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Utilities Commission

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May 19, 2020

Sent via email/eFile

BCH TRANSMISSION SERVICE MARKET REFERENCE-PRICED RATES EXHIBIT A-8

Mr. Fred James
Chief Regulatory Officer
Regulatory & Rates Group
British Columbia Hydro and Power Authority
16th Floor – 333 Dunsmuir Street
Vancouver, BC V6B 5R3
bchydroregulatorygroup@bchydro.com

Re: British Columbia Hydro and Power Authority – Transmission Service Market Reference-Priced Rates Application – Project 1599053 – BCUC Information Request No. 3

Dear Mr. James:

Further to the above-noted application, enclosed please find British Columbia Utilities Commission Information Request No. 3. In accordance with the regulatory timetable, please file your responses no later than Friday, June 5, 2020.

Sincerely,

Original signed by:

Patrick Wruck
Commission Secretary

/jo
Enclosure

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British Columbia Hydro and Power Authority
Transmission Service Market Reference-Priced Rates Application

INFORMATION REQUEST NO. 3 TO BC HYDRO
Incremental Energy Rate Pilot

1.0 Reference: INCREMENTAL ENERGY RATE PILOT PROPOSAL
Exhibit B-6, BCUC Pre-filed SRP Question 7.0
Water Conditions and Sensitivity Analysis

In response to British Columbia Utilities Commission (BCUC) pre-filed Streamlined Review Process (SRP) question 7.0, British Columbia Hydro and Power Authority (BC Hydro) provided the financial impact of the Freshet Rate on ratepayers under (i) favourable, (ii) normal, and (iii) unfavourable water conditions. BC Hydro states:

(I) Favourable water conditions are when annual inflows are at least 10 per cent higher (wetter) than average;

(II) Normal water conditions are when annual inflows are within +/-10 per cent of average; and

(III) Unfavourable water conditions are when annual inflows are at least 10 per cent lower (drier) than average.

Using the same modeling and assumptions as performed for BC Hydro's response to BCUC IR 1.7.1, over the 46 years of historical weather sequences used in the modeling, the expected annual financial impact on ratepayers is:

(I) Favourable: $547,000;

(II) Normal: $34,000; and

(III) Unfavourable: -$374,000.

1.1 Please provide a similar financial impact analysis of the Incremental Energy Rate (IER) to BC Hydro ratepayers under the same favorable, normal, and unfavorable water conditions used in BC Hydro's response to BCUC Pre-filed SRP question 7.0.

1.2 Please discuss the likelihood of the water inflows in a given year being more than 10% above average or more than 10% below average.

2.0 Reference: INCREMENTAL ENERGY RATE PROPOSAL
Exhibit B-1, p. 67; Appendix C, p. 7; Exhibit B-4, BCUC IR 1.25.0 Series
RS 1893 Baseline Determination

In response to BCUC IR 1.25.1, BC Hydro states:

> Fiscal 2019 consumption is the proposed default period for RS 1893 baseline determination. The conditions that might result in an alternate period being used for RS 1893 baseline determination, or for making RS 1893 baseline adjustments, are described in Special Condition Nos.7, 8 and 9 of RS 1893.

On page 7 of Appendix C of the Transmission Service Market Reference-Priced Rates Application (Application), Special Condition 7 of RS 1893, states:

> If BC Hydro and the Customer agree that the LLH [Low Load Hours] and HLH [High Load Hours] Baselines and/or Monthly Reference Demand as defined above are not representative of the Customer's normal expected Rate Schedule 1823 or Rate Schedule 1828 Electricity usage, as applicable, during each Billing Period, and the parties agree to alternative LLH and HLH Baselines and/or Monthly Reference Demand, BC Hydro will file the agreed-to LLH and HLH Baselines and/or Monthly Reference Demand with the British Columbia Utilities Commission (BCUC) for approval. In cases where the Customer and BC Hydro cannot reach agreement, the BCUC will determine the final LLH and HLH Baselines and Monthly Reference Demand.

Further on footnote 40 on page 67 of the Application, BC Hydro states:

> Fiscal 2019 is the most recent fiscal year for which customers have a final Energy CBL [Customer Baseline] that has been filed with and approved by the BCUC. This will ensure alignment of RS 1893 energy baselines with the customer's annual Energy CBL determined in accordance with TS 74.

