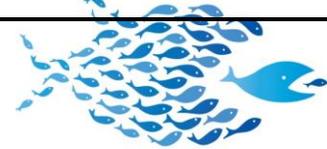


August 30, 2017

VIA EMAIL

Patrick Wruck - Commission Secretary
B.C. Utilities Commission
Sixth Floor, 900 Howe Street
Vancouver, BC Canada V6Z 2N3



BCPIAC
Public Interest Advocacy Centre

Reply to: Leigha Worth
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Dear Mr. Wruck:

Re: British Columbia Hydro and Power Authority (“BC Hydro”) – British Columbia Utilities Commission (“BCUC”) Inquiry Respecting Site C – Project No. 1598922 – BCOAPO *et al.* Submission

In Order G-120-17, the Commission invited, “members of the public to make submissions of data and analysis that are relevant to the scope of the Commission’s Site C Inquiry on or before August 30, 2017 for consideration in the Commission’s Preliminary Report.”¹ Please be advised that we make the following submission regarding the above-noted Inquiry in response to that Commission invitation on behalf of a coalition of anti-poverty, seniors’ and tenants’ organizations. These member organizations are: the British Columbia Old Age Pensioners’ Organization, Active Support Against Poverty, Council of Senior Citizens’ Organizations of BC, Together Against Poverty Society, and the Tenant Resource and Advisory Centre, known collectively in regulatory processes as BCOAPO *et al.* Together, these organizations regularly intervene in regulatory proceedings before the BCUC representing the interests of low and fixed income residential ratepayers.

Introduction – The Site C Inquiry Process

On August 2, 2017, the BC government issued Order in Council No. 244 with the following sections of the Terms of Reference defining the scope of the Site C Inquiry

¹ Exhibit A-2, Commission Order G-120-17, page 2.

Terms of reference

- 3 The terms of reference in accordance with which the commission must inquire into the matter referred to it by section 2 are as follows:
- (a) the commission must advise on the implications of
 - (i) completing the Site C project by 2024, as currently planned,
 - (ii) suspending the Site C project, while maintaining the option to resume construction until 2024, and
 - (iii) terminating construction and remediating the site;
 - (b) more specifically, the commission must provide responses to the following questions:
 - (i) After the commission has made an assessment of the authority's expenditures on the Site C project to date, is the commission of the view that the authority is, respecting the project, currently on time and within the proposed budget of \$8.335 billion (which excludes the \$440 million project reserve established and held by the province)?
 - (ii) What are the costs to ratepayers of suspending the Site C project, while maintaining the option to resume construction until 2024, and what are the potential mechanisms to recover those costs?
 - (iii) What are the costs to ratepayers of terminating the Site C project, and what are the potential mechanisms to recover those costs?
 - (iv) Given the energy objectives set out in the *Clean Energy Act*, what, if any, other portfolio of commercially feasible generating projects and demand-side management initiatives could provide similar benefits (including firming; shaping; storage; grid reliability; and maintenance or reduction of 2016/17 greenhouse gas emission levels) to ratepayers at similar or lower unit energy cost as the Site C project?

The Commission has been ordered to convene this Inquiry in order to gather and interpret the evidence necessary to advise government on the implications of three different scenarios: completing Site C as currently planned, suspending it with the option to resume construction sometime between now and 2024, and terminating the project altogether.

The Commission gave all interested parties until August 30, 2017 to provide "data and analysis relevant to the scope of the Commission's Site C Inquiry."

It goes without saying that the Commission-regulated Crown Corporations, BC Hydro and ICBC, are politically touchy subjects when costs are on the rise as they have been in recent years. Unfortunately, the official response to this was a concerning trend of government regularly and predictably sidestepping regulatory oversight when the political cost of fair and open regulatory processes was seen as too high. As Site C was one such politically-charged project, it came as no surprise when the government exempted the utility from the rigor of making a case for this dam. So, the project went ahead without the benefit of having its specifications, need, economic justification and First Nations Consultation and Accommodation put to the test. Public processes before the Commission are a way for intervenors and the Commission to test the robustness of a utility's plans: a way to identify potential problems and a way to ensure that something like this dam is truly in the public interest.

After years of regulatory oversight being circumvented, BCOAPO is gratified to see the province's newly-minted government making the effort to reevaluate the need for this project as part of the mandate it has given the Commission in OIC 244.

Even before the regulatory schedule had been set, BCOAPO knew that engaging in a full Certificate of Public Convenience and Necessity ("CPCN") process when construction remains underway would not only be impractical but ill-advised. Every day, construction progresses, contracts are signed and the dollars sunk into this project rise. Taking the year or so necessary to run a complex and controversial CPCN process while the project ploughs ahead would inevitably add millions of dollars, perhaps billions, to the ultimate price of a project whose future is now very much in doubt.

