18.30		17.33		17.01
EPCOR Energy	Edmonton, AB		21.26		20.42		19.48		18.07		17.61
Enmax	Calgary, AB		21.63		20.88		19.94		18.53		18.06
DTE Electric	Detroit, MI		22.88		22.93		23.01		23.12		23.15
Consolidated Edison	New York, NY		37.28		36.72		36.03		34.98		34.64
NSTAR Electric & Gas	Boston, MA		38.25		38.02		37.73		37.29		37.14
Pacific Gas and Electric	San Francisco, CA		37.74		39.68		41.29		48.82		53.11



Table 6 Small Power Average Prices

Hydro-Quebec Electricity Prices Comparison Report – Small Power Average Prices as of April 1,2022 CDN c/kWh

CDN C/RWII	1		1147				2114				
		_	kW		1 kW	40 kW 10,000 kWh		100 kW		100 kW	
Utility	City	750 kWh 17% load factor		2,000 kWh 20% load factor		35% load factor		14,000 kWh 19% load factor		25,000 kWh 35% load factor	
	† <i>'</i>			(1st)				(4th)			
Manitoba Hydro	Winnipeg, MB	(2nd)	12.25		10.52	(1st)	9.69		14.18	(1st)	10.53
Hydro-Quebec	Montreal, QC	(1st)	12.00	(2nd)	10.93	(2nd)	10.42	(2nd)	13.62	(2nd)	11.29
BC Hydro	Vancouver, BC	(4th)	13.73	(3rd)	12.82	(3rd)	11.69	(1st)	13.33	(3rd)	11.64
Seattle City Light	Seattle, WA	(3rd)	13.45	(5th)	13.45		13.45	(3rd)	13.92	(5th)	12.28
Pacific Power and Light	Portland, OR		15.52		13.68	(4th)	12.16		14.99	(4th)	11.97
Hydro Ottawa	Ottawa, ON	(5th)	14.90	(4th)	13.40	(5th)	12.69	(5th)	14.89		14.00
Newfoundland Power	St. John's, NL		14.97		14.73		12.76		15.71		12.69
Toronto Hydro	Toronto, ON		17.72		14.97		13.65		16.15		15.06
Florida Power and Light	Miami, FL		16.31		15.07		14.38		18.97		14.16
NB Power	Moncton, NB		17.21		15.18		14.41		17.91		14.39
SaskPower	Regina, SK		17.82		15.23		13.98		19.20		14.60
DTE Electric	Detroit, MI		18.19		17.62		16.40		16.31		16.22
Nova Scotia Power	Halifax, NS		16.84		15.48		16.36		20.32		16.36
CenterPoint Energy	Houston, TX		16.63		21.11		17.00		20.74		16.92
Commonwealth Edison	Chicago, IL		24.70		20.90		16.12		19.72		15.93
Enmax	Calgary, AB		23.67		19.28		18.25		21.73		16.75
Maritime Electric	Charlottetown, PE		21.99		19.94		18.49		22.51		18.07
Nashville Electric Service	Nashville, TN		24.17		19.63		15.85		26.04		17.90
EPCOR Energy	Edmonton, AB		21.47		19.99		19.28		27.17		21.29
Consolidated Edison	New York, NY		39.79		46.44		32.70		43.83		32.27
NSTAR Electric & Gas	Boston, MA		35.43		34.07		36.30		50.22		38.44
Pacific Gas and Electric	San Francisco, CA		40.08		39.05		37.65		43.69		36.32



Table 7 Medium Power Average Prices

Hydro-Quebec Electricity Prices Comparison Report – Medium Power Average Prices as of April 1, 2022

