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a) I do not think Site C is on time or on budget. The Deloitte reports paint a disturbing picture of BC Hydro's inability to correctly estimate contract costs. If the project can be said to be on time, it is only because a vast amount of contingency funds have been spent to do so. However, it appears very likely there will be additional hydrologic problems that will continue to slow progress.

b) I do not believe in pouring any more taxpayer money into this project so I do not support suspending the project.

c) As a BC taxpayer who has opposed the construction of Site C since the 1980s, I am comfortable with the termination of the project and the cost that will entail.

d) I support the statements made by Robert McCullough in his Vancouver Sun opinion column printed on September 20, 2017 on page A11 that renewable energy sources such as wind, solar, geothermal, etc. can provide cheaper sources of power more quickly than Site C. On October 4, 2017, Inside Climate News carried a story at <https://insideclimatenews.org/news/04102017/solar-power-record-growth-china-america-nrdc-iea-forecas-t-report> indicating how renewable energy was making record contributions far exceeding expectations. In addition, I believe we have not yet exploited all the efficiencies we can to reduce energy demand, something the Conference Board of Canada has voiced in a recent report. I believe in the creation of an independent Energy Saving Trust to take over job of disseminating information and grants for energy-saving and renewable energy initiatives. I do not believe this should be the purview of utilities as conservation of energy does not jive with their current business models.

e) BC Hydro's energy demand forecasts have been inflated since the 1970s. The UBC Program on Water Governance has shown there will be no demand for Site C power should it come online in 2024. A combination of greatly increased initiatives to improve energy efficiency, combined with demand reduction messages and programs and an aggressive investment in renewable energy projects will meet peak capacity and energy demands.

I was unable to be in Nelson during the BCUC public forum held on September 26. If I had been able to attend, I would have presented the following five reasons why I oppose construction of Site C:

1) Federal and provincial government approval of Site C based on false info

The report Comparative Analysis of Greenhouse Gas Emissions of Site C versus Alternatives states: "The Site C dam does not deliver energy and capacity at significantly lower greenhouse gas emissions than a fully optimized Alternative Portfolio put forward by BC Hydro (which includes wind energy). The difference in lifecycle GHG emissions, if a difference exists at all, is at most 1% of BC's current emissions."

It goes on to say this is vitally important because "Site C has more significant adverse environmental effects than any project ever reviewed under the history of the Canadian Environmental Assessment Act, including impacts on dozens of species, aquatics, vegetation, wildlife, Aboriginal use of lands and resources, and cultural heritage. The federal and provincial governments stated that the unprecedented

level of significant adverse environmental effects from Site C are justifiable, in part, because the project delivers energy and capacity at substantially lower GHG emissions than the available alternatives. Our analysis indicates this is not the case," says the report prepared for the Program for Water Governance at UBC.

2) The world needs to transition to smart and efficient energy demand

The Rocky Mountain Institute calculates that 60% of generated electricity is used by buildings. As the biggest consumers of power, buildings can literally make or break the critical transition to a low-carbon energy future, RMI concludes. Most of the homes and commercial buildings that will be in use by mid-century are already standing. On average, they need to be twice as energy-efficient by 2050. Architecture 2030 believes they can become net-zero buildings, producing as much energy as they consume.

Keeping average global warming below 2°C is both possible and practical given the rapidly falling cost of renewable energy, the Rocky Mountain Institute concludes in their new analysis *Positive Disruption: Limiting Global Temperature Rise to Well Below 2 C°*. In 2016, for example, renewables met more than half of global growth in electricity demand, and in that year alone, prices fell 37% for the lowest Mexican solar-power bids and 43% for Europe's best offshore wind bids.

"In periods of fundamental change, transitions always occur faster than either the incumbents or industry experts think is possible," said RMI Managing Director James Newcomb. "The cost reductions we now anticipate in batteries and solar photovoltaic technologies alone are enough to drive system-wide changes in electricity and transportation. These changes are triggering shifts across the entire economy at a global scale."

Hitting the below 2°C target will depend not only on accelerating the adoption of renewable energy, but on "the transformation of our energy and transportation system, and improved management of agriculture, forestry, and other land uses," PV Magazine reports. The transition scenario will entail patterns of disruption, innovation, and nonlinear change in the supply of energy, how the economy consumes energy through homes and buildings, industry, and transportation.