We are aware that there are those on both sides of the issue, those who support Site C and those who do not, who think the answers to the questions posed by OIC 244 are self-evident and the Inquiry is simply a pro forma exercise to facilitate that "self-evident" decision. BCOAPO strongly disagrees. The practical restrictions we have identified and the short timelines found in OIC 244 do not mean that BCOAPO is willing to simply

accept an unreasonably cursory Inquiry into what is a hugely complex project with long-reaching effects.

BCOAPO, its counsel, and its expert consultant, Mr. Harper, have participated in numerous regulatory proceedings before the Commission and as such, we are able to provide meaningful input regarding this Inquiry. However, despite that knowledge and experience, what we cannot do is “provide data or analysis that are relevant to the scope of the Commission’s Site C Inquiry,” except in the most general of terms. We, like others in this Inquiry – whether members of the public, experienced intervenors, or even the former President and CEO of BC Hydro, Mark Eliesen – are hobbled by our lack of access to the relevant information BC Hydro has provided or will provide to the Commission and its consultants.

Ideally, BCOAPO would like to see Site C construction put on hold while a full and fair public review of the various options takes place. Is this a perfect solution? No. A perfect solution would have been to have this Inquiry before we even broke ground. BCOAPO’s suggestion is an attempt to make the best of a bad situation because there are risks no matter what we do but the worst risk is not giving this matter the full consideration it is due. This would, however, require a change in the BCUC’s marching orders from Government, something BCOAPO would support and it is sure others in this process would at least consider supporting.

In the alternative, BCOAPO notes that BC Hydro is required to provide the Commission and its experts with its materials by August 30, 2017. However, there is no provision in this Inquiry’s schedule for participants to review BC Hydro’s evidence and certainly no process to test that evidence prior to the deadline for making our submissions. To date, none of the information BC Hydro has provided is on the record. There is, in our view, a need for BC Hydro’s evidence to be made publically available, and an opportunity for participants to test that evidence to then make additional informed and substantive submissions. Without that, there is very little information and data anyone but Hydro

can provide and any opinions we as expert intervenors or the public may offer regarding the project itself may be thoughtful and earnest but not well-enough informed.

Given the information imbalance as set out above, BCOAPO's submissions here are limited to our comments on the Inquiry process and the evidence that would be of assistance to the Commission in conducting this Inquiry.

Load Forecast

The importance of load forecasting to BC Hydro's operations cannot be overstated. Long term load forecasts inform the utility's planned infrastructure and spending over a twenty year horizon, informing the scope and timing of projects and with that, rates over both the long and medium term. Under normal circumstances, a regulatory process to test the needs and justification for Site C would have been based on a load forecast that represented, to the best of the utility's ability, predictions regarding its likely load and resource gaps twenty years into the future.

In our submission, any consideration of the implication of actions relating to Site C requires an examination and consideration of the load forecast.

This load forecast is specifically cited in section 3(c) of the Terms of Reference:

- (c) in making applicable determinations respecting the matters referred to in paragraphs (a) and (b), the commission must use the forecast of peak capacity demand and energy demand submitted in July 2016 as part of the authority's Revenue Requirements Application, and must require the authority to report on
 - (i) developments since that forecast was prepared that will impact demand in the short, medium and longer terms, and
 - (ii) other factors that could reasonably be expected to influence demand from the expected case toward the high load or the low load case;

While the Terms of Reference require that the July 2016 load forecast be used by the Commission in the making of its determinations, it does specifically make allowance for

the reporting of developments in factors that will impact demand in the short, medium and longer terms as well as any other factors that could affect that Load Forecast.

BCOAPO submits that the Commission should require that BC Hydro provide the following Load Forecast-related information to assist in the Inquiry:

- A survey of the variances between all BC Hydro load forecasts and actuals over the past ten to fifteen years to quantify any trend of high load forecast biases. If the Commission finds a trend towards a high bias did exist, this should be detailed in its report to government along with an illustrative downwards adjustment to the July 2016 Load Forecast to account for and offset that trend.
- A fulsome accounting of the changes in the LNG/Industrial usage on the July 2016 Load Forecast with a downwards adjustment reflecting those changes as well.

Evaluation of Risk

It is imprudent to proceed with a project that may not be economically justified, as it is BC Hydro ratepayers that will ultimately have to pay for this gamble – and the bill could be significant. This is particularly of concern for low and fixed income ratepayers, as they are already struggling to cope with dramatically and relentlessly increasing BC Hydro rates.