CDN ¢/kWh	ON ¢/kWh										
			00 kW		0 kW	_	00 kW	_	00 kW		00 kW
		100,000 kWh			200,000 kWh		200,000 kWh		400,000 kWh		,000 kWh
Utility	City		28% load factor		56% load factor		28% load factor		56% load factor		oad factor
Manitoba Hydro	Winnipeg, MB	(1st)	11.14	(1st)	7.82	(1st)	11.01	(1st)	7.75	(1st)	6.53
Hydro-Quebec	Montreal, QC	(3rd)	12.67	(3rd)	9.02	(5th)	12.67	(2nd)	8.37	(2nd)	7.10
BC Hydro	Vancouver, BC	(2nd)	11.99	(2nd)	8.97	(2nd)	11.99	(3rd)	8.96	(4th)	8.34
Pacific Power and Light	Portland, OR		13.54	(4th)	9.80		13.50	(4th)	9.72	(3rd)	8.01
Newfoundland Power	St. John's, NL	(5th)	12.94	(5th)	10.66	(3rd)	12.33	(5th)	10.31		9.76
Seattle City Light	Seattle, WA	(4th)	12.81		11.50	(4th)	12.59		11.33		11.00
Hydro Ottawa	Ottawa, ON		14.45		11.72		14.35		11.67		11.47
DTE Electric	Detroit, MI		16.12		11.78		16.11		11.72	(5th)	9.68
SaskPower	Regina, SK		16.35		12.01		16.34		12.01		10.02
Florida Power and Light	Miami, FL		16.47		11.93		16.41		11.90		10.79
NB Power	Moncton, NB		15.49		12.69		15.49		12.69		12.29
Toronto Hydro	Toronto, ON		16.26		12.87		16.07		12.73		11.88
Commonwealth Edison	Chicago, IL		17.76		12.83		17.67		12.78		11.79
Nova Scotia Power	Halifax, NS		18.07		13.80		18.07		13.80		12.62
Nashville Electric Service	Nashville, TN		19.70		13.35		19.59		13.29		12.54
Enmax	Calgary, AB		20.13		15.14		19.79		14.97		13.98
CenterPoint Energy	Houston, TX		17.98		15.02		20.03		16.05		14.74
Maritime Electric	Charlottetown, PE		19.20		15.80		19.16		15.79		15.29
EPCOR Energy	Edmonton, AB		23.14		18.01		21.80		17.34		16.35
Consolidated Edison	New York, NY		35.65		26.60		35.62		26.58		19.46
NSTAR Electric & Gas	Boston, MA		35.18		26.44		35.08		26.39		23.71
Pacific Gas and Electric	San Francisco, CA		42.74		29.94		42.27		29.29		20.45



Table 8 Large Power Average Prices

Hydro-Quebec Electricity Prices Comparison Report – Large Power Average Prices as of April 1, 2022

