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June 30, 2020

Ms. Marija Tresoglavic  
Acting Commission Secretary and Manager  
Regulatory Support  
British Columbia Utilities Commission  
Suite 410, 900 Howe Street  
Vancouver, BC V6Z 2N3

Dear Ms. Tresoglavic:

**RE: Project No. 1599045**  
**British Columbia Utilities Commission (BCUC or Commission)**  
**British Columbia Hydro and Power Authority (BC Hydro)**  
**Review of BC Hydro Performance Based Regulation (PBR) Report**

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BC Hydro writes in accordance with the regulatory timetable set out by BCUC Order No. G-70-20 to submit clarifying questions and high-level topics to help facilitate further discussion at the workshop scheduled for September 8, 2020.

**Context**

In its Decision on BC Hydro's Fiscal 2017 to Fiscal 2019 Revenue Requirements Application, the BCUC recommended that BC Hydro consider a PBR plan and directed BC Hydro to file a PBR report (Exhibit A2-1), addressing a wide-range of issues including types of PBR plans, length of PBR term, potential earnings sharing mechanisms, off-ramps, the management of capital spending, key performance indicators and an annual review process.<sup>1</sup> In combination, these provisions are often associated with multi-year rate plans that include an indexed attrition relief mechanism<sup>2</sup> (i.e., an "inflation" minus "productivity" formula approach).<sup>3</sup> Accordingly, BC Hydro's PBR

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<sup>1</sup> For further discussion, refer to section 11.1.1 of Exhibit A2-1.

<sup>2</sup> In Exhibit A2-5 (Performance Based Regulation: Basic Features and Possible Applications to BC Hydro), an "attrition relief mechanism" is defined as a "common component of multiyear rate plans that automatically adjusts rates or revenues to address utility cost pressures without closely tracking the utility's own cost...". Starting on page 39, an indexed attrition relief mechanism is described as "...based primarily on industry cost trend research. Cost trends are usually decomposed into input price and productivity trends using indexes."

<sup>3</sup> For further discussion, refer to section 7 of Exhibit A2-5.

Report primarily addressed the considerations and merits of an indexed attrition relief mechanism approach for BC Hydro. Among other things, BC Hydro submitted that:

- After years of significant limitations on the BCUC’s jurisdiction over BC Hydro, cost of service regulation should now be given the opportunity to work;
- The fact that BC Hydro is only now returning to enhanced regulation is likely to make it more challenging to secure stakeholder support for the principles of PBR (particularly, that the utility should be provided with the autonomy to manage its expenditures within the PBR framework without a detailed regulatory review);
- Cost of service regulation is more transparent and accessible while PBR is more esoteric, relying on specialized expertise; and
- BC Hydro does not have a mandate to maximize profits, which can dull the additional “carrot” incentive that PBR attempts to provide.<sup>4</sup>

BC Hydro’s report also noted that if the goal of PBR is to strengthen the incentives for efficiency by limiting the extent to which the amount of revenue recovered through rates is linked to a utility’s actual costs, then:

- The current cost of service approach to regulating BC Hydro already achieves this objective to a certain extent;<sup>5</sup>
- Creating a further disconnect between BC Hydro’s rates and its costs would involve additional trade-offs;<sup>6</sup> and
- Adopting PBR does not automatically result in stronger incentives and depending on the design of the regulatory system, a cost of service approach may provide stronger incentives than a PBR approach.<sup>7</sup>

By Order No. G-245-19, the BCUC established a separate proceeding to review BC Hydro’s PBR Report and by Order No. G-326-19, set out a process to determine whether PBR should be implemented for BC Hydro, prior to examining any key principles and design issues, and to commission a consultant report on PBR and how it may apply to Crown Corporations.

On February 28, 2020, BCUC staff submitted a report by Pacific Economics Group Research LLC (**PEG**) entitled Performance Based Regulation: Basic Features and Possible Applications to BC Hydro (Exhibit A2-5). Among other things, PEG states that:

- Most PBR approaches used today can be characterized as incremental reforms to cost of service regulation rather than entirely different regulatory systems;<sup>8</sup>

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<sup>4</sup> For further discussion, refer to section 11.8 of Exhibit A2-1.

<sup>5</sup> For further discussion, refer to section 11.4 of Exhibit A2-1.

<sup>6</sup> For further discussion, refer to sections 11.8.2 and 11.8.3 of Exhibit A2-1.

<sup>7</sup> For further discussion, refer to section 11.4 of Exhibit A2-1.

<sup>8</sup> For further discussion, refer to section 3.6 of Exhibit A2-5.

