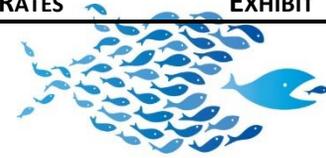


22 May 2020

**VIA E-FILING**

Patrick Wruck  
Commission Secretary  
BC Utilities Commission  
6th Floor 900 Howe Street  
Vancouver, BC V6Z 2N3



**BCPIAC**  
Public Interest Advocacy Centre

Reply to: Leigha Worth  
ED@bcpiac.org  
Ph: 604-687-3034  
Our File: 7500.311

Dear Mr. Wruck,

**Re: British Columbia Hydro and Power Authority (BC Hydro) Transmission  
Service Market Reference-Priced Rates Application  
BCOAPO Information Requests No. 3**

We represent the BC Old Age Pensioners' Organization, Active Support Against Poverty, Council of Senior Citizens' Organizations of BC, Disability Alliance BC, Tenant Resource and Advisory Centre, and Together Against Poverty Society, known collectively in regulatory processes as "BCOAPO et al." ("BCOAPO").

Enclosed please find BCOAPO's Information Requests on the above-noted matter.

If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,  
**BC PUBLIC INTEREST ADVOCACY CENTRE**

*Original on file signed by:*

Leigha Worth  
Executive Director | General Counsel

Encl.

REQUESTOR NAME: **BCOAPO**  
INFORMATION REQUEST ROUND NO: **#3**  
TO: **BRITISH COLUMBIA HYDRO & POWER  
AUTHORITY**  
DATE: **MAY 22, 2020**  
PROJECT NO: **1599053**  
APPLICATION NAME: **TRANSMISSION SERVICE MARKET  
REFERENCE-PRICED RATES  
APPLICATION**

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**51.0 Reference: Exhibit B-1, page 66**

**Exhibit B-4, BCUC 1.27.1**

**Preamble:** The Application states (page 66):

*“RS 1823 and RS 1828 Customers must notify BC Hydro by March 1 of each year that they wish to take electricity under RS 1893 for the forthcoming Billing Year.”*

51.1 Please confirm that for customers deemed eligible for RS 1893 any incremental use (above the RS1893 baselines) for purposes of instantaneous pick-up of load due to loss of self-generation will be treated as RS1893 sales unless the customer elects to use RS1880.

**52.0 Reference: Exhibit B-4, BCUC 1.9.4 and 1.23.8  
Exhibit B-5, BCSEA 1.8.1**

**Preamble:** The response to BCUC 1.9.4 states:

*“BC Hydro would import to serve non-firm load. BC Hydro does plan to meet non-firm load requirement in an operational view, but we do not add it to our load forecast in a planning view and would not build new resources to meet it.”*

The response to BCSEA 1.8.1 states:

*“A revenue forecast for the Freshet Energy Rate and Incremental Energy Rate was not part of BC Hydro’s Fiscal 2020 to Fiscal 2021 Revenue Requirements Application, although actuals for May 2019 were included in the Evidentiary Update to the Fiscal 2020 to Fiscal 2021 Revenue Requirements”.*

52.1 Please explain what planning “to meet non-firm load requirement in an operational view” entails in term of the types commitments or financial obligations BC Hydro would enter into in order to meet this load. For example, will anticipated IER sales be taken into

consideration when BC Hydro is determining whether or not to enter into agreements with Powerex, per the Powerex 2019 Letter Agreement, to secure physical wholesale electricity on a forward basis?

52.2 Was the anticipated load from the Freshet Energy Rate and/or the Incremental Energy Rate included in the determination of the Cost of Energy in BC Hydro's Fiscal 2020 to Fiscal 2021 Revenue Requirements Application?

52.2.1 If not, please reconcile this treatment with the response to BCUC 1.9.4 which states "BC Hydro does plan to meet non-firm load requirement in an operational view".

52.3 Will the anticipated load from the now approved Freshet Energy Rate and/or the Incremental Energy Rate (assuming the pilot is approved) be included in the determination of the Revenue and Cost of Energy forecasts in future in BC Hydro Revenue Requirements Applications?

**53.0 Reference: Exhibit B-4, BCUC 1.3.1 and 1.3.2**

53.1 Will the expected pilot implementations cost for the IER vary depending upon either the number of customers participating or the total IER sales (MWh)? If so, how?

53.2 Please explain the basis for the \$105,000 for IER billing costs for Year 1.

53.3 Please explain why the IER billing costs in years 2 and 3 are materially lower than those experienced for the Freshet Rate pilot.

