

**DROUGHT HAMMERS BC HYDRO'S SIX MONTH FINANCIAL RESULTS**

On 31 November 2023, BC Hydro released its half-year (H1) financial report for 2023/24.<sup>1</sup> Of particular concern was the dramatic \$1.6 billion drop in Trade revenue, which was only partially offset by a \$0.5 billion decline in Trade energy expenditures. This paper will survey the key components of the six-month report.

**Summary of Financial Results**

Table 1 provides a high-level summary of the results for the first six months of the current year compared to last year at the same time. The most obvious change is the reduction in Trade revenue and costs, which is discussed in the next section.

**TABLE 1—HALF YEAR REVENUE AND EXPENDITURES (\$=million)**

|                    | H1 2022 | H1 2023 | Difference |
|--------------------|---------|---------|------------|
| Revenue -Domestic  | 2,480   | 2,557   | 77         |
| -Trade             | 1,991   | 381     | (1,620)    |
| Total              | 4,471   | 2,938   | (1,533)    |
| Expenditure-Energy | 1,357   | 858     | (499)      |
| -Other             | 1,863   | 1,860   | (3)        |
| Total              | 3,220   | 2,718   | (502)      |
| Initial Net Income | 1,251   | 220     | (1,031)    |
| Regulatory Transf. | (1,159) | (152)   | 1,007      |
| Net Income         | 92      | 68      | (24)       |

BC Hydro Second quarter report 2023/24.

**Drought Impacts**

BC Hydro's electrical generation is heavily dependent on the availability of water held in its main reservoirs in the Peace River region and in the Columbia River system. Both systems have experienced low precipitation and warm weather, which rapidly depleted

<sup>1</sup> <https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/accountability-reports/financial-reports/quarterly-reports/bchydro-f24-q2-report.pdf>

the snow cap. Last year, BC Hydro’s finances benefited from the drought as it was able to export (through Powerex) electricity at high prices. Table 2 shows that for H1 last year Trade revenues exceeded costs by almost \$1.2 billion, with an excess of 3,900 GWh in net sales.

Yet for the current year the situation has reversed. Net revenues are only \$56 million, and the surplus in GWh has turned into a 5,400 GWh deficit. This deficit is after accounting for an estimated 1,800 GWh in electricity sales from the Canadian Entitlement (CE) of the Columbia River Treaty.<sup>2</sup> In other words, without the CT sales the H1 deficit would have been approximately 7,200 GWh.

**TABLE 2—H1 TRADE REVENUE AND COSTS (\$-million)**

|         | ----- 2022 ----- |        |        | ----- 2023 ----- |         |        |
|---------|------------------|--------|--------|------------------|---------|--------|
|         | \$               | GWh    | \$/MWh | \$               | GWh     | \$/MWh |
| Revenue | 1,991            | 19,628 | 101.68 | 381              | 12,286  | 88.58  |
| Cost    | 810              | 15,688 | 59.39  | 325              | 17,671  | 62.87  |
| Profit  | 1,181            | 3,940  | 42.29  | 56               | (5,385) | 25.71  |

Source: BC Hydro Second quarter report 2023/24.

BC Hydro acknowledges the impact of the low water conditions in its report:

Water inflows to the system for the six months ended September 30, 2023 were significantly below average and lower than the same period in the prior fiscal year. The below average water inflows were due to below average 2022/23 snowpack and persistently dry conditions across BC Hydro’s basins over the summer and start of fall. As a result of the lower water inflows, BC Hydro purchased more energy from the market to meet domestic load requirements.<sup>3</sup>

System energy storage is tracking below the ten-year historic average due to below average inflows across the second half of fiscal 2023 [2022/23] through second quarter of fiscal 2024 [2023/24]. System energy storage at September 30, 2023 was lower than at September 30, 2022.<sup>4</sup>

Unfortunately, BC Hydro did not quantify the shortfall. However, at a recent meeting of the Peace Williston Advisory Committee BC Hydro officials painted a more dire picture. They noted that 2023 was the driest year since record keeping began in the 1940’s, and

<sup>2</sup> I estimated 1,800 GWh assuming an annual total of 4,750; see [https://www.bcpolicyperspectives.com/media/attachments/view/doc/commentary\\_columbia\\_river\\_treaty\\_24\\_november\\_2023/pdf/commentary\\_columbia\\_river\\_treaty\\_24\\_november\\_2023.pdf](https://www.bcpolicyperspectives.com/media/attachments/view/doc/commentary_columbia_river_treaty_24_november_2023/pdf/commentary_columbia_river_treaty_24_november_2023.pdf)

<sup>3</sup> <https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/accountability-reports/financial-reports/quarterly-reports/bchydro-f24-q2-report.pdf> p. 2.