CDN ¢/kWh	·											
		5,000 kW	5,000 kW	10,000 kW	30,000 kW	50,000 kW	50,000 kW					
		2,340,000 kWh		5,760,000 kWh	17,520,000	23,400,000	30,600,000					
Liatita.	C:L	25 kV	25 kV	120 kV	kWh	kWh	kWh					
Utility	City	65% load factor	85% load factor	80% load factor	120 kV	120 kV	120 kV					
Hydro-Quebec	Montreal, QC	(1st) 5.93	(1st) 5.33	(2nd) 5.15	(2nd) 5.12	(2nd) 5.56	(2nd) 5.04					
Manitoba Hydro	Winnipeg, MB	(2nd) 6.41	(2nd) 5.90	(1st) 5.11	(1st) 5.09	(1st) 5.42	(1st) 5.03					
BC Hydro	Vancouver, BC	(4th) 8.34	(4th) 7.76	(3rd) 6.55	(3rd) 6.53	(3rd) 6.91	(3rd) 6.46					
Pacific Power and Light	Portland, OR	(3rd) 7.88	(3rd) 7.22	(4th) 6.90	(5th) 6.83	(5th) 7.35	(5th) 6.73					
Florida Power and Light	Miami, FL	(5th) 8.95	(5th) 8.06	(5th) 7.03	6.97	7.56	6.85					
Newfoundland Power	St. John's, NL	9.63	9.32	9.28	(4th) 6.66	(4th) 7.12	(4th) 6.58					
SaskPower	Regina, SK	9.62	8.98	7.76	7.65	8.00	7.56					
NB Power	Moncton, NB	9.30	8.44	8.21	8.17	8.81	8.06					
DTE Electric	Detroit, MI	9.66	8.61	8.44	8.38	9.20	8.23					
Nashville Electric Service	Nashville, TN	12.40	11.16	7.81	7.58	8.45	8.12					
Commonwealth Edison	Chicago, IL	11.75	10.78	9.06	9.00	9.33	8.93					
Hydro Ottawa	Ottawa, ON	10.45	9.78	9.65	9.45	9.86	9.33					
Seattle City Light	Seattle, WA	11.00	10.77	10.12	10.10	10.29	10.06					
Toronto Hydro	Toronto, ON	11.76	9.76	10.09	9.94	11.59	9.63					
Maritime Electric	Charlottetown, PE	10.90	10.17	10.32	10.28	10.90	10.17					
Nova Scotia Power	Halifax, NS	12.03	11.40	11.53	11.50	12.03	11.40					
EPCOR Energy	Edmonton, AB	14.88	14.08	12.51	12.39	12.94	12.24					
Enmax	Calgary, AB	13.80	13.16	13.28	13.24	13.77	13.14					
CenterPoint Energy	Houston, TX	14.59	14.03	13.10	13.07	13.33	13.01					
Consolidated Edison	New York, NY	19.45	18.05	18.33	18.26	19.44	18.04					
Pacific Power and Light	San Francisco, CA	20.36	18.84	19.13	19.04	20.31	18.80					
NSTAR Electric & Gas	Boston, MA	23.70	22.08	18.79	18.74	19.46	18.61					



Table 9 BC Hydro Monthly Bills Summary

BC Hydro Monthly Bills Summary for the CDN\$/Month	Current and Past	Five Years				
Vancouver, BC	April 1, 2017 ¹	April 1, 2018 ²	April 1, 2019 ³	April 1, 2020 ⁴	April 1, 2021 ⁵	April 1, 2022 ⁶
Residential						
625 kWh	62	64	65	65	65	64
750 kWh	77	79	81	80	81	79
1,000 kWh	111	114	116	115	116	114
2,000 kWh	246	253	258	255	257	252
3,000 kWh	381	393	400	396	398	390
Small Power						
750 kWh/6 kW	100	103	105	104	105	103
2,000 kWh/14 kW	250	257	262	259	260	256
10,000 kWh/40 kW	1,138	1,172	1,193	1,181	1,187	1,169
14,000 kWh/100 kW	1,818	1,872	1,905	1,886	1,895	1,866
25,000 kWh/100 kW	2,834	2,919	2,970	2,940	2,955	2,910
Medium Power						
100,000 kWh/500 kW	11,660	12,025	12,238	12,118	12,178	11,993
200,000 kWh/500 kW	17,443	17,979	18,298	18,118	18,208	17,932
200,000 kWh/1,000 kW	23,328	24,042	24,468	24,228	24,348	23,979
400,000 kWh/1,000 kW	34,878	35,949	36,588	36,228	36,408	35,856
1,170,000 kWh/2,500 kW	94,890	97,827	99,609	98,622	99,115	97,617
Large Power						
2,340 MWh/5,000 kW/25 kV	231,493	195,646	199,209	197,235	198,222	195,225
3,060 MWh/5,000 kW/25 kV	276,242	237,877	242,187	239,787	240,987	237,343
5,760 MWh/10,000 kW/120 kV	463,887	378,505	385,189	381,325	383,307	377,362
17,520 MWh//30,000 kW/120 kV	1,399,442	1,147,546	1,167,812	1,156,098	1,162,100	1,144,082
23,400 MWh/50,000 kW/120 kV	2,013,159	1,622,025	1,650,673	1,634,106	1,642,612	1,617,149
30,600 MWh/50,000 kW /120 kV	2,407,246	1,982,713	2,017,729	1,997,490	2,007,868	1,976,723

¹⁾ Rates used reflect a 3.50 per cent approved increase effective April 1, 2017.