53.4 Please explain why the IER customer and stakeholder engagement costs for years 2 and 3 are materially less than those for years 2 and 3 of the Freshet Rate pilot.

**54.0 Reference: Exhibit B-4, BCUC 1.16.1  
Exhibit B-1, pages 80-81**

**Preamble:** The response to BCUC1.16.1 states:

*The impact of the IER Pilot was based on the 46 weather sequences used in the Energy Studies, and 40 of these weather sequences showed a positive ratepayer impact."*

54.1 Apart from the "weather sequence" and implementation costs, are there any of there any other factors that could affect the calculation of rate payer impact during the pilot period?

54.1.1 If yes, please explain why they are and for each outline: i) what assumptions were made in the financial modelling; ii)

the range of uncertainty associated with the assumptions and iii) the likely effect on rate payer impact if an alternative outcome arises.

54.1.2 As part of the response, please discuss how/whether the assumption regarding the exchange rate impacts the determination of whether rate payer impacts are positive or negative.

54.2 In the financial analysis performed, how many of the weather sequences showed a positive rate payer impact during: i) the three freshet months when the energy adder is \$3/MWh and ii) the nine non-freshet month when the energy adder is \$7/MWh?

**55.0 Reference: Exhibit B-4, BCUC 1.17.3**

**Preamble:** The responses states that:

*“Any financial gains or losses of the IER Pilot will accrue to all ratepayers.”*

55.1 Please explain exactly how this result will occur.

**56.0 Reference: Exhibit B-4, BCUC 1.20.1 and 1.20.2  
Exhibit B-1, pages 80-81 and Appendix D, pages 22-25 of 296**

**Preamble:** Appendix D contains a description of how the marginal resources used to serve RS1892 load varies depending upon which of three system conditions exist and that rate payers’ benefits are positive under Condition #1, negative under Condition #2 and typically positive under Condition #3.

56.1 Please confirm that the same description (i.e., per Appendix D) applies to the resources that would be used to supply RS1893 (IER) load during the non-freshet period of the year?

56.1.1 If not, please describe what affects the determination of the marginal resources deemed to serve IER load during the non-freshet period and the resulting system marginal values.

56.2 Please confirm that the same assessment (per Appendix D) applies to the IER as to under what system conditions rate payers’ benefits will be positive versus negative during the non-freshet period of the year?

56.2.1 If not, please describe how the variation in system conditions will impact the determination of rate payer benefits during the non-freshet period.

**57.0 Reference: Exhibit B-4, BCUC 1.20.5.2 and 1.20.5.2.1**

57.1 Does the will the existence of IER load impact in any way the determination of the NITS rate? If yes, how?

**58.0 Reference: Exhibit B-4, BCUC 1.16.1 and BCUC 1.20.6  
Exhibit B-1, Appendix E, Table 5**

58.1 Based on the four year period covered by the Freshet Rate pilot, for what percentage of the time did each of the three System Conditions exist?

58.2 During the time that System Condition 3 existed, what percentage of that time was the system value greater than what the RS1893 rate would have been based on the BC Hydro's proposal?

**59.0 Reference: Exhibit B-4, BCUC 1.21.1, 1.21.3 and 1.21.4  
Exhibit B-5, BCOAPO 1.41.1  
Exhibit B-1, page 77 (Table 9)**

59.1 With respect to BCUC 1.21.4, did the consultations with customers yield a range of possible strike prices? If yes, what was the range of prices discussed?

59.2 What exchange rate(s) was used in the analysis?

59.2.1 How does the value(s) used compare with the most recent Treasury Board forecast?

59.2.2 Please re-do the analysis set out in Table 9 using an exchange rate that is \$0.02 higher/lower than that used in the analysis.

**60.0 Reference: Exhibit B-4, BCUC 1.22.1  
Exhibit B-1, page 77 (Table 9)**

60.1 Please confirm that in comparing Option 1A and Option 2A, that Option 1A results in: i) a 12% increase in expected incremental load net revenue and ii) a 0.8% decrease in incremental load.

60.2 If one views the expected incremental load revenue as the "benefit" IER provides to non-participating customers and the incremental IER load as the benefit provided to participating customers, please why explain choosing Option 2A over Option 1A represents a reasonable balance between the interests of participating customers and non-participating customers.

60.3 If BC Hydro believes that other metrics should be used to measure the benefits to participating vs. non-participating IER customers, please indicate what they are and discuss, based on these metrics, why Option 2A is preferable to Option 1A.

