



Quick Facts

For the year ended March 31, 2004

Corporate Mission

BC Hydro's corporate mission is to provide integrated energy solutions to our customers in an environmentally and socially responsible manner.

Business of BC Hydro

British Columbia Hydro and Power Authority is a provincial Crown corporation. As one of the largest electric utilities in Canada, BC Hydro serves more than 1.6 million customers in an area containing over 94 per cent of British Columbia's population. Between 43,000 and 54,000 gigawatt hours of electricity are generated annually, depending upon prevailing water levels, with more than 80 per cent produced by major hydroelectric generating stations on the Columbia and Peace rivers. Electricity is delivered to customers mainly through an interconnected system of nearly 73,000 kilometres of transmission and distribution lines. BC Hydro's Board of Directors is appointed by the Lieutenant-Governor in Council and is responsible for the overall direction of the company.

Facts of Interest

- Net Income of \$98 million (\$77 million before transfers from the Rate Stabilization Account) was \$146 million better than the \$48 million loss (\$70 million loss before transfers from the Rate Stabilization Account) originally projected in the Service Plan, primarily as a result of lower finance charges, higher electricity trade margins at Powerex and higher domestic revenues.
- Precipitation was very low across the province during summer 2003. In contrast, October brought heavy rains and flooding to many parts of B.C. Precipitation over the winter was average to below normal. Snowpack varied from well below average to average across the province.
- The major fires in the Interior region in the summer of 2003 disrupted service to many customers, with a negative impact on system performance. BC Hydro crews and support staff performed in an exemplary manner to restore power to fire-ravaged communities and to rebuild damaged facilities.
- BC Hydro made the first revenue requirements application in 10 years in December. We are in a public hearing before the British Columbia Utilities Commission, seeking a rate increase that will safeguard our ability to deliver reliable power to our customers, while keeping our rates among the lowest in North America.

Energy Facts

Definitions

power = how much electricity is consumed by customers (or produced by power generators) at any instant in time

energy = how much is consumed (or produced) over a period of time

capacity = the maximum sustainable amount of energy that can be produced or carried at any instant

Example: a car engine's horsepower rating is its energy capacity.

Units of power

- 1 kilowatt (kW) = 1,000 watts
- 1 megawatt (MW) = 1,000 kilowatts (or 1 million watts)
- 1 gigawatt (GW) = 1,000 megawatts (or 1 billion watts)

Units of energy

- 1 kilowatt hour (kWh) = 1,000 watts for 1 hour (1,000 watt hours)
- 1 megawatt hour (MWh) = 1,000 kWh
- 1 gigawatt hour (GWh) = 1,000 MWh

(Note that the abbreviations for prefixes follow metric convention, so kilo is k, while mega and giga are capitalized. The abbreviation for watt is W.)

Power to Energy ratios — rule of thumb

- Power to energy — for thermal electric: MW x 8 = GWh per year
- Power to energy — for large hydro: MW x 5 = GWh per year

Comparison statistics

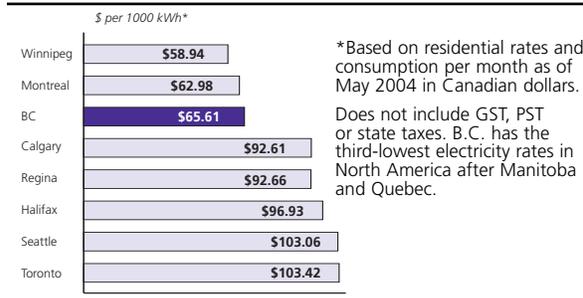
- The average household in BC Hydro service area uses about 10,000 kWh per year.
- A large industrial customer, such as a pulp mill, might use 400 GWh in a year, equal to the consumption of 40,000 households.
- A typical large office building of 20–25 storeys will consume 5 GWh in a year, equal to the consumption of 500 households.
- A large "big box" retail outlet will consume 3.5 GWh per year, or roughly the equivalent of 350 households.
- 1 MWh of electrical power contains the same amount of energy (work capability) as:
 - 0.6 barrels of oil
 - 90 cubic metres of natural gas
- 1 foot of water in Williston Reservoir is on average about 200 GWh per year
- A 1 MW micro hydro plant produces about 5 GWh per year of green energy

