

TO: Mayor and Council

FROM: Councillor Harold Steves

DATE: May 29, 2015

RE: Proposed Site C Dam Project

“That the City of Richmond reaffirm its concern over the construction of the Site C Dam, and, That the City write a letter to the Province of BC requesting a moratorium on the construction and development of Site C until the end of 2017, and that the proposed project be referred to the BC Utilities Commission for review and consultation.”

Further, that copies of this resolution be forwarded to the BC Utilities Commission; and to Metro Vancouver and other Metro Vancouver communities to seek support for this request.

SUMMARY:

1) Burrard Thermal, Energy Alternatives and Site C Dam comparison:

Burrard Thermal presently operates as a peaking plant. If maintained it would continue as a peaking plant while other energy alternatives were developed and conservation practices reduced need. No estimates have been given for domestic power needs justifying construction of the Site C Dam.

Metro Vancouver Estimates:

Site C Dam: 1,100 MW is designed to produce power for 450,000 homes, capable of 880,000

Burrard Thermal: 950 MW is used as a peaking plant, capable of powering 760,000 homes

Existing Metro WTE: 20 MW producing power for 16,000 homes

New Metro WTE: 30 MW producing power for 24,000 homes

CALP Community Energy Guide Estimates (Dr. Stephen Shepherd):

Rooftop Solar potential power for 900,000 homes

Local Run of River Hydro: 7,500 homes

Industrial Energy Recovery: 7,500 homes heat energy

Livestock biogas: 17,000 homes

Forest Biomass: 26,000 homes

Wind: not calculated

Canadian Geothermal Energy Association:

Borealis Lakelse/Terrace: 15 MW

Borealis Valemount: 15 MW

Tecto Energy South Meager Creek: 15 MW

Additional geo thermal power plants can be built to meet demand

11 times as many jobs as Site C

Lowest physical and environmental footprint

Richmond District Energy: 12,000 homes heat energy with plans to expand

2) Agricultural Value of Site C land: Site C neither clean nor green

ALR Land: 9,180 acres removed from ALR, April 2015

Statutory Reserve Land: 24,620 acres (much is farmland previously removed from ALR)

Total: 33,800 acres

Class 1 & 2 alluvial soil, not affected by drought

Capable of producing food for 1 million people (Agrologist Report – Wendy Holm)

Capable of sequestering 52,000 tons of CO₂/yr

(3,500 lb/ac/yr for traditional organic agriculture - Rodale Institute; 5,000 lb/ac/yr for trees)

Fishery and environmental loss: substantial.

3) Business Case Flaws - attached



PEACE VALLEY

landowner association

Ss#2, Site 12, Comp. 19, Fort St. John, British Columbia, V1J 4M7

Via E-Mail Premier@gov.bc.ca

May 26th, 2015

The Honourable Christy Clark
Premier of British Columbia
P.O. Box 9041 Stn. Prov. Govt.
Victoria, B.C. V8W 9E1

Dear Premier Clark,

Re: Fundamental Flaws Invalidate BC Hydro's Site C Dam Business Case

I am writing to urgently request that you delay the Summer 2015 start of Site C dam construction for at least 2 years to:

- save BC ratepayers \$200 million dollars,
- fully respect Site C-related court processes now underway,
- allow time for BC Auditor General Carol Bellringer to consider a finance performance audit of the Site C final investment decision process, and
- address the very disturbing findings of respected energy economist Robert McCullough regarding the Site C business case through an open, expert and independent review of the Site C business case with full procedural safeguards.

Contrary to the statements of Energy and Mines Minister Bill Bennett, Site C is likely double the cost of other energy options

On December 16, 2014, you announced your government's approval of the Site C dam. At \$8.8 billion, Site C is the largest public infrastructure project in BC history.

