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INFORMATION RELEASE – Additional information sought by Provincial Government in the Inquiry Respecting Site C
November 16, 2017

Vancouver – The British Columbia Utilities Commission (BCUC) received the attached joint letter from the Ministry of Energy, Mines and Petroleum Resources and Ministry of Finance yesterday seeking additional information in the BCUC's Inquiry respecting Site C.

The joint letter states that the ministries are supporting the government decision process surrounding the future of the Site C project. In addition to commending the BCUC for completing the Inquiry in an abbreviated timeframe, the letter appends detailed questions for the BCUC on a number of points in the Inquiry Panel's full report.

The BCUC's Inquiry into Site C was initiated by Order in Council No. 244 on August 2, 2017. The additional questions posed by the ministries do not constitute a reopening of the Inquiry. The BCUC will strive to provide clarification in a written response as soon as possible.

The BCUC is a regulatory agency responsible for oversight of energy utilities and compulsory auto insurance in the province of British Columbia. It is the BCUC's role to balance the interests of customers with the interests of the businesses we regulate. The BCUC carries out fair and transparent reviews of matters within its jurisdiction and considers public input where public interest is impacted.

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BRITISH
COLUMBIA

November 15, 2017

Ref.: 102700

Mr. David Morton
Chair
BC Utilities Commission

Email: David.Morton@bcuc.com

Re: Inquiry Respecting Site C

The Ministry of Energy, Mines and Petroleum Resources and Ministry of Finance are supporting the government decision process surrounding the future of the Site C project. On behalf of our respective Ministers, we would like to thank the BC Utilities Commission (Commission) for the report *Inquiry Respecting Site C*. Completing an inquiry of this scope over an abbreviated timeframe and with high levels of public and First Nations input is a considerable achievement.

As our ministries analyze the Commission's report, along with other implications associated with government proceeding with or terminating the Site C project, we want to ensure that we fully understand the assumptions and computations that the Commission made in the analysis of potential alternative sources of energy generation and capacity. Accordingly, we are requesting further explanation or additional information on the points listed below and in the Appendix attached to this letter.

1. Did the Commission include sunk costs (the estimated $2.1 billion that has been spent to date on the project) and termination costs (the $1.8 billion determined by the Commission) in comparing the costs to ratepayers of completing Site C against the costs of pursuing an alternative portfolio of generation resources?

   We were not able to determine whether the sensitivity analysis included on Page 17 of the report's executive summary includes sunk costs and termination costs consistently. If it does not, could the Commission advise on how including these sunk and termination costs might change the cost to ratepayers and the unit energy cost (UEC) in both scenarios?

2. In the event that government elects to terminate the Site C project, has the Commission assumed that BC Hydro would develop and finance the projects

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included in the alternative portfolio (wind, geothermal) rather than independent power producers (IPPs)?

We observe that the Commission has in some cases used BC Hydro's lower cost of capital financing to calculate the cost of the alternative portfolio presented in the report, affecting the valuation of those projects. Could the Commission offer its view of the impact that a higher cost of capital would have on ratepayers if the alternative portfolio were developed by independent power producers rather than directly by BC Hydro?

3. Government will need to consider the total cost of potential demand side management initiatives (rather than just the utility's costs) as it considers the alternatives. Could the Commission advise how the inquiry Terms of Reference led to assessing demand-side measures based on the Utility Resource Cost standard, when Total Resource Cost has been the standard for prior Commission proceedings?

4. If the Site C project were terminated, the $4 billion sunk and remediation costs would need to be recovered, and the amortization period of that recovery would affect BC Hydro rates. Could the Commission please clarify whether it assumed that that these costs would be recovered over 10, 30 or 70 years?

    - Fair and appropriate rate-setting principles for rate-regulated utilities typically aim to avoid causing future generations to pay for investments from which they will derive no benefit. From the Commission's perspective, can recovery of the sunk and remediation costs of Site C over longer periods of 30 to 70 years remain consistent with these inter-generational principles?