<sup>4</sup> Ibid., p. 6.

it was the first time that BC Hydro had experienced a drought in both the Peace and the Columbia river basins at the same time.<sup>5</sup>

BC Hydro has accumulated a \$1.4 billion “war chest” of cumulative Trade surpluses in its Trade Income deferral account.<sup>6</sup> It has asked the BC Utilities Commission to use these funds to lower the indicated Domestic rate increases for the next five years. Perhaps these funds should be held in case the drought conditions continue and BC Hydro is forced to import more electricity.

### **Domestic Revenue and Costs**

The six-month domestic revenues were \$ 2.56 billion, which was approximately \$77 million higher than the prior year, which mainly reflects a 2.2% rate increase. in the prior fiscal year. Domestic power sales increased by 1.5%.

The cost of energy for Domestic requirements decreased by \$10 million. However, the gigawatt hours dropped by 9,095, which reflects the low water conditions and the importation of additional power discussed earlier.

### **Interest Rate Increase–Hedging**

The increase in interest rates during the six months had a significant impact on BC Hydro’s results. The future interest rate hedging program, which had an accumulated loss of \$ 67 million (owed by ratepayers to BC Hydro) by 1 April 2023, was now in the black. By 30 September 2023 a swing of \$324 million resulted in a gain (owed to ratepayers) of \$ 266 million. Approximately \$2.9 billion in notional principle was hedged as at H1.

### **Interest Rate Increase –Non-Current Pension**

The increase in interest rates has increased the discount rate on pension obligations which reduces the cash requirement. This was partly offset by a decrease in the rate of return on pension assets.

The \$854 million in the regulatory liability on 1 April 2023 has jumped to a regulatory liability of \$1.14 billion as of 30 September 2023. While this is shown as a regulatory liability (owed to ratepayers) the funds are required to meet pension solvency rules and are not available for distribution.

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<sup>5</sup> Information from an observer at the meeting.

<sup>6</sup> <https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/accountability-reports/financial-reports/quarterly-reports/bchydro-f24-q2-report.pdf> p. 21.

## Regulatory Account Balance

The H1 results have significantly reduced the net regulatory assets (owed by ratepayers), which totalled \$480 million as of 30 September 2023, compared to \$1.47 billion as of 1 April 2023. Most of the change is explained by the changes in non-current pension costs (\$284 million), future interest rate hedging (\$333 million), and trade income (\$239 million) discussed earlier. These were offset by an increase in the non-owned cost of energy asset (owed by ratepayers).

**TABLE 3 –Net Regulatory Account Balance (\$=million)**

|                        | April '23 | H1 '23  | Difference |
|------------------------|-----------|---------|------------|
| Regulatory Assets      | 3,946     | 4,195   | 249        |
| Regulatory Liabilities | (2,479)   | (3,208) | (729)      |
| Net Assets             | 1,467     | 987     | (480)      |

Source: BC Hydro Second quarter report 2023/24, p. 21.

## Net Debt and Equity

In the first six months of the current fiscal year the net debt rose by \$1.67 billion to total almost \$28.3 billion.

Thanks to the multitude of regulatory/deferral accounts the equity rose by \$89 million to total \$7.4 billion. According to the government's second quarter report, BC Hydro is currently forecasting a \$712 million net income for the year. This is the budget amount.

## Summary

The drought conditions are a matter of concern.<sup>7</sup> If these conditions persist there will be serious repercussions for the government's efforts to mandate the use of more clean electricity to meet its net zero emissions objective. These conditions will also drive higher Domestic rates because higher cost imported electricity will be required to meet Domestic demand.

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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 reviews of ICBC's and BC Hydro's rate requests.

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