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Reassessment of Site C Financial Viability

Updating Site C Cost Estimates for Seismic and Design Changes
Updated to March 21, 2021

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Last week, BC Hydro released the long-delayed Site C report entitled "Public Annual Report No. 5 and Quarterly Progress Report No. 20." A column in the Vancouver Sun remarked on the report's inadequacy, saying "only B.C. Hydro could take almost 500 pages to tell you next to nothing about what you really want to know." Today, BC Hydro responded to the BCUC's questions on the last report – adding an additional 154 pages that evaded clarifying substantive issues.[1]

Since 2016, BC Hydro has released twenty-two progress reports.[2] The last progress report was issued on July 31, 2020. For unexplained reasons, the progress reports normally issued for April-June 2020 and July-September 2020 were skipped.

The July 31, 2020 report indicated a cost overrun through March 31, 2020 of $403 million with total costs as of that date of $5,127 million.[3]

In the current report, Table 15 updates the cost overrun and total costs to December 31, 2020.[4] Based on these values, at year end, Site C's cost overrun was $677 million with total costs of $6,455 million.

BC Hydro has ascribed the increase in costs and delay to the pandemic, but this explanation appears to be at odds with their figures. Pandemic related manpower reductions would reduce salaries and delay installations. While it is true that delays add to the cost of the

[1] DOC_61665_2021-03-18-BCH-Response-to-BCUC-IR1-AnnReport-No4-ProgressReport-No19
[2] The numbering and schedule of the Site C reports has been erratic. In some years, BC Hydro will release five reports. In other years, four reports are issued. Content of the reports has changed over time, but, in general, less information has been released on the Site C projects as delays and cost overruns have increased.
[3] Quarterly Progress Report No. 19 F2020 Fourth Quarter – January 2020 to March 2020, page 80.
[4] Annual Progress Report No. 5 (Combined with Quarterly Progress Report No. 20) – January 2020 to December 2020, page 106.

project in later years, the delay would reduce costs in the current period. As BC Hydro reported in the previous report:

> During the reporting period, progress on the generating station and spillways advanced on all work fronts prior to the escalation of the COVID-19 pandemic and work being scaled back at the dam site on March 18, 2020. The contractor stopped work on the generating station and spillways on March 18, 2020 and is now performing essential activities to care for the site, including concrete thermal control and water management.[5]

After work was scaled back, costs in the last nine months of 2020 increased by 26%.

The critical questions not addressed in the current report concern the state of the current schedule and budget. It was obvious from the last report that a delay of one year was most likely. Since then, two major new projects – reinforcing the dam and the installation of "no-slip" piles – have been added. The newest report hints that billions of additional costs have yet to be addressed in the $16 billion estimate – contract revisions, hedging losses, contingency and Treasury Reserves.

One month ago, we estimated percentage of completion – without the new cost overruns -- at 48% based on the $10.7 billion budget figure and 35% based on the announced but undocumented $16.0 billion budget. The large budget overruns in the past year change these estimates slightly. Based on the most recent report, the percentage of completion using the $16.0 billion budget is 40.3%. These numbers are conservative, of course, since the new report makes very clear that the $16 billion budget is speculative, at best.

Nonetheless, the project is now further from completion than it had been in 2019.

The newest report makes it very clear that future changes are to be expected:

> In the dashboard, BC Hydro has classified the overall health of the Project as "red", or at risk, specifically regarding schedule, scope and budget. This is primarily due to the increased cost and schedule pressures resulting from the global COVID-19 pandemic; the need for enhancements to the foundations of structures on the right bank; and other financial pressures identified in 2019 and 2020. The single largest cost pressure is due to the schedule and ongoing cost impacts from the COVID-19 pandemic.[6]

The "red" classification is self-explanatory – characterizing a very uncertain future.

[5] Quarterly Progress Report No. 19 F2020 Fourth Quarter – January 2020 to March 2020, page 19.
[6] Ibid., page 18.