2.1 BC Hydro sets the RS 1823 Energy CBLs every year which are approved by the BCUC. Please explain why Fiscal 2019 consumption is the proposed default period for determining HLH, LLH Baselines and Monthly Reference Demand for customers that participate in the IER Pilot in any year of the proposed pilot period.

2.1.1 As an alternative, please discuss the pros and cons of using the most current fiscal year's information to set RS 1893 baselines for IER customers after Fiscal Year 2020.

2.1.2 As an alternative, please discuss the pros and cons of using an average of previous fiscal years' information (e.g. most recent 3 years) in setting RS 1893 baselines for IER customers.

2.2 Please provide examples of conditions where customer LLH and HLH Baselines and/or Monthly Reference Demand would reset as per Special Condition 7 of RS 1893.

2.3 Please discuss or otherwise explain whether BC Hydro would adjust customer LLH and HLH Baselines and/or Monthly Reference Demand set under RS 1893 for natural load growth.

2.3.1 If so, please specify the applicable section(s) of RS 1893.

2.3.2 If not, please explain why customer LLH and HLH Baselines and/or Monthly Reference Demand set under RS 1893 should not be adjusted for natural load growth.

2.4 Please provide a description or definition for load shifting for the IER. Explain how BC Hydro would identify and adjust for load shifting impacts during the IER pilot.

3.0 Reference: INCREMENTAL ENERGY RATE PROPOSAL
Exhibit B-1, Section 5.5, pp. 72–81
Economic Justification and Ratepayer Impacts

On page 73 of the Application, BC Hydro states:

> BC Hydro used its forecast of system marginal value[1] from the energy study models in estimating the ratepayer impact of serving incremental customer load under the proposed Incremental Energy Rate Pilot for the pilot period.

On page 74 of the Application, BC Hydro states:

> The estimated ratepayer impact of the Incremental Energy Rate Pilot is based on the forecast system marginal values and the following factors:
>
> - Customer-specific forecasts of incremental RS 1893 load;
> - Customer-specific assumptions of 'strike price' (i.e., the estimated price at which the customer will stop taking incremental load and/or turndown to their baseline);
> - Forecast daily Mid-C market prices in HLH and LLH; and
> - An energy charge adder in $/MWh.

Further on page 79 of the Application, BC Hydro states:

> Based on the assumptions provided, for energy charge adder Option 2A:
>
> - Expected incremental RS 1893 energy sales are 266 GWh per year and expected net revenue to BC Hydro is approximately $1.3 million per year;
> - At the 10th percentile, there is a 10 per cent chance that BC Hydro would see a forecast annual net revenue loss of approximately ($0.3 million) or more for approximately 243 GWh of incremental energy sales; and
> - At the 90th percentile, there is a 10 per cent chance that BC Hydro would see a forecast annual net revenue gain of approximately $2.9 million or more for approximately 282 GWh of incremental energy sales.

On May 11, 2020 BC Hydro released a report titled "Demand dilemma: How BC Hydro is responding to declining load and operational challenges resulting from COVID-19"[2] (Demand Dilemma Report). On page 2, of this report BC Hydro states:

> Major industry—forestry, mining and oil and gas—accounts for approximately 30% of BC Hydro's overall electricity load and energy demand from these customers has decreased by 7% since mid-March. Forestry is one of the most impacted industries due to temporary partial and full closures of mills. Energy demand from this sector could drop by up to 28%, while mining may see a decline of 22%. The oil and gas industry is expected to be less impacted with an expected drop of up to 7%. These forecasts are

[1] Based on BC Hydro's October 2018 Energy Study which is used as the basis for the Cost of Energy forecast in the Fiscal 2020 to Fiscal 2021 RRA.
[2] https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/news-and-features/BC%20Hydro%20Report_COVID19_DemandDilemma.pdf

dependent on the global response to COVID-19, as much of the load from BC Hydro's largest customers is highly correlated with economic activity outside of BC, particularly in US and Asian markets.

3.1 For each of the factors used to estimate ratepayer impact as described on pages 73 and 74 of the Application (i.e. system marginal value, customer-specific forecast of incremental RS 1893 load, Mid-C market prices, customer strike price, and energy adder), please explain how they can be affected by the COVID-19 pandemic, if at all.

3.1.1 All else equal, please provide a range for favourable, normal, and unfavourable scenarios impacted by the COVID-19 pandemic.

In Section 5.5.5 of the Application on pages 80–81, BC Hydro provides a discussion of risks of the proposed IER.

