

Columbia River Power:  
Already paid for, cleaner and more  
development – friendly than Site C

Submission to the  
British Columbia Utilities Commission  
Inquiry  
Into the Financial Impact of Site C

Cameron Beck

August 30 2017

## Columbia River Power:

### Already paid for, cleaner and more development – friendly than Site C

About as much electricity as would be generated at the proposed Site C dam is already produced by a project paid for by the citizens of British Columbia. But this electricity is not being utilized in BC; instead it is sold, at rock bottom prices, to U.S. power utilities.

This submission addresses section 3 (b) (iv) of the Terms of Reference for the British Columbia Utilities Commission 2017 inquiry respecting Site C:

Given the energy objectives set out in the *Clean Energy Act*, what, if any, other portfolio of commercially feasible generating projects . . . could provide similar benefits . . . to ratepayers at similar or lower unit energy costs as the Site C project?

The project already generating about as much electricity as would be generated at the proposed Site C dam on the Peace River is the Columbia River project, a flood control and hydroelectric project built by BC Hydro and its U.S. partners on the Columbia River in the 1960s under the terms of the Columbia River Treaty.

Other submissions will identify Columbia River power among many other alternatives to Site C.

But: this alternative deserves solo billing to emphasize its significance.

The Columbia River Treaty, a detailed and legally binding treaty, maximizes the potential generation of electrical power on the river and provides BC with more power from the Columbia than would be possible if BC only developed electric power generation on its portion of the Columbia.

The treaty created a partnership between BC Hydro and U.S. power producers to maximize potential electric power generation on the Columbia River by emphasizing water storage on the upper reaches (the British Columbia portion) of the river with hydroelectricity generating turbines on the downriver (U.S.) portion of the river.

Water stored in British Columbia's portion of the Columbia River provides 1,300 MW of electrical generating capacity. Though this electricity is generated in turbines on the U.S. portion of the Columbia, the electricity is the property of the Province of British Columbia. It is identified as the Columbia River Entitlement.

Currently this power is sold on the Western North America "spot market" by BC Hydro's subsidiary, Powerex, for between \$25 and \$35 per MWh. This electricity, instead of power from Site C, could be utilized in British Columbia instead of far more expensive electricity from Site C, if and when our demand for electricity increases.

Utilizing the Columbia River Entitlement to meet any future increase in demand for electricity in BC better meets the objectives of the BC *Clean Energy Act* than would utilizing electricity from the Site C dam.

The objectives of BC's *Clean Energy Act* include the following:

- To increase electricity self-sufficiency;
- To generate at least 93% of the electricity in British Columbia;
- To ensure (BC's electricity) rates remain among the most competitive of rates charged by public utilities in North America;
- To encourage economic development and the creation and retention of jobs;
- To foster the development of First Nation and rural communities.

The purpose of the first two objectives is clearly identified in the title of the legislation, *Clean Energy Act*: the Province wants to ensure electricity utilized in B.C. is "clean" energy; electricity imported from other jurisdictions is not necessarily "clean".

Electricity belonging to BC under the terms of the Columbia River Treaty and generated in a partnership between BC Hydro and the Bonneville Power Administration, however, is as clean - and in fact, would be more clean - than electricity that would be produced by the proposed Site C dam. The Columbia River Entitlement electricity is, like the potential electricity generated at the proposed Site C dam, hydroelectricity.

But if "clean" is defined as carbon neutral, Site C is not as clean as Columbia River Entitlement electricity. The proposed Site C dam and reservoir would flood 107 kilometers of the Peace River Valley, destroying forests and releasing their sequestered carbon into the atmosphere. The proposed dam and reservoir would also eliminate future carbon sequestering forest growth.

If "clean" is given a broader definition, an avoidance of any adverse environmental impacts, then the proposed Site C dam and reservoir would be even less clean, destroying wildlife habitat and productive agricultural land.

Utilizing Columbia River Entitlement electricity would not involve any further flooding of land, and so utilizing the Columbia electricity, if and when needed, rather than developing Site C to generate approximately the same amount of electricity, is cleaner.

Clearly, utilizing Columbia River Entitlement electricity, if and when needed, does not violate the spirit and intent of the Clean Energy Act. If narrow legal minds insist the precise wording of the Act prohibits the use of this power the Act can be changed by regulation to reflect the spirit and intent of the Act.

The Act was clearly designed to be flexible. The Act gives considerable authority to the Minister and the Lieutenant Governor in Council to interpret and even make changes to provisions of the Act. The definition of self-sufficiency has already been changed once.

The third *Clean Energy Act* objective identified above - to ensure (BC's) (electricity) rates remain among the most competitive of rates charged by public utilities in North America - is an objective clearly met by Columbia River Entitlement electricity.

The fourth objective of the *Clean Energy Act* identified above - to encourage economic development and the creation and retention of jobs - is obviously met when the objective of having the lowest, or among the lowest, electricity rates in North America is achieved. Low electricity rates help to encourage economic development, job creation and job retention. The economy and jobs objective is clearly met by utilizing Columbia River Entitlement electricity.

The fifth *Clean Energy Act* objective identified above - to foster the development of First Nation and rural communities - is met in several ways by utilizing Columbia River Entitlement electricity.

Columbia River Entitlement electricity costs considerably less than would electricity generated at the proposed Site C dam, and lower cost electricity clearly benefits First Nation and rural communities throughout British Columbia.

More important, development of First Nation and rural communities in the Peace River Valley, if the threat of flooding by the proposed Site C dam is removed, will be able to emerge from decades of decline imposed by that threat to fully develop the multitude of resources offered by the Peace Valley. Wildlife habitat would be protected and could be enhanced. Tourism values would be protected and enhanced, and investments in tourism infrastructure would be encouraged.

The development of First Nation and rural communities in the valley will be greatly accelerated when the agricultural potential of the valley can at last be realized. Hundreds and eventually thousands of permanent jobs could be created when the valley's full potential to grow and process vegetable crops is achieved; the valley's soils, elevation, climate and growing season mean it can produce most of the crops produced in the Fraser valley, but with higher yields.

Additionally, development of First Nations throughout BC is better ensured when treaties with First Nations are honoured and adhered to rather than violated. A decision to use Columbia River Entitlement electricity, if and when needed, rather than violating Treaty 8 by flooding the Peace Valley, will give First Nations more confidence that most agreements arrived at with non-indigenous people will be honoured. This can only further the development of both First Nation and non-indigenous rural communities.

To summarize:

If and when British Columbia needs additional electricity, this can be provided by Columbia River Entitlement power and, in the process, achieve the key objectives of the *BC Clean Energy Act*.

Columbia River Entitlement electricity is “clean”(“cleaner” than electricity that would be generated at the proposed Site C dam), will (unlike electricity from the proposed Site C dam) ensure BC’s electricity rates remain among the lowest in North America, will use those low rates (unachievable with Site C’s high costs) to encourage economic growth, job creation and job retention, and will encourage First Nation and rural community development (unlike the proposed Site C project which would discourage First Nation and rural development across the Province and actually prevent it in the Peace Valley).