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September 26, 2019

VIA ELECTRONIC MAIL

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, B.C. V6Z 2N3

**Attention: Patrick Wruck, Commission Secretary
and Manager, Regulatory Support**

Dear Sirs/Mesdames:

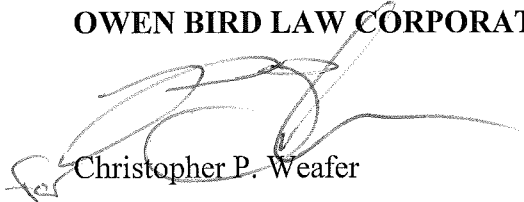
**Re: British Columbia Hydro and Power Authority Application for 2019 Letter
Agreement with Powerex Corp. ~ Project No. 1599038**

We are counsel to the Commercial Energy Consumers Association of British Columbia (the "CEC"). Attached please find the CEC's first set of Information Requests with respect to the above-noted matter.

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

Yours truly,

OWEN BIRD LAW CORPORATION



Christopher P. Weafer

CPW/jj
cc: CEC
cc: BC Hydro
cc: Registered Interveners

**COMMERCIAL ENERGY CONSUMERS ASSOCIATION
OF BRITISH COLUMBIA (“CEC”)**

INTERVENER INFORMATION REQUEST NO. 1

**British Columbia Hydro and Power Authority Application for 2019 Letter
Agreement with Powerex Corp.
Project No. 1599038**

September 26, 2019

1. Reference: Exhibit B-1, page 3 and page 8

Description of 2019 Letter Agreement

Like the 2018 Letter Agreement, the 2019 Letter Agreement provides BC Hydro with the ability to make a "Purchase Interest Request" (as defined in the agreement) to Powerex. A Purchase Interest Request is a binding written offer to purchase wholesale electricity from Powerex on its terms, including the maximum price that BC Hydro is willing to pay, maximum volumes of electricity, and delivery period(s). In response to a Purchase Interest Request, Powerex is obliged to use commercially reasonable efforts to sell and deliver wholesale electricity on a forward basis to BC Hydro, as confirmed in writing in an instrument referred to as a "Confirmation". When the deliveries of electricity contemplated by the Confirmation are made, BC Hydro pays for the electricity at the price as detailed in the Confirmation in accord with the pricing mechanism in the 2019 Letter Agreement. Generally, that price is a wholesale market price.

Forward wholesale electricity acquired by Powerex for sale to BC Hydro under the 2019 Letter Agreement is delivered, and title transfers, to BC Hydro at the border interconnection points of its transmission system. Powerex's obligation is to deliver electricity on a firm basis. Transmission service outside of BC is the responsibility of Powerex, and within BC is the responsibility of BC Hydro. Payments for electricity deliveries are made monthly.

In summary, the 2019 Letter Agreement is an additional tool for BC Hydro to employ to address short-term operational requirements. It does so by allowing BC Hydro to secure physical wholesale electricity from Powerex on a forward basis (ie outside of the pre-schedule day-ahead wholesale markets) but still within the operating time horizon. There is no other mechanism currently in place that allows BC Hydro to purchase wholesale electricity in that manner.

Energy Supply Contract Considerations: Section 71(2.21) of the UCA

Section 71(2.21) of the UCA describes the factors the Commission must consider when assessing whether an ESC filed by BC Hydro is in the public interest.

Interests of BC Hydro Ratepayers

The first enumerated factor is whether the ESC is in "the interests of persons in British Columbia who receive or may receive service from the authority" (i.e., is the ESC in the

interest of BC Hydro's customers). BC Hydro submits that the 2019 Letter Agreement is in the interests of BC Hydro's customers for the reasons set out above.

- 1.1. Is it appropriate to state that an intent of the Letter Agreement is to maximize the value to ratepayers from energy purchases? Please explain why or why not.
- 1.2. Is it appropriate to state that ratepayers can expect to experience significant benefits from the Powerex Letter Agreement? Please explain and quantify any benefits to the extent possible.
 - 1.2.1. Please discuss any benefits that BC Hydro expects may or may not accrue to ratepayers as a result of the Letter Agreement and explain why those benefits might or might not occur.
 - 1.2.2. Please identify any risks that could accrue to ratepayers as a result of the Letter Agreement and explain why those risks might or might not occur.
 - 1.2.2.1. Please quantify any risks to the extent possible.
- 1.3. Please confirm that Powerex will work to purchase wholesale electricity at the lowest possible price on behalf of BC Hydro, up to the maximum specified by BC Hydro, rather than purchasing at the maximum if possible.
 - 1.3.1. If not confirmed, please explain why not.

2. Reference: Exhibit B-1, page 3 and 4 and Appendix 3, page 4-15

Roles of BC Hydro and Powerex

The decisions from time to time to acquire forward wholesale electricity from Powerex through the issuance of a Purchase Interest Request are solely those of BC Hydro.