Note: Bill calculations exclude taxes and non-utility levies and include the deferral account rate rider. For rates starting April 1, 2019 (Fiscal 2020), April 1, 2020 (Fiscal 2021) and April 1, 2021 (Fiscal 2022), the deferral account rate rider was zero per cent. For April 1, 2022 (Fiscal 2023), the deferral account rate rider was (2.0) per cent.

²⁾ Rates used reflect a 3.00 per cent approved increase effective April 1, 2018.

³⁾ Rates used reflect a 1.76 per cent approved net bill increase effective April 1, 2019.

⁴⁾ Rates used reflect a 1.01 per cent interim net bill decrease effective April 1, 2020 (Compliance filing net bill decrease was 1.62 per cent).

⁵⁾ Rates used reflect a 1.16 per cent interim net bill increase effective April 1, 2021 (Compliance filing net bill increase was 1.00 per cent).

⁶⁾ Rates used reflect a 1.40 per cent interim net bill decrease effective April 1, 2022.



Table 10 BC Hydro Average Prices Summary

BC Hydro Average Prices Summary for t	he Current and Pa	st Five Years				
Vancouver, BC	April 1, 2017 ¹	April 1, 2018 ²	April 1, 2019 ³	April 1, 2020 4	April 1, 2021 ⁵	April 1, 2022 ⁶
Residential						
625 kWh	12.10	10.28	10.47	10.38	10.44	10.31
750 kWh	11.68	10.58	10.77	10.67	10.74	10.59
1,000 kWh	11.15	11.42	11.62	11.51	11.58	11.39
2,000 kWh	10.36	12.67	12.90	12.77	12.84	12.60
3,000 kWh	10.10	13.09	13.32	13.19	13.26	13.00
Small Power						
750 kWh/6 kW	13.37	13.77	14.01	13.86	13.94	13.73
2,000 kWh/14 kW	12.49	12.86	13.08	12.95	13.02	12.82
10,000 kWh/40 kW	11.38	11.72	11.93	11.81	11.87	11.69
14,000 kWh/100 kW	12.99	13.37	13.61	13.47	13.54	13.33
25,000 kWh/100 kW	11.34	11.67	11.88	11.76	11.82	11.64
Medium Power						
100,000 kWh/500 kW	11.66	12.03	12.24	12.12	12.18	11.99
200,000 kWh/500 kW	8.72	8.99	9.15	9.06	9.10	8.97
200,000 kWh/1,000 kW	11.66	12.02	12.23	12.11	12.17	11.99
400,000 kWh/1,000 kW	8.72	8.99	9.15	9.06	9.10	8.96
1,170,000 kWh/2,500 kW	8.11	8.36	8.51	8.43	8.47	8.34
Large Power						
2,340 MWh/5,000 kW/25 kV	8.11	8.36	8.51	8.43	8.47	8.34
3,060 MWh/5,000 kW/25 kV	7.54	7.77	7.91	7.84	7.88	7.76
5,760 MWh/10,000 kW/120 kV	6.38	6.57	6.69	6.62	6.65	6.55
17,520 MWh//30,000 kW/120 kV	6.36	6.55	6.67	6.60	6.63	6.53
23,400 MWh/50,000 kW/120 kV	6.73	6.93	7.05	6.98	7.02	6.91
30,600 MWh/50,000 kW /120 kV	6.29	6.48	6.59	6.53	6.56	6.46

¹⁾ Rates used reflect a 3.50 per cent approved increase effective April 1, 2017.

Note: Bill calculations exclude taxes and non-utility levies and include the deferral account rate rider. For rates starting April 1, 2019 (Fiscal 2020), April 1, 2020 (Fiscal 2021) and April 1, 2021 (Fiscal 2022), the deferral account rate rider was zero per cent. For April 1, 2022 (Fiscal 2023), the deferral account rate rider was (2.0) per cent.