Financial Information (in millions)

	2004	2003
Revenues ¹	\$ 3,424	\$ 3,107
Net income	\$ 98	\$ 418
Capital and Demand-Side Management program expenditures	\$ 637	\$ 741
Capital assets	\$ 9,844	\$ 9,793
Net long-term debt	\$ 6,853	\$ 6,849
Rate stabilization account	\$ 0	\$ 21

¹ During fiscal 2004, in response to changes in United States accounting standards, BC Hydro amended its accounting policy related to revenue recognition for electricity trade activities that are supported by derivatives such as swaps, forward sales and options. Revenues associated with these derivatives are presented on a net basis in fiscal 2004 and 2003. Revenues for fiscal years prior to 2003 have not been restated.

Residential Rate Comparisons



Operating Statistics

	2004	2003
<i>Customers at March 31</i>		
Residential	1,466,035	1,442,597
Light industrial and commercial	186,944	183,188
Large industrial	136	133
Other	3,198	3,092
Electricity trade	173	176
Total	1,656,486	1,629,186
<i>Electricity sold (gigawatt hours)</i>		
Residential	15,646	15,024
Light industrial and commercial	17,175	16,757
Large industrial	15,505	15,179
Other	1,825	1,717
Electricity trade	28,373	31,182
Total	78,524	79,859
<i>Revenues (in millions)</i>		
Residential	\$ 960	\$ 923
Light industrial and commercial	912	893
Large industrial	525	516
Other energy sales	89	88
Miscellaneous	67	55
Electricity trade	871	632
Total	\$ 3,424	\$ 3,107
<i>Average revenue (cents per kWh)</i>		
Residential	6.1	6.1
Light industrial and commercial	5.3	5.3
Large industrial	3.4	3.4
Other energy sales	4.9	5.1
Electricity trade	6.8	6.2
<i>Average annual kilowatt hour use per residential customer</i>	10,761	10,476
<i>Peak one-hour demand, integrated system (megawatts)</i>	9,619	8,481
<i>Lines in service</i>		
Distribution (kilometres)	54,617	55,734
Transmission (circuit kilometres)	18,300	18,284
Number of employees ²	4,406	6,013

² Includes full and part-time employees. On April 1, 2003, approximately 1,600 employees were transferred to Accenture Business Services of British Columbia.

Generating Capacity in kW

Hydroelectric*	Kilowatts (kW)
Aberfeldie.....	5,000
Alouette.....	9,000
Ash River.....	28,000
Bridge River.....	466,000
R Buntzen.....	72,800
Cheakamus.....	157,000
R † Clayton Falls.....	2,000
Clowhom.....	33,000
Elko.....	12,000
Falls River.....	7,000
R John Hart.....	126,000
Jordan River.....	170,000
Kootenay Canal.....	580,000
Ladore.....	47,000
La Joie.....	25,000
Mica.....	1,805,000
V Peace Canyon.....	694,000
R Puntledge.....	24,000
V Revelstoke.....	1,980,000
Ruskin.....	105,000
R Seton.....	48,000
Seven Mile.....	790,000
V Shrum, G.M.....	2,730,000
R Shuswap.....	6,000
Spillimacheen.....	4,000
V R Stave Falls.....	91,000
R Strathcona.....	64,000
R Wahleach.....	64,000
Walter Hardman.....	8,000
Whatshan.....	54,000
	10,206,800

Thermal

Burrard.....	950,000
Fort Nelson.....	49,400
Prince Rupert.....	46,000
	1,045,400

Diesel Generation

† Ah-Sin-Heek.....	7,200
† Anahim Lake.....	3,650
† Atlin.....	2,650
† Bella Bella.....	3,300
† Dease Lake.....	3,980
† Eddontenajon.....	2,200
† Masset.....	11,374
† Sandspit.....	9,150
† Telegraph Creek.....	2,300
	45,804

Total Capacity 11,298,004

* Maximum sustained generating capacity
R Has recreational area
V Has visitor centre
† Non-integrated area (NIA)

Transmission Lines in Service

	Circuit Kilometres
500 kV lines.....	5,675
360, 287 and 230 kV lines....	4,121
138 kV lines.....	4,743
60 kV lines.....	3,761
Total.....	18,300

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