Approved contract overruns during the same period are hard to interpret since critical materials were omitted in the most current report.[7] The large contracts have increased by $516 million since the March 2020 report. It is unclear how much of the increased costs were included in the 2020 cost overruns and how much is yet to be realized in the years to come. Since it is unlikely that manpower reductions due to the pandemic actually increased current costs, the 26% increase in the last nine months of 2020 reflected contract revisions.

Also, BC Hydro has been very secretive about the level of losses in their speculative hedging of interest rates. Previous reports have provided significantly more details. The current report simply states:

> 3.5 Internal Project Financing versus External Borrowings to Date
> To date, all Project funding has been from internal borrowings and there has been no Site C Project-specific debt issued. As part of BC Hydro's debt management strategy, BC Hydro's exposure to variable debt is managed within a board-approved range of five per cent to 25 per cent and a target of 15 per cent. <u>In addition, since fiscal 2017, BC Hydro has hedged $10 billion of its future forecast long-term debt issuances through the use of derivative contracts to lock in interest rates.</u> Updates to BC Hydro's debt management strategy as a result of the re-baselined budget will be discussed in future quarterly progress reporting.[8]

The previous report provides the same basic number for their hedging:

> To date, all Project funding has been from internal borrowings and there has been no Site C Project specific debt issued. As part of BC Hydro's debt management strategy, BC Hydro's exposure to variable debt is managed within a board-approved range of 5 per cent to 25 per cent and a target of 15 per cent. <u>In addition, since fiscal 2017, BC Hydro has hedged $10.0 billion of its future forecast long-term debt issuances through the use of derivative contracts to lock in interest rates.</u> As at March 31, 2020, $5.0 billion of hedges remained outstanding to hedge future debt issuances, hedging approximately 75 per cent of BC Hydro's forecast total borrowing requirements out to and including fiscal 2025.[9]

Since both reports indicate the same total amount of hedging, no new hedges were purchased from the end of March 2020 through the end of December 2020. As of the end of March 2020, only $5 billion of the total forward construction costs were hedged. At last

[7] Most significantly, the project graphic indicating the revised schedule and the degree of completion – shown in all previous reports – is missing from the current report.
[8] Annual Progress Report No. 5 (Combined with Quarterly Progress Report No. 20) – January 2020 to December 2020, page 107.
[9] Quarterly Progress Report No. 19 F2020 Fourth Quarter – January 2020 to March 2020, pages 80 and 81.

report, BC Hydro had lost $1.030 billion on these hedges.[10] If BC Hydro had continued hedging through to today, they would have recovered most of these losses, since interest rates have fallen 96 basis points between September 30, 2020 and today.

BC Hydro has not addressed the impact of their hedging losses on the cost of Site C. Given the end of their hedging program, this $1 billion is sunk and will not impact the decision to continue or close the Site C project. This is, of course, a cost to be borne by British Columbia tax and rate payers.

Finally, the newest reports explicitly questions whether contingency costs have been factored into the new, undocumented, budget:

> The re-baselined budget is expected to include a revised contingency allowance and reserve subject to Treasury Board's discretion. Updates will be provided in subsequent progress reports.[11]

We know that as of March 2020, 76% of the existing $858.1 million contingency had been drawn upon.[12] The cost overruns from April through December 2020 would have exhausted the remaining contingency and would have started drawing on the Treasury reserves of $708 million.[13]

The existing contingency and Treasury reserves are not available to address risk in the proposed $16 billion dollar budget. The text quoted from the most recent report indicates that contingency and reserve amounts are yet to be finalized.

In sum, the newest report indicates a very high level of cost overruns in the last nine months of last year (32%), major contract revisions ($516 million), no offset for the $1,030 million in hedging losses, and appears to indicate that the $16 billion cost for the project is still being updated as the Treasury determines the correct level of contingency and reserves.

All indications are that the current $16 billion budget is a work in progress and further revisions are likely.

[10] British Columbia Hydro and Power Authority 2020/21 Second Quarter Report, page 22.
[11] Annual Progress Report No. 5 (Combined with Quarterly Progress Report No. 20) – January 2020 to December 2020, page 101.
[12] Quarterly Progress Report No. 19 F2020 Fourth Quarter – January 2020 to March 2020, page 7.
[13] Ibid., page 72.