BC Hydro makes such purchase decisions within the usual operational management framework it employs to make all dispatch and other system operation decisions. BC Hydro's operational management framework is described in the F20-F21 RRA. To avoid duplicating evidence already before the Commission on the same topic, BC Hydro has attached as Appendix 3 to this application section 4.4 of the F20-F21 RRA ("Maximizing the Value of Our Energy Supply") and the IR responses in regard to that section. That evidence provides a fulsome account of how BC Hydro manages its generation system in the operational time horizon to cost-effectively meet its load-serving obligations.

At the beginning of each Energy Study, Powerex provides BC Hydro with forward market price curves for electricity at Mid-C and gas prices at Sumas. The Energy Study uses these forward curves as a starting point and then adds variability to these prices to capture an expected range of price uncertainty.

- 2.1. Please comment on the presumed accuracy of the forward market price curves provided to BC Hydro.
- 2.2. Do BC Hydro and Powerex communicate beyond the provision of the forward market price curves and the ordering process in order to maximize the potential benefits to BC Hydro and ratepayers? Please explain why or why not.
 - 2.2.1. What, if any, other types of information other than forward price curves are, or could be, provided to BC Hydro.

3. Reference: Exhibit B-1, pages 5-6 and Southern Intertie Data Report page 27

Over the past decade there has been a steady decline in the volume of wholesale electricity traded on a day-ahead basis in the Pacific Northwest; that was one of the factors that prompted the 2018 Letter Agreement as a solution to the impending electricity supply issue BC Hydro faced in winter of 2018/2019, rather than attempting to rely on day-ahead purchases under the 2003 TPA. In response to BCUC IR 1.8.1.1 in the proceeding regarding that agreement, BC Hydro filed graphs showing declines in liquidity for both on-peak and off-peak hours at the Mid-Columbia wholesale electricity trading hub. Those graphs are reproduced here:¹⁰

10. Market Liquidity

Figure 10.1: Mid-C Liquidity (Day-Ahead Peak)

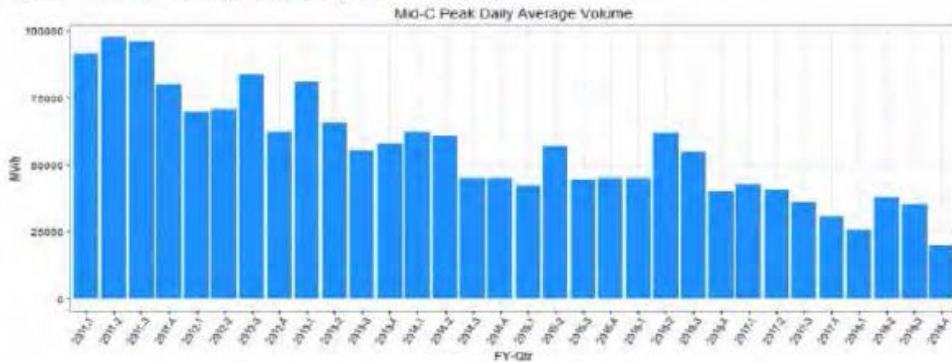
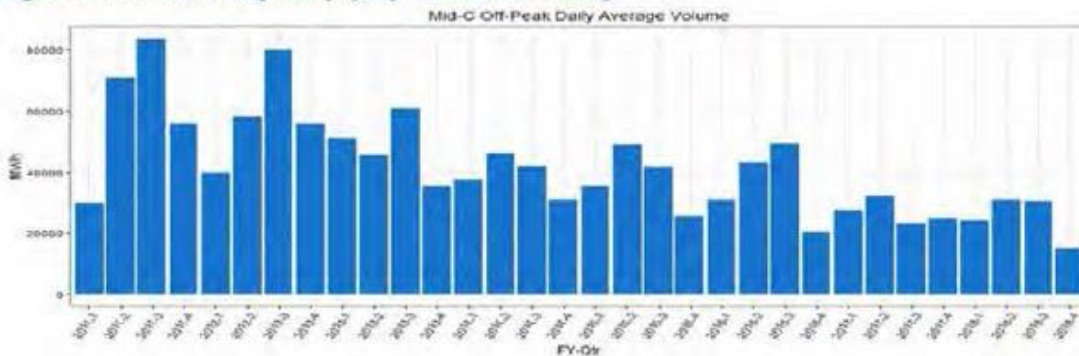


Figure 10.2: Mid-C Liquidity (Day-Ahead Off-Peak)



10. Market Liquidity

Figure 10.1: Mid-C Liquidity (Day-Ahead Peak)