We retained respected energy economist Robert McCullough to prepare an independent expert review of Site C business case assumptions. In his report, Mr. McCullough concludes:

While the cost and choice of options deserve further analysis, the simple conclusion is that Site C is more expensive – dramatically so – than the renewable/natural gas portfolios elsewhere in the U.S. and Canada. Our analysis indicates that the Site C portfolio may well be twice as costly as the renewable/natural gas portfolio adopted elsewhere. (emphasis added)

BC Hydro's financial analysis is skewed to favour Site C over alternatives

In the cover letter to his report, Mr. McCullough states:

In the course of our review we have found evidence from the U.S. Bonneville Power Administration that suggests that **British Columbia Hydro's choice of a discount rate may have differed from their usual practice**. Since this is the single most important assumption in any cost benefit study, a careful review of BC Hydro's decision to use this discount rate is in order. (emphasis added)

You and your Cabinet appear to have relied on incomplete, misleading or inaccurate advice from the staff of BC Hydro and the Ministry of Energy and Mines. Otherwise how could Minister of Energy and Mines, Bill Bennett conclude that Site C is the least cost option for BC ratepayers, as he did at the December 16th Site C technical briefing:

What I'd like to say to start with is that what has driven me as the Energy minister over this last year and a half is **what's best for the ratepayer of British Columbia, how we can acquire the power that we need at the least cost possible, and the answer turned out to be the Site C project**. (emphasis added)

Our serious concerns do not end there.

Contrary to BC Hydro statements, a 2 year delay will save ratepayers \$200 million

In January 2015, BC Hydro Commercial Manager of Site C, Michael Savidant, stated in an affidavit that Site C will cost \$175 million more if the start of project construction is delayed for one year. We conducted the attached review and found, using BC Hydro's own analysis, that a 2-year delay will save BC ratepayers approximately \$200 million, whether or not Site C ultimately proceeds:

The \$175 million cost of delay estimate contained in the Savidant Affidavit is incomplete and misleading. **It is incomplete because it does not take into account the sale of surplus Site C power at a loss until Site C's full 5,100 GWh are needed. If the construction of Site C is delayed 2 years, significant export losses will be avoided. The Savidant estimate is misleading because it is a cash cost estimate rather than a present value estimate.** Other BC Hydro cost estimates are routinely presented in present value terms to ensure comparability.

BC Hydro's analysis shows that delaying the Site C project for 2 years will result in gross savings estimated at \$317 million. After adjusting for the present value of other costs of delay, **the net savings to BC ratepayers of a 2-year delay will be approximately \$200 million.** A longer delay will very likely generate higher net savings to BC ratepayers. (emphasis added)

The Site C final investment decision ignores critical new information on geothermal energy

In apparent reliance on BC Hydro and Ministry of Energy staff advice, Minister Bennett indicated at the December 2014 technical briefing that geothermal is not a viable option and that identification of the resource can be very expensive and risky. This is directly contradicted by information provided to the BC government ~~ON~~ ^{by the} ~~the~~ ⁵⁵ Canadian Geothermal Association in November 2014 in its report entitled "Geothermal Energy: The Renewable and Cost Effective

Alternative to Site C". Please refer to the attached backgrounder for more information on geothermal; there appears to be a tacit government moratorium on hot sedimentary aquifer geothermal in Northeast BC.

Contrary to Finance Minister Mike de Jong's statements, Site C is not a green project

Most recently in April 2015, Bloomberg News interviewed Finance Minister Mike de Jong and the Minister indicated Site C is a very large green project:

Finance Minister Mike de Jong said he discussed the possibility of raising money via green bonds for the [Site C] project in meetings last week with fund managers in Boston, New York and Chicago.

"We obviously have a very large green project in Site C and we're asking, 'Is there an opportunity, what would that opportunity look like, and can you advance something along those lines without sacrificing liquidity?' " de Jong said. (emphasis added)

It is very misleading, if not untrue, to suggest that large hydro projects such as Site C are green projects for financing purposes. We contacted Jacob Securities Inc.¹, provided their SVP Research, John McIlveen² with the Bloomberg article and asked Mr. McIlveen whether or not Site C is a green project. In the attached letter dated April 28th, 2015 he stated unequivocally:

Large hydro is not green and does not qualify for green credits. This is due to the large reservoir and dam that damage the environment. (emphasis added)

Conclusion

Clearly, the final investment decision for this \$8.8 billion project contains fundamental flaws. For all of the above reasons, we ask you to act in the best interests of BC ratepayers and delay the start of Site C construction until at least Summer 2017.

In the circumstances, I respectfully request a written response from you by June 5th, 2015.

Sincerely,



Ken Boon
President
Peace Valley Landowner Association

Cc: Carol Bellringer CPA, FCA, Auditor General for British Columbia

¹ Jacob Securities Inc. is an independent full-service investment bank providing underwriting and financial advisory services to companies in the power, infrastructure, **CNCL**gy, **56**ergy and mining sectors.

² John McIlveen has 30 years experience in debt markets, private equity and public equity.