3.2 Please highlight or discuss any changes to risks provided in Section 5.5.5 due to the COVID-19 pandemic.

3.3 Based on BC Hydro's most current experience and challenges highlighted in the Demand Dilemma Report, to the extent possible, please provide the updated expected increment RS 1893 energy sales and expected net revenue for under each energy charge adder as provided in Table 13 on page 79 of the Application.

3.3.1 Please also include favourable, normal, and unfavourable scenarios for expected increment RS 1893 energy sales and expected net revenue for the proposed energy charge adder based on BC Hydro's most current estimate.

4.0 Reference: INCREMENTAL ENERGY RATE PROPOSAL
Exhibit B-1, pp. 77; Exhibit B-4, BCUC IR 1.21.1; Exhibit B-6, Response to BCUC Pre-filed Question 6.0; Order G-300-19
Annual Sales Revenues

Table 9 on page 77 of the Application shows expected incremental load net revenue using a $7/MWh adder in non-freshet months to equal $1.32 million, as shown in the first line of the following table below.

Table 9 Option 2A – Flat $7/MWh Adder in Non-freshet months

RESULTS (all values on a per year basis):		
Expected Incremental Load Net Revenue	1315	kCAD
10th Percentile Net Revenue	-257	kCAD
50th Percentile Net Revenue	1308	kCAD
90th Percentile Net Revenue	2881	kCAD
Expected Incremental Load	266	GWh
10th Percentile Incremental Load	243	GWh
50th Percentile Incremental Load	272	GWh
90th Percentile Incremental Load	282	GWh

In Exhibit B-4, BC Hydro's response to BCUC IR 1.21.1 states:

> In all cases under Condition No. 3, the daily revenue over-recovery or under-recovery for net daily RS 1893 energy sales arises from the difference between the Mid-C index price (plus adder) and the system marginal value on the given day.

In Exhibit B-6, BC Hydro's response to BCUC Pre-filed Question 6.0 provided a below revised table to reflect implementation costs for each year of the freshet rate, as well as impacts of load shifting and natural load growth.

4.1 Please clarify whether the estimated $1.32 million of expected net revenue per year considers the effects of load shifting, natural load growth, and implementation costs.

4.2 Please complete the following table to show the breakdown to support the $1.32 million expected net revenue per year. Provide any adjustments to the table as necessary.

Component	Dollars (in millions)
RS 1893 Expected Incremental Net Revenue	$1.32
Less load Shifting Impact	
Less load Growth Impact	
Less implementation Costs	
Less other (please specify)	
Adjusted Ratepayer Benefit	

Order G-300-19, dated November 26, 2019, approved the IER on an interim and non-refundable basis, effective January 1, 2020.

4.3 Please provide the incremental energy sales volumes and revenues based on year-to-date results of the IER, up to and including April 30, 2020, if available. Are the actual year-to-date results projected to meet BC Hydro's expected incremental net revenue of $1.32 million per year?

5.0 Reference: INCREMENTAL ENERGY RATE PROPOSAL
Exhibit B-1, pp. 84–85; Exhibit B-4, BCUC IR 1.28.0 series
IER evaluation

The IER pilot started on January 1, 2020 on an interim basis and will end on March 31, 2024. On pages 84 and 85 of the Application, BC Hydro outlines its proposal to evaluate the IER pilot with a list of 13 reporting items from (a) to (m). BC Hydro states that it "anticipates that the evaluation report will help guide whether any changes to the Incremental Energy Rate Pilot will need to be made and whether it should be made a permanent rate."

In response to BCUC IR 1.28.0 series, BC Hydro proposes not to file annual reports and views that annual reporting is resource intensive and has low regulatory efficiency. BC Hydro proposes a filing date of December 13, 2023 for the evaluation report.

5.1 Please indicate the earliest date that BC Hydro can provide an evaluation report that covers the results for the initial period (January 1, 2020 to March 31, 2021) and three complete fiscal years (fiscal 2021, fiscal 2022 and fiscal 2023), and if necessary, an application to make any changes to the IER .

5.1.1 Referencing the list of reporting items from (a) to (m), what information will be available, partially available, or unavailable if BC Hydro is directed to file an evaluation report, and if necessary, an application to make any changes to the IER, by June 30, 2023.

5.1.2 Please indicate the earliest date that BC Hydro can provide an evaluation report that covers up to and including fiscal 2022.

5.2 In the hypothetical scenario that the BCUC approves the IER under the condition that evaluation reports on the IER must be filed annually, please discuss whether BC Hydro would maintain its proposal to offer the IER.