

B.C. HYDRO'S 2019/20 ANNUAL REPORT: DOMESTIC SALES CONTINUE TO DECLINE BUT HIGH PROFIT ASSURED BY RELIANCE ON REGULATORY ACCOUNTING

Last week the government finally released B.C. Hydro's annual report for 2019/20.¹ This paper reviews some of the financial and operational highlights of the year. The Appendix contains summary tables of certain aspects of the financial report.

1.0 Financial Summary

The net income of \$705 million was achieved by relying on a total of \$1.06 billion in various transfers to regulatory accounts. Without these transfers the corporation would have suffered a loss of \$360 million.²

The largest increase in the regulatory transfers was the result of a COVID-19 related decline in interest rates late in the fiscal year. The lower interest rates caused a large increase in the hedging loss liabilities. This is discussed in Section 5.

BC Hydro's increase in regulatory assets allowed it to record total equity (assets less liabilities) of \$5.65 billion. The year-end net regulatory asset balance of \$5.0 billion represents 88.5% of the total equity, up from 86.1% in the prior year. In the absence of regulatory accounting the net equity would have been only \$650 million.

2.0 Domestic Sales Continue to Decline

BC Hydro reported a 4.9% (2,530 GWh) decline in domestic power sales, due primarily to a major drop in surplus sales (down 2,048 GWh). Total domestic sales revenue was only \$39 million less than the prior year due to a 1.76% increase in rates effective 1 April 2019.

The decline in domestic sales maintains a longer-term trend. During the last four years total domestic sales (including surplus sales) declined by 5,187 GWh (9.1%). While residential and commercial sales rose modestly (up 3.8% and 1.5% respectively) large industrial and surplus sales declined. During this period total sales revenue rose by

¹ <https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/accountability-reports/financial-reports/annual-reports/BCHydro-Annual-Service-Plan-Report-2019-2020.pdf> The external auditor signed off the financial statements on June 4, 2020.

² Ibid. p. 41.

13.4% with larger increases in revenue from residential and commercial customers partially offset by a lower increase for large industrial customers and the practical elimination of surplus sales revenue.³

Unlike previous years, BC Hydro did not provide the average annual water inflow, other than to say that the system storage was higher than in the previous year.⁴

3.0 Trade Income

Although the volume of trade electricity increased by approximately 5%, the total trade revenue declined by 23.4% (down \$268 million), as average prices declined by almost 26%.

4.0 Hydro Reducing Hydro Generation from Owned Dams

During the last four years Domestic electricity sales (including line loss) declined by approximately 6,250 GWh, or 10%; see Appendix Table A-5. During the same period, the electricity generated by BC Hydro dams (and some thermo generation) declined by 9,000 GWh, or 18.2%. Independent Power Producer generated power increased marginally by 156 GWh (1.1%). Purchases from other sources increased by some 2,600 GWh during these four years.

4.0 Regulatory Accounts

As of 31 March 2020, the net balance in the regulatory accounts was \$5.01 billion, an increase of \$748 million from the prior year. The main additions and reductions in the regulatory accounts for the year were:

Regulatory Account	\$=million	Reason
Change in Liabilities		
Heritage Deferral	Down 185	Offset 2019 rate increase
Trade Income Deferral	Down 87	Offset 2019 rate increase
Change in Assets		
Debt Management	Up 790	Offset increase hedging liabilities
Non-Current Pension	Down 276	Higher discount rate, no MSP payments

Source: B.C. Hydro 2019/20 Annual Report, p. 68.

The \$5.01 billion in net regulatory assets represents about 88.5% of the recorded equity. The ratio of net regulatory assets to equity was 86.1% in 2018/19, and 94.4% in 2017/18.

³ BC Hydro explains that low water inflows and storage levels resulted in the drop in surplus sales, see page 22.

⁴ See page 25.

5.0 Interest Rate Hedging Liabilities Jump by \$790 Million

In 2016/17, BC Hydro began to purchase contracts to hedge against increases in the interest rate for future debt. The notion was that as rates increased the hedges would offset the additional cost of borrowing. The regulator agreed to create a new Debt Management Regulatory Account (DMRA) to record the expected gains. Unfortunately, rates began to decline resulting in growing liabilities.⁵

In 2019/20, as interest rates dropped to stimulate economic activity, the balance in the DMRA grew by \$790 million to total \$953 million. As of 31 March 2020, the hedging contracts totalled approximately \$5.0 billion, approximately \$1.0 billion less than the prior year.⁶ The hedging liabilities would decline or be eliminated if interest rates were to significantly increase. An increase appears unlikely as central banks are predicting low rates for some time to come.⁷ Therefore, the hedging losses are depriving ratepayers of the financial benefits of lower borrowing costs.

6.0 The COVID-19 Impact

BC Hydro states that the economic downturn resulting from the COVID-19 pandemic did not materially affect the 2019/20 results.⁸ This is not true because the significant decline in the Bank of Canada interest rates caused the large increase in the hedging liabilities recorded in the DMRA.

Earlier BC Hydro advised the BCUC that it will record any COVID-19 revenue decline for 2020/21 as a regulatory asset to protect the profit target:

The extent and duration of the impacts of the pandemic on BC Hydro's revenues and costs are uncertain. However, BC Hydro's regulatory accounts will mitigate much of the uncertainty caused by the pandemic by capturing variances from forecast which can then be returned to or recovered from customers in the next test period in accordance with existing BCUC orders. For example:

- Any impacts to cost of energy or load (e.g., potential declines in the commercial sector load) will be recorded in the Cost of Energy variance accounts.⁹

⁵ More background can be found in http://www.bcpolicyperspectives.com/media/attachments/view/doc/commentary_hydro_hedging_8_october_2019_2/pdf/commentary_hydro_hedging_8_october_2019_2.pdf

⁶ See page 88.

