



Quick Facts

For the year ended March 31, 2005

Corporate Purpose

BC Hydro's corporate purpose is to provide reliable power, at low cost, for generations.

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 over 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 was \$402 million, an increase of \$291 million from the year before. This resulted in a return on equity of 14.24 per cent, compared with 3.74 per cent for fiscal 2004.
- On October 29, 2004, the British Columbia Utilities Commission issued its decision on BC Hydro's Revenue Requirements Application of December 15, 2003. BC Hydro was entitled to a rate increase of 4.85 per cent effective April 1, 2004. As a result, BC Hydro was able to earn a level of net income that is more reflective of the allowed return on equity under regulation.
- BC Hydro reaffirmed its commitment to the environment with about 61 per cent of its incremental load acquired this year from BC Clean energy sources.
- Power Smart programs produced cumulative annual electricity savings of over 3,600 GWh. This is roughly equal to the electricity needs of over 360,000 homes, or the output of one-and-a-half 250 MW natural gas-fired generating stations.
- Operational efficiencies and facility upgrades through the Resource Smart program are now contributing over 1,200 GWh a year in reliable energy, equivalent to about half the output of a 250 MW generating plant.

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's 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)

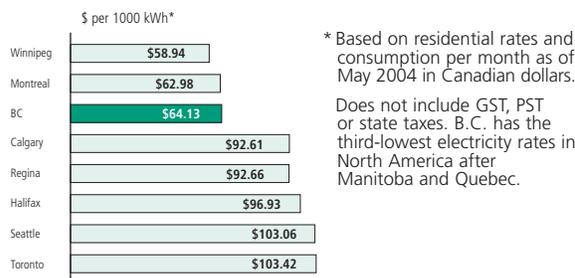
For the years ended or as at March 31	2005	2004
Revenues ¹	\$ 3,725	\$ 3,424
Net income	\$ 402	\$ 111
Capital asset and deferred expenditures ²	\$ 612	\$ 637
Capital assets	\$ 9,982	\$ 9,900
Net long-term debt ³	\$ 6,627	\$ 6,853

¹ During fiscal 2004, in response to changes in United States accounting standards, BC Hydro amended its accounting policy related to revenue recognition for 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.

² Capital asset and deferred expenditures include non-cash items.

³ Consists of long-term debt, including the current portion, net of sinking funds and cash and cash equivalents.

Residential Rate Comparisons



Operating Statistics

For the years ended or as at March 31	2005	2004
Residential	1,484,339	1,462,079
Light industrial and commercial	187,313	185,065
Large industrial	138	136
Other	3,265	3,202
Trade	203	173
Total	1,675,258	1,650,655
<i>Electricity sold (gigawatt hours)</i>		
Residential	15,814	15,646
Light industrial and commercial	17,459	17,175
Large industrial	16,177	15,505
Other	1,755	1,825
Trade	29,706	28,373
Total	80,911	78,524
<i>Revenues (in millions)</i>		
Residential	\$ 1,016	\$ 960
Light industrial and commercial	967	912
Large industrial	573	525
Other energy sales	88	89
Miscellaneous	60	67
Trade	1,021	871
Total	\$ 3,725	\$ 3,424
<i>Average revenue (cents per kWh)</i>		
Residential	6.4	6.1
Light industrial and commercial	5.5	5.3
Large industrial	3.5	3.4
Other	5.0	4.9
Trade ¹	7.1	6.8
<i>Average annual kilowatt hour use per residential customer</i>		
	10,722	10,761
<i>Peak one-hour demand integrated system (megawatts)</i>		
	9,437	9,619
<i>Lines in service</i>		
Distribution (kilometres) ²	55,254	54,617
Transmission (circuit kilometres)	18,286	18,300
Number of employees ³	4,396	4,406

¹ The method used to calculate the trade revenue per kilowatt hour is based on gross trade revenues.

² The method used to track the distance of the three-phase underground power lines was changed in fiscal 2004.

³ Includes full- and part-time employees of BC Hydro, its subsidiaries and British Columbia Transmission Corporation.

Generating Capacity in kW

Hydroelectric*	Kilowatts (kW)
Aberfeldie.....	5,000
Alouette.....	9,000
Ash River.....	28,000
Bridge River.....	475,000
R Buntzen.....	72,800
Cheakamus.....	158,000
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.....	65,000
R Wahleach.....	64,000
Walter Hardman.....	8,000
Whatshan.....	54,000
	10,217,800

Thermal

Burrard.....	950,000
Fort Nelson.....	47,000
Prince Rupert.....	46,000
	1,043,000

Diesel Generation

† Ah-Sin-Heek.....	6,600
† Anahim Lake.....	3,650
† Atlin.....	2,550
† Bella Bella.....	3,300
† Dease Lake.....	3,980
† Eddontenajon.....	2,200
† Masset.....	11,374
† Sandspit.....	10,150
† Telegraph Creek.....	2,300
† Other.....	3,525
	49,629

Total Capacity..... 11,310,429

* 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....	4,045
138 kV lines.....	4,810
60 kV lines.....	3,756
Total.....	18,286

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