

The Site C Dam

We don't Need it – we can't Afford it.

(A submission to the B.C. Utilities Commission)

Dr. Adrienne Peacock, Desmond Wilson

Dear Commissioners,

As ordinary BC Hydro ratepayers we wish to make the following observations about the proposed Site C dam on the Peace River. We hope you will pay close attention to the submissions that you have received from several individuals, particularly Marc Eliesen, Dr. Harry Swain and Eoin Finn, all of whom have very specialized expertise with respect to Site C.

However, we wish to bring to your attention the following:

The need for the Power (*terms of reference (c (i) (ii))*) :

It is abundantly clear to us that BC Hydro has fallen short in making the case for the long term need for the power that Site C could produce. Their projections for the increase in demand for power over the past ten years has proven to be widely off the mark with actual power usage flat or in decline over that period, rather than escalating

at the annual 2% rate they forecasted. This does not give us confidence in Hydro's ability to accurately forecast demand for the next 20- 35 years; nor should it give much confidence to the Commission.

In our mind, it is vital that the Commission seek alternative sources for gauging future electrical demand rather than rely on the flawed speculation of BC Hydro. Many other submissions have convincingly argued that alternative demand scenarios are more likely and have eloquently pointed out the source of Hydro's error, including a failure to recognize the declining market for industrial, commercial and residential power and the unwillingness to admit that price elasticity is a major factor in determining electricity demand.

We would also draw your attention to the recently approved amendments to the BC Building Code where a new Energy Step Code has been added with the intent of radically reducing residential and commercial building energy use and GHG emissions. Under this newly approved legislation (as part of the BC Climate Action Plan) the intent is to gradually reduce energy use over the next 15 years up to a requirement for passive buildings (zero net energy) by 2032. This will have an enormous impact on future energy use in these buildings. BC Hydro was an active partner in determining this initiative --- have they also accounted for this in their demand forecasts?

Alternative Sources of Power*(terms of reference (b) (iv)) :*

Many alternatives to the old mega dams of the last century now exist. The Joint Review Panel on Site C rightly excoriated BC Hydro for

ignoring the potential for geothermal power that exists in BC, in spite of the fact that they were directed to consider this potential in the final report of the BCUC Hearings in 1983.

Similarly, the success in recent years in the operation of geoexchange systems in BC seems to have been ignored and this energy, like geothermal power, is dispatchable. Wind and solar power are increasingly being used as alternatives to other power sources and their economic viability has been attested to in other submissions. It should also be pointed out that the existing heritage dams in BC can provide the dispatchability to support to wind, solar and tidal power when and if the latter are temporarily not available.

Terms of reference 3 (b) (iv)

There seems to be a conflict in your mandate under the Clean Energy Act wherein you are expected to safeguard the ratepayers' interests while ignoring the clear alternatives that the Burrard Thermal generating station and the Columbia River Entitlement can provide. It is hard to believe that The Columbia River Treaty can be set aside on the dubious premise that there may be a few days in the year that transmission from this location may not be available, considering that this comparable power can be had for a fraction of the cost of Site C (\$25-30 per MWH vs. \$ 85-100per MWH).

Burrard Thermal exists to provide emergency relief in times of interrupted power, whether experienced through a potential interruption of Columbia River power, due to forest fires or ice storms

incapacitating transmission lines. It provided resilience to the system for the lower mainland. It has proven to be a very inexpensive backup, operating for about 10 – 12 days per year on average. It also produces inconsequential emissions of greenhouse gases in comparison to that of even one LNG plant for which relief from the Clean Energy Act has been provided.

As Dr. Swain points out in his submission, the Clean Energy Act was designed to be adjustable as the Minister and Cabinet can change requirements by regulation, and there have been many changes to accommodate the needs of government, as in, for example, the LNG facility GHG emissions. Therefore the Commission should apply the malleable nature of the Act where there is conflict between the ratepayers' interests, the public interests, and the particular requirements of the Clean Energy Act.

Affordability (*terms of reference 3 (b)(i)*) :

As other submissions have made clear, BC Hydro is close to bankruptcy with an accumulated deficit of \$23 billion and contractual obligations of some \$57 billion. Now is not the time to add yet another \$9 - \$15 billion to that debt. Clearly the massive overruns on the Northwest Transmission Line, together with the alarming miscalculations on cost for the Keeyask dam in Manitoba and the Muskrat Falls dam in Newfoundland do not bode well for the predicted costs of Site C. Is there any reason to suppose, especially given the recent geotechnical problems at the dam site, that Site C will come in at anywhere near the projected cost? Will Site C be the exception to the

general worldwide rule of massive cost overruns for dams of this scale? To build an enormously expensive project of this scale without appropriate regulatory oversight seems an abrogation of the public interest.

Opportunity Cost (*terms of reference 3 (b)*) :

Almost invariably the BC Hydro ratepayer and the BC taxpayer are one and the same. Consequently, we suggest that in adhering to your mandate to calculate the cost to the ratepayer of the three options before you, you must consider the potential revenues that could be available to the taxpayer if \$9-15 billion were spent on more economically viable alternatives. The stimulus to the economy through expending such public dollars on other much needed infrastructure with the attendant creation of long term employment opportunities is surely part of the financial equation before you. A small fraction of these sums invested in alternative energy sources would provide for a healthy return to the taxpayer (ratepayer) and secure the future energy needs of the province.

Commission's Alternatives:

In conclusion, we urge the Commission to select the option to terminate construction and remediate the site. Ken Boon has clearly explained why remediation should not be a costly effort.

To simply suspend the project would further harm the interests of the landowners who have suffered for over more than 30 years under a

flood reserve, and do irreparable damage to the Treaty Rights of First Nations people.

Respectfully submitted,

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