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INFORMATION REQUEST ROUND NO: **3 (Evidentiary Update)**
TO: BRITISH COLUMBIA HYDRO & POWER AUTHORITY
DATE: **September 19, 2019**
PROJECT NO: 1598990
APPLICATION NAME: **British Columbia Hydro and Power Authority - F2020-F2021
Revenue Requirements Application**

BC Hydro Evidentiary Update – Page 2: lines 12-19

“Updates the Cost of Energy Forecast: The Evidentiary Update replaces the October 2018 Energy Study forecast in the Application with the June 2019 Energy Study forecast, which includes actual costs for April and May 2019. Dry conditions and lower water inflows have decreased planned hydroelectric generation (water rentals) and purchases from IPPs and Long-Term Commitments, resulting in lower planned surplus sales and higher planned market electricity purchases. Further information is provided in section 1.2 below;”

- 3.1 Please clarify as to whether there are any methodology changes between the October 2018 Energy Study and the June 2019 Energy Study.
- 3.2 Does BC Hydro expect the observed ‘dry conditions and lower water inflows’ to be seasonal or short-term in nature?
- 3.3 Does BC Hydro consider the weather conditions or patterns contributing to the observed “dry conditions and lower water inflows’ an aberration to the respective (for the months of April and May) assumptions that inform the October 2018 Energy Study or the June 2019 Energy study?
- 3.4 Please confirm the year in which the Energy Study methodology, largely in its present form, was first developed.
- 3.5 Please confirm the year in which the Energy Study methodology, largely in its present form, was last revisited (incorporating changes of an appreciable magnitude).

BC Hydro Evidentiary Update – Page 2: lines 20-24

“Updates the Discount Rate for Pension Costs: The Evidentiary Update replaces the forecast discount rate of 3.83 per cent used to forecast BC Hydro’s pension costs in the Application with the actual discount rate of 3.33 per cent as of April 1, 2019. The lower discount rate has an

unfavourable impact on operating costs, as discussed in section 1.3 below;”

“Operating Costs Have Increased Due to Uncontrollable Factors

Operating costs have increased due to two factors that are outside of BC Hydro’s control:

First, the discount rate used to value BC Hydro’s pension liability has decreased from 3.83 per cent as of September 30, 2018 to 3.33 per cent as of April 1, 2019. The discount rate is driven by market conditions and is determined by BC Hydro’s external actuary. It is not controllable by BC Hydro as it is based on ‘AA’ Canadian Corporate bonds. A decrease in the discount rate results in a higher present value of BC Hydro’s pension liability. This increases BC Hydro’s current service pension costs by \$15.9 million in fiscal 2020 and \$17.1 million in fiscal 2021.

The lower discount rate also increased BC Hydro’s fiscal 2019 non-current pension costs. This increase is deferred to the Non-Current Pension Cost Regulatory Account and amortized into rates over a 13-year period, which increases the required recovery by \$40.8 million in both fiscal 2020 and fiscal 2021.”

- 3.6 Please confirm or otherwise explain, that while the setting of the discount rate itself, is outside of BC Hydro control, the anticipation of financial markets’ conditions leading to factors such as interest or discount rates (with a bearing on BC Hydro operating costs such as pension liability or debt costs) are within BC Hydro purview.
- 3.7 As well, please confirm or otherwise explain whether BC Hydro, as part of its corporate or public discussion or assessment of corporate risks, routinely develops and/or provides sensitivity analysis (describing direction and magnitude of impact) of presumed, forecasted or anticipated changes to interest or discount rates on its operating costs.

BC Hydro Evidentiary Update – Page 4: lines 7-12

“Overall, actual domestic sales revenue in April and May 2019 was lower than forecast due to warm weather, reduced use per account and lower consumption at the step two rate, which resulted in lower residential revenue. Large industrial revenue was also lower due to delayed commercial operation dates for new cryptocurrency customers and lower production in the oil and gas sector because of poor market conditions.”