- 60.4 Please confirm that, in assessing the merits of the various energy adder options the views of potential IER customers (and related associations) were solicited and taken into account.
- 60.5 Please indicate whether the views of customers who would be unable to participate (i.e., non-RS 1823 and non-RS1828 customers) were solicited with the respect to the various energy adder options and what their views were.

**61.0 Reference: Exhibit B-1, pages 73 and 80-81**

**Preamble:** The Application states:

*“BC Hydro used its forecast of system marginal value 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.”*

- 61.1 What was the vintage for the energy study models used to forecast the system marginal values used in the analysis (i.e., when were the model results produced)?
- 61.2 Please discuss the degree to which system conditions have changed since the energy models used were developed and whether current forecast system marginal values for the period considered would not generally be higher, lower or approximately the same as those used in the analysis.

**62.0 Reference: Exhibit B-4, BCUC 1.23.11**

- 62.1 Please confirm that forgone export at a later date can only occur under System Condition #3. If not confirmed please explain why.

**63.0 Reference: Exhibit B-4, BCUC 1.25.1 & 1.25.2  
Exhibit B-5, BCOAPO 1.23.1  
Exhibit B-1, Appendix C (revised)**

- 63.1 With respect to Appendix C, Special Condition 7, please confirm customers must have at least two years of historical electricity usage to be eligible for baseline determination.
- 63.2 Given the likely impact of the COVID-19 pandemic on 2020 sales to RS1823 and RS1828 customers, will historical usage in either F2020 or F2021 be considered in assessing whether customers meet the “at least two years of historical Electricity usage” eligibility requirement? If yes, please explain why.
- 63.3 With respect to Appendix C, Special Condition 7, please explain the circumstances under a customer would have the required two years of historical Electricity usage but not have historical annual electricity consumption for Fiscal 2019.

63.4 Given the likely impact of the COVID-19 pandemic on 2020 sales to RS1823 and RS1828 customers, if the customer does not have historical annual electricity consumption for Fiscal 2019 will more recent usage during periods when public health order existed regarding the pandemic be viewed as acceptable for purposes of setting the baselines? If yes, please explain why.

**64.0 Reference: Exhibit B-4, BCUC 1.26.1**

64.1 Please explain the basis for choosing two times the monthly Reference Demand as the proposed limitation on RS 1893 usage (as oppose to some other value such as 1.25 times or 1.5 times).

**65.0 Reference: Exhibit B-4, BCUC 1.28.2  
Exhibit B-1, page 84  
Exhibit A-8, BCUC 2.4**

**Preamble:** Exhibit B-1 states that the evaluation will include “*examination of whether load shifting by customers occurred and an assessment of the impact*”.

BCUC 1.28.2 does not outline any measure for load shifting.

65.1 Will the examination of load shifting include an assessment of the IER sales made that would have occurred in the absence of the IER (e.g. natural load growth)?

65.1.1 If not, why not?

65.1.2 If yes, if not discussed in the response to BCUC 2.4, how does BC Hydro expect to measure/estimate this aspect of load shifting?

**66.0 Reference: Exhibit B-4, BCUC 1.28.3  
Exhibit A-8, BCUC 3.1, 3.2 & 3.3 and BCUC 4.3**

66.1 In view of the impacts of the COVID-19 pandemic on industrial sales, does BC Hydro still consider that the evaluation of results for the initial period (January 1, 2020 to March 31, 2021) and the three complete fiscal years (fiscal 2021, fiscal 2022 and fiscal 2023) will be sufficient to provide a satisfactory evaluation of the IER Pilot?

66.1.1 If yes, why?

66.1.2 If not, should the pilot and the timing of the evaluation report be extended?

**67.0 Reference: Exhibit B-5, BCOAPO 1.1.2 and 1.39.1 & 1.39.2**

**Preamble:** The purpose of this question is to understand the relationship (if any) between the Energy CBL established for RS1823 and the Energy Baselines established for RS1893.

67.1 Please confirm that: i) the RS1823 Energy CBL is an annual value and ii) for RS1893 Energy Baselines are established for the HLH and LLH of each month (i.e., 24 per year) and are an average hourly value.

67.2 For a specific customer, can the RS1893 Energy Baselines when summed for the 12 months exceed the RS1823 (annual) Energy Baseline?

67.2.1 If yes, please explain how this result would arise.

67.2.2 If not, why not?

67.2.3 In such circumstances, is it possible for a customer to shift load either between months or between HLH and LLH within a month so as to take advantage of periods with lower IER rates without impacting the total annual energy billed under RS1823 or its future RS1823 CBL? If yes, will this impact be assessed as part of the proposed evaluation and reporting?