- Empirical evidence on the impact of PBR on the efficiency of publicly-owned utilities is limited and not encouraging. While modest efficiency gains can occur, they are not ensured and some serious implementation problems have surfaced over the years;<sup>9</sup>
- PBR options available for regulating BC Hydro extend beyond an indexed attrition relief mechanism;<sup>10</sup>
- BC Hydro's current rate-setting approach already includes several PBR provisions;<sup>11</sup> and
- Refinements to these existing PBR provisions could be considered.<sup>12</sup>

In BC Hydro's view, it is particularly noteworthy that under the current rate-setting approach, BC Hydro's allowed revenue requirement is fixed in advance, until its next application, rather than being subject to an earnings review when financial returns depart significantly from target returns. This approach is closer to PBR than it is to more traditional cost of service regulation.<sup>13</sup>

### Proposed Topics for Discussion

In light of the above, BC Hydro suggests that the workshop focus on PEG's submissions with regard to:

1. Those elements of BC Hydro's existing regulatory framework that are considered to be cost of service provisions and those that should be characterized as PBR provisions.

From BC Hydro's reading of the report, PEG would identify the following provisions of BC Hydro's current rate-setting approach as PBR provisions.<sup>14</sup> A common feature of some of these provisions is that they aim to provide incentives by limiting the extent to which the amount of revenue recovered through rates is linked to a utility's actual costs.

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<sup>9</sup> For further discussion, refer to section 11 of Exhibit A2-5. In addition, refer to BC Hydro's response to BCUC IR 2.286.1, included as part of Exhibit A2-4, which provides a discussion of recent challenges with regard to PBR for Hydro Quebec.

<sup>10</sup> For further discussion, refer to section 10.4 of Exhibit A2-5.

<sup>11</sup> For further discussion, refer to "PBR for BC Hydro" in section 10.2 of Exhibit A2-5.

<sup>12</sup> For further discussion, refer to section 10.4 of Exhibit A2-5.

<sup>13</sup> Dr. Dennis Weisman, who has been retained by BC Hydro, describes it this way: "Traditional [cost of service regulation] is an example of an earnings-based regulatory regime that seeks to instill competitive discipline by limiting the regulated firm's financial returns. [PBR] is an example of a price-based regulatory regime that seeks to instill competitive discipline by capping the prices (revenues) of the regulated firm." For further discussion, refer to section 2.1 of Dr. Weisman's report entitled "A Report on the Theory and Practice of Performance-Based Regulation" included as part of Exhibit A2-1

<sup>14</sup> For further discussion, refer to "PBR for BC Hydro" in section 10.2 of Exhibit A2-5.

- (a) Multi-year rate plans de-link rates and costs by reducing the frequency of rate cases (*BC Hydro notes that its revenue requirements are set on a forecast basis, covering multiple years and while a PBR plan could have a longer test period, it could also incorporate an earnings sharing mechanism which would re-establish the link between rates and costs. It is for this reason that, in some cases, a cost of service approach may provide stronger incentives than a PBR approach*).
  - (b) Revenue decoupling de-links rates and costs by reducing the frequency of rate cases (*PEG notes that BC Hydro's Non-Heritage Deferral Account adjusts revenue for margin fluctuations between rate cases resulting from variances between actual and forecasted sales volumes*).
  - (c) Performance metrics and benchmarking can de-link rates and costs by providing financial rewards or penalties based on performance or by providing additional information, beyond a forecast of costs, to inform a decision on rates (*PEG notes that BC Hydro provides regular reporting to the BCUC on several metrics and the Fiscal 2020 to Fiscal 2021 Revenue Requirements Application included a benchmarking study from The Brattle Group*).
  - (d) Targeted incentives to use disfavoured inputs are not intended to de-link rates and costs but rather to incent a utility to incur expenditures in areas where it may not otherwise do so. PEG identified conservation as an example because it can reduce capital expenditures which can reduce a utility's return on equity if its allowed return is tied to the value of assets in-service.<sup>15</sup> (*PEG notes that BC Hydro's Demand-Side Management (DSM) regulatory account allows DSM expenses to be tracked and amortized over 15 years*).
2. The relative advantages and limitations of BC Hydro's current rate-setting approach (including both the cost of service provisions and the PBR provisions).
  3. Specific challenges and considerations that arise with regard to the suitability of any potential PBR provisions in the case of a Crown Corporation, like BC Hydro and why the adoption of PBR appears to be so limited and challenging, in the case of Crown Corporations.
  4. Potential modifications to the current rate-setting approach for BC Hydro (including both the cost of service provisions and the PBR provisions) that could be considered to address any identified limitations.
  5. Possible pros, cons and trade-offs that may be associated with any identified modifications to the current rate-setting approach as well as any potential implementation challenges or considerations<sup>16</sup>.

In addition to the discussion topics suggested above, BC Hydro requests that the BCUC provide additional information, in advance of the workshop, on potential next steps in this process and the expected timing.

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<sup>15</sup> For further discussion, refer to section 6.3 of Exhibit A2-5.

<sup>16</sup> For further discussion on potential PBR implementation challenges, refer to section 11 of Exhibit A2-5.

June 30, 2020  
Ms. Marija Tresoglavic  
Acting Commission Secretary and Manager  
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We appreciate the BCUC considering our suggested discussion topics and we look forward to participating in a productive workshop.

For further information, please contact Chris Sandve at 604-974-4641 or by email at [bchydroregulatorygroup@bchydro.com](mailto:bchydroregulatorygroup@bchydro.com).

Yours sincerely,



Fred James  
Chief Regulatory Officer

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