- 3.8 Please provide the difference (in GWh) between forecasted and actual consumption in the oil and gas sector, for the months of April and May 2019.
- 3.9 Please present the difference (in GWh) between forecasted and actual consumption in the oil and gas sector for the months of April and May 2019, as a percentage of the total consumption (in GWh) in the oil and gas sector, for the months of April and May 2019.
- 3.10 Please present the difference (in GWh) between forecasted and actual consumption in the oil and gas sector for the months of April and May 2019, as a percentage of the total consumption (in GWh) in the large industrial sector, for the months of April and May.
- 3.11 Does BC Hydro expect the ‘poor market conditions’ leading to lower consumption in the oil and gas sector for the months of April and May 2019 to persist during the test period?
- 3.12 Are the ‘poor market conditions’ leading to lower consumption in the oil and gas sector for the months of April and May 2019 largely driven by suppressed Station 2, AECO and Sumas gas prices? Or are there other factors?
- 3.13 What is BC Hydro’s outlook for Station 2, AECO and Sumas gas prices in the near (test period) to medium term?

BC Hydro Evidentiary Update – Page 9: lines 3-12

“The primary driver of the decreased cost of energy is lower costs for IPPs and Long-Term Commitments. These costs have decreased for two reasons:

First, as shown in [Figure 2](#) and [Figure 3](#) above, supply from IPPs and Long-Term Commitments is lower. This is due to:

- dry conditions and low water inflows, which decrease hydro generation; and**
- lower forecast deliveries, based on updated historical delivery averages and delayed commercial operation dates.**

Second, the full implementation of IFRS 16, discussed further in Appendix F, shifts costs from IPPs and Long-Term Commitments (Cost of Energy) to Amortization and Finance Charges.”

- 3.14 Please discuss the nature of any increases in potential future BC Hydro activity (whether related to market energy purchases or otherwise) that may

be spurred from lower than forecast IPP energy deliveries in the long run (whether hydro, wind, or other).

- 3.15 To what degree are potential risks associated with lower than forecast IPP energy deliveries in the long run, absorbed by IPPs alone? Do any of these risks (if any) pose any 'spill-over' risk effect to BC Hydro?
- 3.16 Please discuss the nature of any risks (if any), which maybe borne or absorbed by BC Hydro (and its ratepayers) in the long run associated with lower than forecast IPP energy deliveries.
- 3.17 Please discuss the nature of any costs, charges or write-offs that may appear on BC Hydro books (if any), associated with either lower IPP energy deliveries or increased 'compensatory' BC Hydro activities (such as increased market energy purchases, etc.) over time.
- 3.18 What happens to the use (or under-use) of that domestic transmission capacity, which is otherwise utilized by IPP's to deliver their energy to BC Hydro – would transmission charges associated with underutilized transmission capacity by IPPs be absorbed in the NITS (Network Integration Transmission Service)?
- 3.19 Would risk associated with under-utilized transmission capacity on account of lower long-term energy deliveries by IPPs be borne by BC Hydro and/or its other customers?

BC Hydro Evidentiary Update – Appendix C - Page 3: Section 1.3

1.3 Cost of Market Energy

Cost of Market Energy is forecast to increase by ██████ million in fiscal 2020 and ██████ million in fiscal 2021, compared to the Application. As discussed above, dry weather conditions during the winter of fiscal 2019 have continued into fiscal 2020, increasing the potential need for market electricity purchases and decreasing surplus sales and domestic transmission costs.

- 3.20 Please provide the definition of 'dry weather conditions' (as observed during the winter of fiscal 2019).
- 3.21 Please explain whether BC Hydro's account of 'dry weather conditions' that continue into fiscal 2020 is based purely on historical flow averages.

3.22 Please explain whether BC Hydro's Energy Study methodology captures purely historical (rear view) flow averages, or whether there are other elements to the methodology.

BC Hydro Evidentiary Update – Appendix G – Page 18: second paragraph

Bulk System Reinforcement

- The Peace Region Load Shedding Remedial Action Scheme project was \$25.7 million above plan because the project was put into service in fiscal 2018 but the capital expenditures were not recognized as capital additions until fiscal 2019.
- 3.23 Please provide a description of (including the drivers for) the Peace Region Load Shedding Remedial Action Scheme project and the list of large industrial customers that it is connected to.
- 3.24 Please provide the actual total cost for the Peace Region Load Shedding Remedial Action Scheme project along with cost breakdown by major component.
- 3.25 Please confirm the start-date and in-service date for the Peace Region Load Shedding Remedial Action Scheme project.