²⁾ Rates used reflect a 3.00 per cent approved increase effective April 1, 2018.

³⁾ Rates used reflect a 1.76 per cent approved net bill increase effective April 1, 2019.

⁴⁾ Rates used reflect a 1.01 per cent interim net bill decrease effective April 1, 2020 (Compliance filing net bill decrease was 1.62 per cent).

⁵⁾ Rates used reflect a 1.16 per cent interim net bill increase effective April 1, 2021 (Compliance filing net bill increase was 1.00 per cent).

⁶⁾ Rates used reflect a 1.40 per cent interim net bill decrease effective April 1, 2022.



Table 11 Corresponding BC Hydro Rate
Schedules included in each Segment of
the Hydro-Quebec Rate Survey

Hydro Quebec Segment	Corresponding BC Hydro Rate Schedule			
Residential				
625 kWh	RS 1101			
750 kWh	RS 1101			
1,000 kWh	RS 1101			
2,000 kWh	RS 1101			
3,000 kWh	RS 1101			
Small Power				
750 kWh/6 kW	RS 1300			
2,000 kWh/14 kW	RS 1300			
10,000 kWh/40 kW	RS 1500			
14,000 kWh/100 kW	RS 1500			
25,000 kWh/100 kW	RS 1500			
Medium Power				
100,000 kWh/500 kW	RS 1600			
200,000 kWh/500 kW	RS 1600			
200,000 kWh/1,000 kW	RS 1600			
400,000 kWh/1,000 kW	RS 1600			
1,170,000 kWh/2,500 kW	RS 1611			
Large Power				
2,340,000 kWh/5,000 kW/25 kV	RS 1611			
3,060,000 kWh/5,000 kW/25 kV	RS 1611			
5,760,000 kWh/10,000 kW/120 kV	RS 1823			
17,520,000 kWh/30,000 kW/120 kV	RS 1823			
23,400,000 kWh/50,000 kW/120 kV	RS 1823			
30,600,000 kWh/50,000 kW/120 kV	RS 1823			



Table 12 BC Hydro Rankings Summary in Hydro-Quebec Rate Surveys, Out of 22 Utilities Surveyed

BC Hydro Rates Comparisons Ranking Summary for the Current and Past Five Years

Vancouver, BC	April 1, 2017	April 1, 2018	April 1, 2019	April 1, 2020	April 1, 2021	April 1, 2022
Residential						
625 kWh	3	3	3	3	3	2
750 kWh	3	3	3	3	3	3
1,000 kWh	5	3	3	5	3	3
2,000 kWh	9	7	7	6	7	5
3,000 kWh	9	8	8	8	8	7
Small Power						
750 kWh/6 kW	7	8	6	5	6	4
2,000 kWh/14 kW	7	6	5	5	5	3
10,000 kWh/40 kW	7	5	5	5	3	3
14,000 kWh/100 kW	5	5	3	3	2	1
25,000 kWh/100 kW	8	6	4	3	3	3
Medium Power						
100,000 kWh/500 kW	4	4	4	2	2	2
200,000 kWh/500 kW	5	3	4	3	3	2
200,000 kWh/1,000 kW	5	4	4	2	3	2
400,000 kWh/1,000 kW	5	4	4	3	3	3
1,170,000 kWh/2,500 kW	6	4	3	3	4	4
Large Power						
2,340 MWh/5,000 kW/25 kV	6	4	3	3	4	4
3,060 MWh/5,000 kW/25 kV	6	3	3	3	4	4
5,760 MWh/10,000 kW/120 kV	5	4	3	5	4	3
17,520 MWh//30,000 kW/120 kV	7	5	4	5	5	3
23,400 MWh/50,000 kW/120 kV	8	5	4	5	5	3
30,600 MWh/50,000 kW /120 kV	8	5	4	5	5	3



Average Residential Consumption and Average Bills April 1, 2022

An alternative metric to consider is the average monthly bill paid, and electricity consumed, by the "average" residential customer served by each utility in Canada. This measure is different from the reporting in the Hydro Quebec study, which compares utilities using common loads across all the utilities. Only 14 of the 22 participating utilities provide their average bill information, and the average bill information is not disclosed in the Hydro Quebec Report but is collected in their annual survey.