3) Economically feasible energy efficiency remains untapped

Despite the numerous benefits associated with energy efficiency improvements, the International Energy Agency asserts that two-thirds of economically feasible global efficiency measures remain untapped. The Conference Board of Canada's report *Doing More With Less: Energy Efficiency Potential in Canada* provides an overview of Canadian energy efficiency potential studies. It applies the studies' efficiency improvements to the National Energy Board's long-term energy forecast to determine the impact of these enhancements on future Canadian energy consumption. These energy efficiency improvements could contribute to reducing the energy intensity and the overall energy demand in Canada's residential, commercial, and industrial stationary energy uses.

Even this report, in my opinion, underestimates the speed of the technological transition and the continued exponential growth in renewable energy technologies as they reach scale. Organizations like the International Energy Agency (IEA) and U.S. Department of Energy's Energy Information Agency (EIA) have consistently underestimated future growth of not only wind and solar adoption, but also potential

energy efficiency achievements. In general, the energy economy will move from a system based on large, centralized infrastructure to one based on efficient, data-driven distributed systems.

With its many heritage homes, 42% of Nelson's single detached homes were built before 1946 compared to the provincial average of 7.5%. We must immediately begin a deep energy retrofit program to vastly improve the building stock in West Kootenay communities. Such a program could provide skilled jobs in local communities for the many graduates of Selkirk College's Industry and Trades Training program.

4) BC Hydro's long term debt a concern for ratepayers

In 2013, former BC Hydro CEO Charles Reid confirmed that in total the corporation owed almost \$70 billion: \$15 billion in long term debt, \$4.5 billion in deferral accounts, and some \$50 billion in future contractual obligations. He defended the debt, saying it would be paid back out of revenue from the corporation's customers.

In an exclusive in the March 1, 2016 Watershed Sentinel, energy researcher Arthur Caldicott detailed BC Hydro's now \$76 billion debt. By March 2017, former provincial MLA Rafe Mair accused the Liberal government of increasing BC Hydro's real debt in constant dollars by "1,337% from \$6 billion in 2005 to \$80.2 billion today".

In January 2017, Moody's Investors Services reconfirmed B.C.'s AAA credit rating, but continued to sound alarm bells about BC Hydro's finances, saying the Crown electricity provider's rising debt level is a risk to B.C.'s credit rating. "The anticipated increase in debt continues to pressure the province's rating since it raises the contingent liability of British Columbia," wrote Moody's.

Writing in The Tyee of September 13, 2017, Andrew MacLeod – quoting a BC Hydro spokesperson – says power produced using the utility's heritage assets costs around \$32 per megawatt-hour, while the average cost of energy from independent power producers is around \$100 per megawatt-hour. BC Hydro's basic residential rate is \$85.80 per megawatt-hour, meaning it is losing money on the power it buys from IPPs.

BC Hydro ratepayers cannot tolerate the kind of rate increases that will be required to pay off the corporation's debt and it is not justifiable to force future generations of ratepayers to pay for mistakes BC Hydro made before they came of age.

5) Site C negotiations with First Nations irrevocably flawed

Site C is an infringement on the rights of the First Nations' people of the Peace River Valley. From the get go, negotiations with First Nations for contravention of their treaty rights were all about compensation instead of whether the infringements on treaty rights are justified and about possible alternatives to Site C.

As West Moberly First Nation Chief Roland Willson says, "You don't consult after you make the decision. You consult to make the decision. The consultation informs the decision-making process, not the other way around."

In 1990, the Sparrow case established that government is obligated to consider what treaty rights (or

non-treaty Indigenous rights) are affected before issuing permits or developing policy. Where rights will be infringed, government is required to justify them.

That didn't happen before the main permits were issued for Site C and that was the basis for the lawsuits from the West Moberly and Prophet River First Nations. Decisions and actions on Site C are supposed to be taken in partnership with Indigenous people.

Free, prior and informed consent means Indigenous peoples are at the table from the beginning of the project and continuing all the way through – and that consent is given at each stage. That did not happen and is cause enough for Site C to be abandoned.