67.3 For a specific customer, can the RS1893 Energy Baselines when summed for the 12 months be less than the RS1823 (annual) Energy Baseline?

67.3.1 If yes, please explain how this result would arise.

67.3.2 If not, why not?

67.3.3 In such circumstances, is it possible for a customer to shift load either between months or between HLH and LLH within a month so as to take advantage of periods with lower IER rates without impacting the total annual energy billed under RS1823 or its future RS1823 CBL? If yes, will this impact be assessed as part of the proposed evaluation and reporting?

67.4 For a specific customer, is it possible that the RS1893 Energy Baselines when summed for the 12 months be less than 90% of the RS1823 (annual) Energy Baseline?

67.4.1 If yes, please explain how this result would arise.

67.4.2 If not, why not?

67.5 The response to BCOAPO 1.1.2 states:

*“For example, if the customer undertakes capital investments to permanently increase plant production capacity and makes a request to BC Hydro in accordance with TS 74 for its RS 1823 Energy CBL to be increased, BC Hydro would make a corresponding adjustment to the customer’s RS 1893 baselines to reflect this change.”*

Please explain how the “corresponding adjustment” to each of the 24 RS1893 energy baselines and the 12 monthly reference demands would be determined.

67.6 Assuming the twenty four RS1893 Energy Baselines are based on a customer’s F2019 usage under RS1823 is it possible for the customer’s annual usage under RS1823 in future years (when the customer is also using RS1893) to exceed the annual sum of the RS1893 Energy Baselines?

67.6.1 If yes, please explain how this could occur.

**68.0 Reference: Exhibit B-5, BCOAPO 1.5.1**

68.1 The response provided did not answer the specific question asked which was – “how many of the current RS 1823 customers would not be able to take service under the proposed (IER) rate” due to lack of available local/network transmission capability. Please respond to the question assuming the RS1893 energy and reference demand baselines are based on F2019 usage.

**69.0 Reference: Exhibit B-5, BCOAPO 1.7.1**

69.1 As part of the evaluation and reporting for the IER Pilot will BC Hydro undertake to report the number of participating customers from whom the RS1893 Energy Baselines when summed for the 12 months were less than versus greater than their RS1823 (annual) Energy Baseline?

69.1.1 If not, why not?

**70.0 Reference: Exhibit B-5, BCOAPO 1.22.1**

70.1 Consistent with the original question, please separate out the sources of the responses from intervenors/stakeholders as between those that represent customers served under RS1823 or RS1828 and those that don’t.

**71.0 Reference: Exhibit B-5, BCOAPO 1.26.2, 1.27.1 and 1.29.2  
Exhibit B-1, page 77 (Table 9)**

71.1 What was the contribution to the total expected incremental load net revenue from during the periods when each of the three system conditions existed in the financial modelling exercise?

71.1.1 If the response is considered confidential please explain why providing it would result in financial harm to BC Hydro and/or its rate payers.

**72.0 Reference: Exhibit B-5, BCOAPO 1.34.1**

72.1 Why is an “adjustment” required to account for seasonal storage (i.e., how does seasonal storage impact the “cost” of providing energy under RS1893)?

**73.0 Reference: Exhibit B-5, BCOAPO 1.35.1 and 1.39.3**

**Preamble:** The response to BCOAPO 1.35.1 states:

*“In either case, BC Hydro seeks to make clear that the established baselines are representative of the customer’s expected future electricity consumption under the applicable firm service rate (RS 1823 or RS 1828) during the forthcoming freshet period (for RS 1892) or forthcoming Billing Year (for RS 1893)”.*

73.1 Please confirm that the approach for establishing the RS1893 baselines assumes that there will be no “natural growth” in the load for RS1823 customers who apply for service under RS1893.

73.1.1 If not confirmed, please explain why.

73.1.2 If confirmed, please contrast this “assumption” with the large industrial load forecast for F2019 (the default year for RS1093 Baselines) versus later years in BC Hydro’s F2020 to F2021 Revenue Requirements Application.