While the current cost estimate for Site C is \$8.8 billion, it is very likely that the final tally will be much higher. There have been a number of cost estimates developed for Site C – from the start of the permitting process in 2010 up to present. Extensive cost overruns have been the rule rather than the exception for other current large hydro projects in Canada, as was also pointed out by Mark Eliesen in his submission in this proceeding (Exhibit F13-1, p. 6-11). This trend extends well beyond Canada: a study conducted by Atif Ansar, Bent Flybjerg, Alexander Budzier and Daniel Lunn found that of 245 large dams in 65 countries that were built between 1934 and 2007, the dams suffered

average cost overruns of 96% (with overruns increasing with the size of projects) and average delay of project implementation of 44%.² Suffice to say, it is likely that the projected costs for Site C do not come close to what the final tally will be.

We submit that the Commission should conduct a survey of cost overruns in other Canadian (and North American) large hydro projects, as well as a survey of the cost of delays in other Canadian (and North American) large hydro projects. This Inquiry should then involve an assessment of risk and cost of likely delays for Site C, taking into account the potential cost impact of the significant and entrenched First Nations and environmental opposition to the project.

We further submit that the Commission should engage engineers and/or geologists capable of assessing Site C location and geologic risks of the project proceeding as planned (considering likely issues, associated costs, etc.)

BCOAPO submits that the Commission should require BC Hydro to provide the following information for the purposes of conducting this Inquiry:

- Details of each of the formal cost estimates that have been prepared for Site C – from the start of the permitting process in 2010 up to present. In each case supporting details should be provided regarding: i) the status of project at the time the estimate was produced, ii) the associated scope of the project (as defined at that point in time), iii) the associated risk register and risk management plan and iv) the contingency allowances and management reserves associated with the cost estimate, along with a delineation of the risks that these reserves and contingency amounts were meant to address.
- Variance explanations explaining the reasons for the changes in the cost estimates over time and, in particular, whether the changes were due to i) a

² Ansar, Atif and Flyvbjerg, Bent and Budzier, Alexander and Lunn, Daniel, Should We Build More Large Dams? The Actual Costs of Hydropower Megaproject Development (March 10, 2014). Energy Policy, March 2014, pp.1-14.. Available at SSRN: <https://ssrn.com/abstract=2406852>

change in scope, ii) issues that had previously been contemplated in terms of the risk register and the contingency and management reserve allowances; or iii) new issues/risks that had risen during the evolution of the project.

- In addition to the preceding, supporting details for the current cost estimate (\$8.8B) and status of the project should address the following questions:
 - Are all permits and approvals (Municipal, Provincial, Federal) in place for the project? If so, provide a list of these permits and approvals and the dates acquired. If not, what are the potential delays or cost increases that could result in acquiring any missing permits or approvals and what are the plans to mitigate any delays or cost increases if such further permits/approvals are required?
 - Have all necessary agreements/consents been reached with affected First Nations? If so, provide a list of these agreements and the dates they were concluded. If not, what are the potential delays or cost increases that could result in concluding any outstanding agreements – and what are the plans to mitigate any delays or cost increases if such further permits/approvals are required?
 - Have any labour relations issues occurred on the project (e.g. Collective Bargaining issues, work stoppages, safety concern walkouts)? Are any future problems anticipated, and if so, what are the potential delays or cost increases that could result from these concerns? What are the plans to mitigate any delays or cost increases if any such problems do occur?
 - Have there been any problems that have occurred on the project as a result of weather or location issues (e.g. due to winter work conditions and/or the remote location)? Are any future problems anticipated, and if so, what are the potential delays or cost increases that could result from these concerns? What are the plans to mitigate any delays or cost increases if any such problems do occur?
 - Have any problems occurred on the project as a result of environmental issues (e.g. sensitive terrain or watercourse areas, habitat issues for fish or wildlife)? Are any future problems anticipated, and if so, what are the potential

- delays or cost increases that could result from these concerns? What are the plans to mitigate any delays or cost increases if any such problems do occur?
- Have any problems occurred on the project as a result of geotechnical or geological conditions at the proposed site? Are conditions fully understood or is there potential for future problems to arise, and if so, what are the potential delays or cost increases that could result from these concerns? What are the plans to mitigate any delays or cost increases if any such problems do occur?
 - What is the breakdown of the budgeted costs as to those that will be incurred by BC Hydro vs. third parties?
 - Details regarding third party contracts that have been awarded to date, in terms of: i) areas of work, ii) their proportion of overall costs and iii) the risks/liabilities assumed by BC Hydro vs the third party contractor (i.e. to what extent they are fixed price contracts).
 - Status in awarding the remaining third party contracts.
 - Is a suitable contractor management structure in place with fully staffed and trained personnel who are using quantified performance management metrics?
 - What (if any) are the consequences for poor performance for both contractor and BC Hydro contract management? How are these poor performances measured, and what are the consequences for poor performance?
 - Details of total expenditures: i) to-date (i.e. most recent month available) and ii) expected as of December 31, 2017 and June 30, 2018.
 - Details as to additional costs that are likely to be incurred (in addition to expenditures to-date) if the project was terminated as of: i) December 31, 2017 or ii) June 30, 2018.