    - Recently it has been stated that recovering the project's sunk and remediation costs over a 10-year period would lead to a 10 per cent hike in BC Hydro rates. Is this assertion consistent with the Commission's thinking?

5. We are unaware of prior instances when anything other than BC Hydro's mid-load forecast has been used for planning purposes. For that reason, we would like to clarify:

    - Did the Commission assume lower demand for electricity (reflected in the low-load forecast used in the report) because it is forecasting a period of lower economic growth for the province in which major power consumers such as mining, forestry, technology and commercial sectors are in decline?

    - Does the Commission include in its load forecast the potential increased electrical power demand of meeting the province's stated objectives to reduce greenhouse gas emissions through greater electrification of our economy?

We sincerely appreciate the Commission's timely response to these questions and requests for clarification. Government has committed to making a decision on the Site C project before the end of the year. The Commission's responses to our questions will assist our ministries in better understanding the report and the assumptions that underlie it as we prepare advice to support government in making a decision that will be in the best interests of British Columbians.

Dave Nikolejsin
Deputy Minister
Ministry of Energy, Mines
and Petroleum Resources

L Wanamaker

Lori Wanamaker
Deputy Minister
Ministry of Finance

Attachment

Appendix: Detailed Questions for the Commission

We understand that while BC Hydro modelled over 60 scenarios and tested various assumptions, including a number of alternatives requested by the Commission, the alternative portfolio that the Commission included in the final report was not analyzed using BC Hydro's modelling tools. On this basis, government has asked BC Hydro to provide an assessment of the model used to develop the Commission's final alternative portfolio. BC Hydro will provide the Commission with the results of that assessment separately.

In our initial analysis of the report, our ministries have identified several areas that we would appreciate the Commission's feedback on. Several of our questions relate to the impact of certain assumptions made in the report, and how the costs of those assumptions would be recovered from ratepayers.

We understand that BC Hydro follows standards for rate-regulated utilities in its financial statements and in preparing its applications for review by the Commission. This accounting framework follows a number of principles in relation to the amortization of capital assets and the deferral of other costs for the purpose of matching recoveries from ratepayers to periods over which benefits are provided.

It would be helpful if the Commission could clarify how the choices of cost amortization and recovery periods in the Termination scenario fit within appropriate utility rate-setting principles that recognize and avoid unnecessarily transferring current utility costs to future user generations when there are clearly no longer directly-related assets or benefits being provided. Such decisions lead rate-regulated accounting practice and use of regulatory accounts, which are areas of particular interest by the provincial Auditor General as well as credit rating agencies.

The Commission's process involved some deliberations on the cost of capital. The alternative portfolio presented in the report assumes that BC Hydro will finance all new resources on its balance sheet. However, other than redevelopment of existing sites and Site C, BC Hydro has, for almost three decades, been primarily procuring new supply from competitive processes or bilateral agreements that are benchmarked to competitive processes. This effectively means that BC Hydro avoids assuming such debt on its balance sheet and only recognizes the incremental costs of new energy purchases which would include the private sector's annual debt servicing costs and equity return within approved purchase contracts.

It would be helpful to understand how the Commission assesses the impact on ratepayers of the additional debt associated with the assumptions underlying the alternative portfolio. We would particularly appreciate better understanding the Commission's approach to using BC Hydro's cost of capital for IPP projects and the approach used for the cost of capital faced by an IPP (i.e. what IPPs actually pay) and the resultant rate impacts. For example, on page 159-160, the Commission appears to conclude that IPP financing is the relevant assumption for the alternative portfolio, and the BC Hydro financing assumption should only be used for the Unit Energy Cost (UEC) analysis. However, on pages 167, 170 and Appendix C (Assumption 2), it appears that the

Commission has used BC Hydro financing (100% debt financing at a cost of 3.43%) for the alternative portfolio. If we are interpreting this correctly, we would appreciate clarification on which cost of capital should be used in analysing rate impacts.

