

Canadian Manufacturers & Exporters
ANALYSIS OF THE BC UTILITIES COMMISSION INQUIRY RESPECTING SITE C DAM
November 2017

Introduction

On November 1, 2017 the BC Utilities Commission (the Commission) released its final report *Inquiry Respecting Site C*. To prepare the report the Commission investigated three separate cases. These were:

1. To proceed with the dam construction as planned.
2. To cancel the project, remediate the site and invest in alternative energy portfolios.
3. To delay the project and proceed or not at a later date.

The Commission investigated the accuracy of the information leading to BC Hydro's initial decisions, made its own estimations of the cost of each decision, and analysed the resulting risk to the ratepayer. CME would like to commend the Commission for its thorough and responsible approach to the preparation of this report.

Key Findings

As one key finding of the report, the Commission strongly advised against delaying the decision on the project to later date. This option represented the greatest risk to the ratepayer and the greatest long term cost.

With respect to the other two options however, the decision is not as clear. The Commission identified risks with both cases. The risks in each case revolved around the average load and corresponding costs. The Commission recommended scaling back BC Hydro's load projections but was also cautious in its approach to other elements of the future. It has noted that disrupting technologies could undermine the need for the Site C power, but also that such technologies could be more expensive than projected, or in the case of geothermal, have not yet been proven viable in British Columbia.

This analysis of the future cost to ratepayers included potential cost overruns if the project proceeds, and the cost of cancelling the project and remediating the site if the project does not. After including all of these issues and their potential impact on ratepayers, the BCUC very clearly states that it does not take a position on either proceeding with or cancelling the project. In fact, the key finding of the report was that: *"... the cost to the ratepayers of Site C and the Illustrative Alternative Portfolio are virtually equivalent, within the uncertainty inherent in the assumptions."*

In other words, the Commission has placed the decision firmly into the hands of government to proceed or not based on issues outside the impact on the ratepayer. Given this, there are issues outside the scope of the report that warrant proceeding with the project.

Accounting for Paradigm Shift

When estimating the future electrical loads required by British Columbia there are two key issues that were not considered either by BC Hydro or the Commission. One is the ongoing conversion to electricity of energy usage currently served by fossil fuels (transportation, home heating, and etcetera). The second is the disruptive potential of distributed, home-based micro-generation. These issues were not overlooked in error but were deliberately omitted because they represent a paradigm shift, as opposed to normal forecasting.

Although the Commission has not considered these issues it is critical that government take them into account. Given initiatives like the City of Vancouver banning the use of natural gas and the increasing pace of vehicle electrification, the shift to electrification of our transportation and move away from fossil fuels is a far more prevalent, urgent and ongoing change.

Economic Impacts

From the perspective of the manufacturing industry, this decision must be made based not just on the risk to the ratepayer, but on the risk to the economy. The negative impacts on our economy would be both immediate, for those directly related to the project, and long term, for those considering investing in British Columbia.

The economic benefits of proceeding are clear for the industry in terms of jobs and investment. Beyond the 2,000 jobs created on the site, there is also the economic boost caused by the demand for materials created by BC manufacturers. These include companies that make products like steel, bolts and fasteners, concrete, and related equipment. Many have already made business plans based on this project.

There is also a risk to the overall economy should the government decide not to proceed. Consultation with CME members indicates that, should the cancellation of major projects in BC continue, it will lead to job losses within those companies, or potentially, companies leaving BC altogether. The short-term job losses would be compounded by a longer term impact on investment, particularly in the northern regions of our province. This represents a significant risk to BC's economy.

Future Industrial Development

Another issue not considered by the Commission is the potential that long-term, firm, predictable, and relatively inexpensive power provides for future industrial development. The uncertain future of LNG development in BC has led to that no longer being considered a significant driver of usage, however there are other power heavy processing industries that BC could attract with the electricity generated by Site C.

Importantly, some of these are directly related to the development of clean energy solutions. The hydrogen and fuel cell industry is an excellent example. In conjunction with battery electric vehicles, hydrogen fuel cells will be used to power vehicles and used as range extenders in hybrids. The benefit of hydrogen is zero emissions at the tail pipe. When the hydrogen is produced from electrolysis with clean energy such as hydro, truly emission free transportation can be achieved. Further development could also come from the opportunity to export bulk hydrogen to Asia, manufactured in BC from our clean, renewable and relatively low cost hydro power.

Another industry with similar considerations is the development of solar power ingots and cells. The most important consideration for the development of such items is not access to market but instead access to power and silicon. The development of Site C might not secure such investments but cancelling it would most likely remove BC from consideration for such important industrial development.

Conclusion

The Commission report has narrowed down the government's choices. It has concluded that, within the parameters of its mandate, the decision to proceed with the project or to cancel the project would represent roughly equal risk to the province in terms of cost. Given the other issues around the paradigm shift to higher electricity usage, the risk to the economy and the potential economic development that Site C represents, the choice seems clear.

If the government proceeds with the project it provides a boost to the economy at the risk of, one day, having too much clean electrical power generation (and hence a higher cost to the ratepayer). If the government cancels the project it creates economic harm in the short term, precludes certain long term economic development opportunities and still runs the risk of not having enough clean power for our electrical future.

Recommendation:

That the Provincial Government proceed with the construction of the Site C dam.