**74.0 Reference: Exhibit B-5, BCOAPO 1.39.3 and 1.41.4**

**Preamble:** BCOAPO 1.39.3 states:

*“No, the RS 1823 Energy CBL reset will not capture any natural load growth that was billed under RS 1893. In accordance with TS 74, the Energy CBL reset determination can only consider RS 1823 energy purchases”.*

BCOAPO 1.41.4 states:

*“For illustrative purposes, if 5 per cent or 10 per cent of incremental load purchased under RS 1893 was deemed to*

*be energy that would have been purchased under RS 1823 there would be, holding that volume of energy constant:*

*A reduction in BC Hydro's expected net revenue if RS 1893 was priced lower than RS 1823; and*

*An increase in expected net revenue if RS 1893 was priced higher than RS 1823.*

*The revenue impact would also need to consider the prospective impacts of RS 1823 Energy CBL reset on the relative mix of each customer's RS 1823 Tier 1 and Tier 2 energy volumes".*

74.1 With respect to the first part of BCOAPO 1.41.4 referenced in the Preamble, please confirm that, given the assumptions regarding the "strike price" energy purchased under RS1893 is more likely to be priced lower than RS1823.

74.1.1 If not confirmed, please explain why.

74.2 Given that the RS 1823 Energy CBL reset will not capture any natural load growth that was billed under RS 1893 (per BCOAPO 1.39.3), please provide the analysis originally requested in BCOAPO 1.41.4 assuming current RS1823 rates and that all of incremental load was load that would have occurred under RS 1823 is natural load growth such the RS1823 Energy CBLs would not be reset.

**75.0 Reference: Exhibit B-5, BCSEA 1.6.1 and 1.6.2**

75.1 Please confirm that in the determination of the revenue to cost ratios for the Transmission Service Rate class RS1893 loads are included in the determination of the energy and demand allocators used in the Fully Allocated Cost of Service Study.

75.1.1 If not confirmed, please clarify how the RS1893 loads are used in the allocation of costs.

**76.0 Reference: Exhibit B-5, BCSEA 1.12.1**

**Preamble:** The response states:

*"As the annual energy surplus in the planning view decreases, the operational view of the annual surplus will also decrease. On average, RS 1892 and RS 1893 are expected to provide benefits to all ratepayers while BC Hydro has an operational annual surplus of energy. As the annual energy surplus decreases, the benefit to non-participating customers will generally decrease, all else being equal. From an energy perspective, the economic impact on ratepayers of RS 1892 is expected to be less*

*sensitive to whether or not BC Hydro is in an operational annual surplus or deficit because BC Hydro may experience energy oversupply in the freshet period even during a period of an annual deficit”.*

76.1 Assuming RS1893 is made permanent after the completion of the pilot, based on the above response will there be a need to monitor the continuing viability of RS1893 as the load resource balance changes over time?

76.1.1 If not, why not?

76.1.2 If yes, how frequently should this be done and in what forum (e.g., as part of a Revenue Requirements Application, as part of the periodic Long Term Resource Plan Applications or as part of the periodic Rate Design Applications).

**77.0 Reference: Exhibit B-5, CEC 1.4.3.1 and 1.12.3**

**Preamble:** The response to CEC 1.4.3.1 states:

*“BC Hydro consulted with customers and stakeholders on the appropriate value for the energy charge adder in freshet and non-freshet months.”*

77.1 Specifically which customers (i.e., what are the rate schedules for those customers who had not participated in RS1892 and the prospective customers – per CEC 1.12.3) and stakeholders did BC Hydro consult regarding the appropriate value for the IER energy charge adder in freshet and non-freshet months?

**78.0 Reference: Exhibit B-1, pages 58 & 84 and Appendix D  
Exhibit B-4, BCUC 1.28.1.2  
Exhibit A-8, BCUC 5.1 & 5.2**

**Preamble:** In the Application (page 58) BC Hydro proposes that the IER Pilot run from January 1, 2020 to December 31, 2024. BC Hydro also indicates (page 84) that the evaluation is expected to be undertaken after completion of the third full fiscal year of the pilot (fiscal 2023) and will be filed with the BCUC in fall 2023.

The response to BCUC 1.28.1.2 states:

*“BC Hydro is of the view that a single final evaluation report filed in fall 2023 would be more useful for stakeholders since the results would be covering three full fiscal years of the pilot”.*

78.1 It is noted that while the Final Evaluation Report for the Freshet Rate Pilot (dated December 2018) covered three years of the Freshet Rate Pilot it only included an evaluation of the actual load

shifting impacts for the first two years of the pilot and preliminary forecast for year 3. Will the proposed timing of the evaluation for the IER Pilot allow BC Hydro to complete an evaluation of the actual impacts of load shifting for the first three years of the IER Pilot?

78.1.1 If not, what time frame does BC Hydro expect its evaluation as to the impact of load shifting (including natural load growth) to cover?

78.1.2 If not, please indicate what the anticipated timing of the evaluation report would be if the BCUC directed that it include an evaluation of load shifting impacts for all three years.