The rankings of the monthly residential bill are shown in the table below and reflect the differing average load characteristics of the utility. For example, even though Quebec has the lowest electricity rates in 2022 and 2021, its average monthly residential customer bill in 2022 and 2021 was 13 per cent and 17 per cent higher, respectively, than BC Hydro's average residential monthly bill. Using this measurement, BC Hydro ranks first this year, reflecting both low rates and a relatively milder climate. BC Hydro's ranking in 2021 was second.



Table 13 Ranking of Average Residential bill

Ranking	Utility	2022 Avg. bill/ month (\$)	2022 Avg. kWh/ month	Utility	2021 Avg. bill/ month (\$)	2021 Avg. kWh/ month
1	BC Hydro (Vancouver, BC)	92	839	Hydro Ottawa (Ottawa, ON)	87	630
2	Hydro Ottawa (Ottawa, ON)	92	630	BC Hydro (Vancouver, BC)	90	828
3	Hydro Quebec (Montreal, QC)	104	1,364	Hydro Quebec (Montreal, QC)	106	1,403
4	Manitoba Hydro (Winnipeg, MB)	132	1,319	Manitoba Hydro (Winnipeg, MB)	126	1,306
5	Newfoundlan d Power & Labrador Hydro (St. John's, NL)	166	1,235	Newfoundlan d Power & Labrador Hydro (St. John's, NL)	168	1,264
6	NB Power (Moncton, NB)	180	1,350	NB Power (Moncton, NB)	176	1,350



BC Hydro Electricity Rate Comparison Annual Report

Report No. 15

Attachment B

Ministerial Order No. M 167

PROVINCE OF BRITISH COLUMBIA

REGULATION OF THE MINISTER OF ENERGY AND MINES AND MINISTER RESPONSIBLE FOR HOUSING

Clean Energy Act

Ministerial Order No.

I, Rich Coleman, Minister of Energy and Mines and Minister Responsible for Housing, order that the Rate Comparison Regulation, B.C. Reg. 140/2009, is repealed, and the following Rate Comparison Regulation is made.

RATE COMPARISON REGULATION

Definition

- 1 In this regulation:
 - "Act" means the Clean Energy Act;
 - "applicable rates" means, with respect to a public utility's electricity rates, the average monthly bill for electricity, but not any other terms and conditions of those rates.

Report requirements

- 2 In a report to be provided to the minister under section 8 (4) of the Act, the authority must do all of the following:
 - (a) include a comparison with at least one public utility in each of at least fifteen other jurisdictions in North America, including all of the following:
 - (i) the provinces of Alberta, Quebec, Ontario and Manitoba;
 - (ii) the states of Washington, Oregon and California;
 - (b) compare the previous year's applicable rates for residential, commercial and industrial customers with similar rates of the public utilities referred to in paragraph (a);
 - (c) express the monetary comparisons in Canadian currency;
 - (d) provide the authority's previous 5 years of applicable rates.

DEPOSITED

JUN 2 8 2011

B.C. REG. 119/2011

JUN 2 8 201

Date

Act and section:

Other:

Minister of Energy and Mines and Minister Responsible for Housing

(This part is for administrative purposes only and is not part of the Orden) Authority under which Order is made: Clean Energy Act, S.B.C, 2010, c. 22, s. 37 (f) Utilities Commission Act, R.S.B.C. 1996, c. 473, s. 125.1 (4) (c); M114/2009 June 9, 2011 Resub R/77/2011/27

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