Further, the Commission should require BC Hydro to provide the following information to allow for a robust analysis of the implications of project deferral:

- Which activities/costs would have to be written off vs. which activities/costs could be retained for future “use” if the decision was taken to “mothball” or “defer” the current project with view to (potentially) completing it at a later date;

- The extent to which the above delineation is impacted by the extent of delay in re-starting/completing the project (i.e. are there critical dates after which aspects of the work that would have been completed by December 31, 2017 or June 30, 2018 would need to be redone/written-off?)
- The increase in the project's cost for each year of deferral in the in-service date, broken down as to the impact of i) capitalization of costs incurred to date (and not written-off), ii) inflation for costs yet to be incurred and iii) the cost of activities that would need to be replicated.

In our view, a rigorous cost-benefit analysis is required before the project should be allowed to proceed.

Surplus

BCOAPO submits that the Commission should consider the following as part of this Inquiry:

- If Site C creates an energy surplus, what is the true cost of Site C including the losses created by dumping that energy on the market where the spot price is not likely going to approach the cost of generation?
- Is there likely to be a sufficient market for this surplus absent a decision to incent corporations to use our excess by selling power at a loss (at the expense of BC Hydro ratepayers)?

Evaluation of Site C vs. Alternatives

As part of the Inquiry, the Commission has been asked to consider “what portfolio of generating projects and demand-side management initiatives could provide similar benefits.” In evaluating alternatives to Site C, BCOAPO submits that the Commission should consider the following:

- Based on these “alternatives” what are the relative economics (i.e., based on NPV analysis) of continuing with, deferring or cancelling Site C over the planning

horizon? These should include other resource options (e.g. IPPs and DSM). All cost-effective DSM should be included in the non-Site C portfolio(s).

- What are the critical inputs to the economic analysis (e.g., timing of the need date, future inflation and interest rates, future export prices for any surplus energy, capital and operating cost of the alternatives)
- What is the sensitivity of the results to likely variations in these critical inputs? In particular, what values/combination of values would lead to Site C not being the preferred “economic” alternative?
- What are the revenue requirement profiles, expected rate levels and overall revenue requirement NPVs for the various alternatives - i.e., continuing with, deferring or cancelling Site C over the planning horizon?
- What are the critical inputs to the revenue requirement analysis (e.g., timing of the need date, future inflation and interest rates, future export prices for any surplus energy, capital and operating cost of the alternatives)
- What is the sensitivity of the results to likely variations in these critical inputs? In particular, what values/combination of values would lead to the continuation of Site C not being the preferred option from a revenue requirement/rate level perspective?
- How do the risks of continuing with Site C as planned compare to the risk of the alternatives?

Other Legal Considerations

On August 28, 2017, the U.N. Committee on the Elimination of Racial Discrimination issued a negative report on the Site C dam and, after citing “deep concerns”, called for a full review of the project “in collaboration with Indigenous Peoples to ‘identify alternatives to irreversible destruction of Indigenous lands.’”³ While this U.N. Report is not the decision of a British Columbia court, let alone a Canadian one, its strong condemnation of the current state of affairs regarding this project and this province’s First Nations should be enough to give us pause. If nothing else, BCOAPO submits that

³ <http://www.cbc.ca/news/canada/british-columbia/site-c-un-panel-august-2017-1.4266109>

this report should prompt the Commission to consider whether it is necessary to engage in further investigation into whether BC Hydro has adequately discharged its constitutional duty to meaningfully consult and accommodate affected First Nations.

Unfortunately, the U.N. committee's report is not the only red flag regarding BC Hydro's potential legal exposure in regards to the state of its Site C First Nations engagement. Even before August 28th there was ample enough evidence of ongoing First Nations opposition to the Site C project that BCOAPO had significant concerns regarding the legal and financial risk the project poses to the utility and its captive ratepayers. The members and clients of BCOAPO's organizations are, as a matter of principal, committed to the fair treatment of First Nations Peoples consistent not only with the letter of the law but also with the spirit of Reconciliation and the level of ongoing Aboriginal opposition brings into question whether BC Hydro has discharged its legal duties in this regard.

The organizations urge the BCUC to, as part of its investigations, engage counsel to conduct a comprehensive review of the project's impacts on First Nations traditional lands and treaty rights, BC Hydro's First Nations engagement, and the legal sufficiency of the utility's consultation and accommodation process. This risk assessment could then be used to generate an opinion about the likelihood of additional legal challenges arising, a costing the challenges that have taken place thus far and an estimate of any future cases that counsel opine may arise, and an opinion of the cost, both direct and indirect of such a challenge should it be successful.

All of which is respectfully submitted,

Leigha Worth
Executive Director and General Counsel

Erin Pritchard
Staff Lawyer