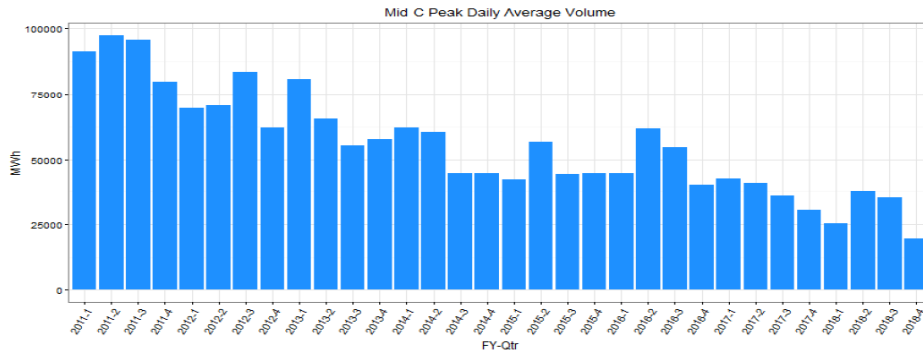


Figure 10.2: Mid-C Liquidity (Day-Ahead Off-Peak)

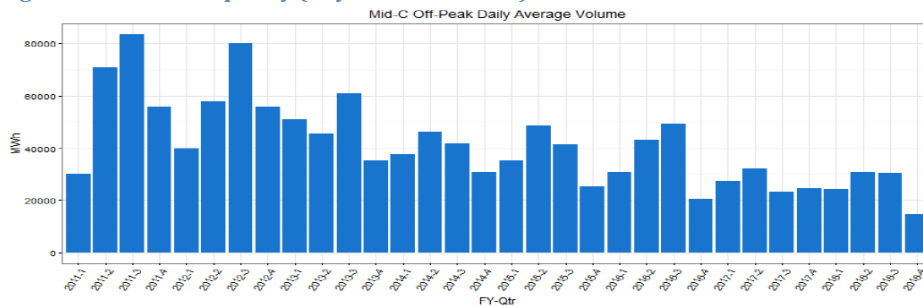
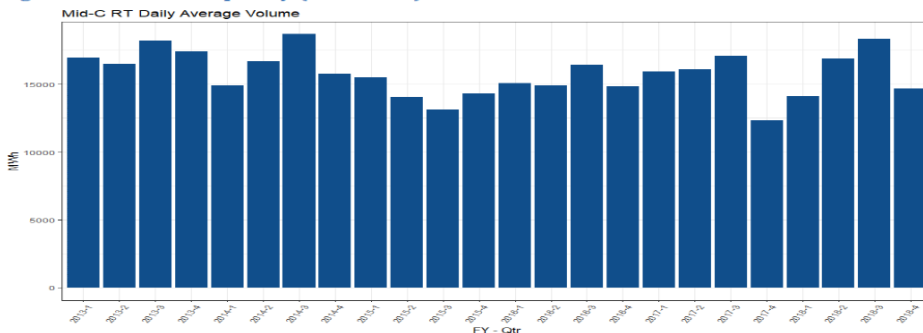


Figure 10.3: Mid-C Liquidity (Real Time)



Day-Ahead volume based on ICE data. Real time volume based on Powerdex.

- 3.1. Please confirm that trading volumes are a good proxy for market liquidity.
- 3.2. Please provide BC Hydro's views as to why Day-Ahead Peak trading volumes have been declining for a decade.
 - 3.2.1. Please provide historical reports dating back 20 years if available.
 - 3.2.1.1. Please comment on the trends seen dating back 20 years and their relevance to the application.
- 3.3. Please provide BC Hydro's views as to why Day-Ahead Off-Peak trading volumes have been declining since about 2012.

3.3.1. Please provide historical reports dating back 20 years if available.

3.3.1.1. Please comment on the trends seen dating back 20 years and their relevance to the application.

3.4. Please explain the relevance of Figure 10: Mid-C Liquidity (Real Time) provided in the Southern Intertie Data report and how its relative stability relates to Day-Ahead volumes, if at all.

4. Reference: Exhibit B-1, page 6

On a go-forward basis BC Hydro observes that, since the beginning of the current fiscal year, it has continued to have low system inflows, and has no basis to believe that the long-term decline in day-ahead market liquidity will quickly reverse itself. There are numerous other events that could result in similar supply shortfalls that threatened BC Hydro last winter, which may not reliably be addressed through purchases from Powerex on a day-ahead basis under the 2003 TPA. In these circumstances, BC Hydro believes it is prudent and in the interests of its ratepayers to have in place an additional mechanism that will allow it to respond to system conditions and reliably manage potential electricity shortages in a timely and cost-effective way. The 2019 Letter Agreement serves this objective.

4.1. Please elaborate on the ‘numerous other events’ that could result in similar supply shortfalls and provide their potential impact.