BC Hydro has suggested that recovery in rates of sunk costs in a termination scenario should occur over a 10-year period. If the project were to continue as planned, the sunk costs, as part of the overall project costs, will be recovered over a 70-year period, consistent with the amortization of the Site C asset. The Commission model appears to exclude sunk costs in the termination scenario, and has removed those costs from the completion scenario as well. Effectively this assumes that sunk costs will be recovered through rates over 70 years if the project is terminated. Recovering costs in rates over a shorter period has a material impact on the costs of the alternative portfolio. It would be helpful if the Commission could provide an estimate of the impact on rates of using these two timeframes.

The tables on page 17 of the executive summary and page 170 in the main report include a summary of the Commission's sample scenarios showing the effect of modifying one or more variables to the resulting Net Present Value cost to ratepayers. As noted above, the Commission's alternative portfolio does not appear to include sunk costs, and sunk costs have also been removed on the continue scenario. The tables also include UECs. For the Site C scenario, the UECs reflect costs, including sunk costs, of Site C being either $10 billion or $12 billion depending on assumptions. Our review of the Commission report suggests that the alternative portfolio does not include termination costs. It would be helpful if the Commission could confirm this and provide a version of the UEC portion of the table with termination costs included in the alternative portfolio. This would help provide a consistent basis for comparing costs between the scenarios of completing or terminating the project.

It is our understanding that in previous proceedings the Commission has concluded that the Total Resource Cost (TRC) test is the appropriate way to evaluate demand side management (DSM) in comparison to other resources. In this inquiry, the Commission's model uses the Utility Resource Cost (URC) standard. We believe that using the URC may underestimate the actual cost of DSM to ratepayers. It would be helpful for us to understand the Commission's rationale in choosing a test methodology that differs from past practice. Could the Commission confirm that the TRC test remains the appropriate metric, and if so, what impact would this have on the analysis?

We have noted that the Commission has concluded that BC Hydro's low load forecast was most appropriate for an assessment of the need for the capacity of Site C. It would be helpful for us to further understand the rationale, and whether the assessment includes the load requirements needed to meet the Province's *Clean Energy Act* energy objectives of:

- Reducing greenhouse gas emissions by 2050 by 80% less than 2007 levels;
- Encouraging the switching from one kind of energy source or use to another that decreases greenhouse gas emissions in British Columbia; and,
- Encouraging communities to reduce greenhouse gas emissions and use energy efficiently.

It would also be useful to know if the Commission examined the value of "dispatchable" resources versus intermittent resources, particularly as applied to the goal of moving industrial energy requirements now and in future to low carbon electricity.
It has been government's assumption that electrification with low carbon electricity would be a key initiative to achieve greenhouse gas reductions. The provincial government is working with the Government of Canada on electricity system infrastructure investments to reduce and avoid greenhouse gas emissions, and has enabled BC Hydro to pursue electrification initiatives under the *Greenhouse Gas Reduction (Clean Energy) Regulation* under the *Clean Energy Act*. It would be helpful for our ministries to understand if the Commission has a different outlook, and if the Commission could further describe the impact on its analysis of electrification initiatives to meet greenhouse gas reduction objectives.

The report identifies an aggressive DSM program, coupled with load curtailments as a way to achieve the alternative portfolio scenario. We would appreciate further information from the Commission on how such load curtailments would practically be achieved in the natural resource sector without impairing operations, jobs and economic growth for sectors already facing trade sanctions and pressures.

We understand that BC Hydro has provided the Commission with a description of its view of what BC's economic environment would look like under a low load outlook scenario. It would helpful if the Commission could further describe its interpretation of the low load outlook. We observe that the Commission's view is that the outlook could be even lower than that presented in BC Hydro's low-load scenario, and we are interested in understanding how that outlook is based on realistic economic sustainability around which the alternative portfolio would be premised.