<https://financialpost.com/executive/executive-summary/posthaste-super-low-interest-rates-could-be-around-for-the-next-4-years-if-these-economists-are-right>⁷

⁸ <https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/accountability-reports/financial-reports/annual-reports/BCHydro-Annual-Service-Plan-Report-2019-2020.pdf> p. 21.

⁹ https://www.bcuc.com/Documents/Arguments/2020/DOC_57721_2020-04-01-BCH-FinalArgument.pdf Pdf 254 or Pdf 264/266.

The writer is a retired senior BC government public servant whose paper describing the BC government’s manipulation of the finances of BC Hydro from 2008 to 2014 was published by *BC Studies* in November 2016. *BC Studies* published his paper on the 40-year financial history of ICBC in 2013. He is an intervener in the BC Utilities Commission’s current reviews of ICBC’s and B.C. Hydro’s rate requests.

APPENDIX

Compared to the prior year, total revenue declined by 4.6%, as an average 1.76% increase in domestic prices was offset by a decline in the volume of domestic electricity sold and a significant drop in trade revenue. Expenditures increased by 12.7%, with a major loss in debt hedging (finance charges) being responsible for most of the increase.

The write-off of the Rate Smoothing Regulatory Account in 2018/19 distorts the year-over-year comparison of the change in the net income.

Table A1 – REVENUE AND EXPENDITURE SUMMARY (\$=million)

	2018/19	2019/20	Difference	Per Cent
Revenue				
Domestic	5,432	5,393	(39)	(0.7)
Trade	1,141	876	(265)	(23.2)
Total	6,573	6,269	(304)	(4.6)
Expenditures				
Domestic Energy	1,557	1,742	185	11.9
Trade Energy	624	628	4	0.6
Amortiz. & Depreciation	949	988	39	4.1
Grants & Taxes	266	254	(12)	(4.5)
Finance Charges	1,196	1,645	449	37.5
Other Operating Costs	1,292	1,372	80	6.2
Total	5,884	6,629	745	12.7
Net Income Before Reg. Acc.	692	(360)	n/a	n/a
Regulatory Account Change	(1,120)	1,065	n/a	n/a
Net Income	(428)	705	n/a	n/a
Net Regul. Acc’t Balance	4,257	5,005	748	17.6
Equity	4,947	5,654	707	14.3
Ratio	86.1%	88.5%		

Net Long-Term Debt	22,101	23,354	1,253	5.7
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Source: B.C. Hydro 2019/20 Annual Report page 41 and note 5.

Table A2 shows that domestic electricity sales declined by 2,530 (4.6%) compared to the prior year. The practical elimination of surplus sales was the primary reason for the overall loss. Over two years surplus sales dropped by some 6,000 GWh, reflecting the lower production caused by lower water inflows in 2018/19 and 2019/20.

Table A2 – SALES INCOME by CUSTOMER CLASS (\$=million)

	2018/19	2019/20	Difference	Per Cent
Residential	18,000	17,993	(7)	--
Lt. Ind. & Commercial	19,007	18,692	(315)	(1.7)
Large Industrial	13,896	13,398	(498)	(3.6)
Total	50,903	50,083	(810)	(1.6)
Surplus Sales	2,230	182	(2,048)	(91.8)
Other Sales	1,510	1,848	338	22.3
Total Domestic	54,643	52,113	(2,530)	(4.6)
Trade	28,158	29,573	1,415	5.0
Total	82,801	81,686	(1,115)	(1.3)

Source: B.C. Hydro 2019/20 Annual Report p. 22.

The \$734 million decrease in capital expenditures for growth in 2019/20 is a result of the purchase of the remaining 2/3rds of the Waneta Dam in the prior year. B.C. Hydro continues to spend significant amounts on capital projects for growth and expansion, mostly for the construction of the Site C dam project.

Table A3 – CAPITAL EXPENDITURES (\$=million)

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Sustaining	1,005	1,136	1,286	1,190	965	955
Growth	1,164	1,170	1,158	1,283	2,861	2,127
Total	2,169	2,306	2,444	2,473	3,826	3,082

Source: B.C. Hydro annual report, Appendix C, p. 118.

Free cash flow is a measure of how much cash a business generates after accounting for capital expenditures such as buildings or equipment. This cash can be used for expansion, dividends, reducing debt, or other purposes. Table A4 shows that B.C. Hydro has not recorded a positive free cash flow for many years yet has paid dividends to the government until 2018/19.

Table A4 – FREE CASH FLOW and DIVIDEND (\$=million)

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Free Cash Flow	(910)	(1,042)	(1,186)	(398)	(1,831)	(999)
Dividend	264	326	259	159	59	0

Source: B.C. Hydro annual reports.

Table A5 shows that during the last four years domestic energy sales and line loss GWh has declined by 6,249, or almost 10%. During the same period, the electricity generated by BC Hydro assets has declined by approximately 9,000 GWh, or 18.2%.

Table A5 – 4 YEAR SOURCE OF DOMESTIC ELECTRICITY (GWh)

	2015/16	2019/20	Difference	Per Cent
Domestic Sales	57,300	52,113	(5,187)	(9.1)
Line loss	5,713	4,651	(1,062)	(15.6)
TOTAL	63,013	56,764	(6,249)	(9.9)
Owned Generation	49,567	40,554	(9,013)	(18.2)
Indep. Power Producers	14,319	14,475	156	1.1
Other	(873)	1,735	2,608	n/a
TOTAL	63,013	56,764	(6,249)	(9.9)

Source: BC Hydro annual reports, five year summary statistics for domestic sales and line charges, and management discussion of domestic energy costs.