4.2. BC Hydro states that it ‘has no basis to believe that the long-term decline... will quickly reverse itself’. Does BC Hydro have any basis to believe that it will continue to decline, or stabilize? Please explain and provide any evidence BC Hydro has available.

4.3. What information does BC Hydro use to make determinations as to whether or not market liquidity will continue current trends, stabilize or reverse?

4.3.1. When and how does BC Hydro seek out such information and make its determinations?

5. Reference: Exhibit B-1, page 6

Finally, it is apparent that an alternative solution to the on-going operational supply issues arising from the liquidity decline in day-ahead markets would be a revised Transfer Pricing Agreement. BC Hydro and Powerex are considering updating the 2003 TPA, including considering how the 2003 TPA might usefully be revised to accommodate forward transactions. That consideration is underway, but is not a trivial exercise because of the central role that the 2003 TPA plays in the BC Hydro-Powerex relationship. Nevertheless, and to the extent that Powerex and BC Hydro do update the 2003 TPA for that purpose, the 2019 Letter Agreement can be considered a bridging mechanism.

- 5.1. Please discuss the advantages and disadvantages of a revised Transfer Pricing Agreement versus the proposed Powerex Letter Agreement.
- 5.2. Please explain why BC Hydro believes it would be useful to update the 2003 TPA and treat the 2019 Letter Agreement as a bridging mechanism, rather than relying on the Powerex Letter Agreement indefinitely.
- 5.3. When does BC Hydro expect that it would update the 2003 TPA?
- 5.4. Please elaborate on the difficulties faced updating the 2003 TPA.
- 6. Reference: Exhibit B-1, page 8**

2013 IRP

The Commission must also consider BC Hydro's 2013 Integrated Resource Plan (**2013 IRP**).¹² Like the 2018 Letter Agreement, the purpose of the 2019 Letter Agreement is to enable BC Hydro to address electricity supply issues in the operational time horizon. The 2013 IRP is a long-term planning document that, among other things, assumes average inflows and no reliance on imports to serve domestic load, regardless of BC Hydro's needs in the operational time horizon. In BC Hydro's submission the 2013 IRP is not relevant to the Commission's assessment of the 2019 Letter Agreement.

- 6.1. Please elaborate on BC Hydro's statement that: 'The 2013 IRP is a long-term planning document...regardless of BC Hydro's needs in the operational time horizon.' Is BC Hydro implying that the proposal is inconsistent with the current IRP? Please explain.
- 6.2. When does BC Hydro expect to provide its next IRP?
- 6.3. Please confirm that the Integrated Resource Plan is used by BC Hydro as the basis for many of its annual decisions, such as the levels of DSM to be pursued.
- 6.4. How, if at all, could the Letter Agreement be expected to impact BC Hydro's plans for IPP purchases as established in the next Integrated Resource Plan?
- 6.5. How, if at all, could the Letter Agreement be expected to impact BC Hydro's proposed long term Demand Side Management plans as established in the next Integrated Resource Plan?
- 6.6. How, if at all, could the Letter Agreement impact other elements of the next IRP? Please explain.

7. Reference: Exhibit B-1, page 9

Section/Objective	Explanation
2(a) – Self Sufficiency	Self-sufficiency is a criteria BC Hydro uses in its long term planning efforts and is not relevant to supply issues in the operational time horizon. The 2019 Letter Agreement neither advances nor conflicts with this objective, and is therefore in alignment with it.

7.1. How long is the operational time horizon that BC Hydro is referring to in this instance?

8. Reference: Exhibit B-1, Appendix 1 page 5 of 11

15. Term; Survival. This Agreement shall be effective as of the date first written above and shall remain in effect until terminated by either party upon thirty (30) days' prior written notice; provided, however, that such termination shall not affect or excuse the performance of either party under any provision of this Agreement that by its terms survives any such termination and, provided further, that this Agreement and any other documents delivered pursuant hereto shall remain in effect with respect to the Transaction(s) entered into prior to the effective date of such termination until both parties have fulfilled all of their obligations with respect to such Transaction(s).

TPA. Nothing in this Agreement is intended to amend or modify the rights and obligations of BC Hydro or Powerex under the Transfer Pricing Agreement between them dated as of April 1, 2003 (as amended) ("TPA"), and Transactions shall not be considered transactions or transfers under the TPA. All deliveries to BC Hydro of electricity will first be deemed to be deliveries on account of Transactions confirmed under this Agreement and any remaining volumes will be deemed to be deliveries under the TPA, and any damages or remedies for undelivered electricity under this Agreement are hereby waived.

- 8.1. Please comment on any repercussions that BC Hydro might experience if Powerex were to terminate the agreement without an updated TPA.
- 8.2. Please provide the circumstances which BC Hydro believes might Powerex to terminate the agreement.