

# **BRITISH COLUMBIA UTILITIES COMMISSION**

## **British Columbia Utilities Commission Review of British Columbia Hydro and Power Authority's Performance Based Regulation Report**

**BCUC Project No. 1599045**

### **Final Argument of BC Sustainable Energy Association**

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## PART ONE: INTRODUCTION AND SUMMARY

### A. Final argument of BCSEA

1. This is the final argument of the intervener B.C. Sustainable Energy Association (BCSEA). It is filed pursuant to the amended regulatory timetable established by BCUC Order G-92-21.<sup>1</sup>
2. This final argument responds to BC Hydro’s May 3, 2021 Final Argument.<sup>2</sup>

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<sup>1</sup> Exhibit A-14.

<sup>2</sup> [https://www.bcuc.com/Documents/Arguments/2021/DOC\\_62400\\_2021-05-03-BCH-Final-Argument.pdf](https://www.bcuc.com/Documents/Arguments/2021/DOC_62400_2021-05-03-BCH-Final-Argument.pdf).

## **B. BCSEA's interests in the proceeding**

3. BCSEA is a registered charity and a non-profit association of citizens, professionals and practitioners committed to promoting the understanding, development and adoption of sustainable energy, energy efficiency and energy conservation in British Columbia. BCSEA supports the province's transition to a lower-carbon economy. BCSEA has four chapters across BC and approximately three hundred individual and organizational members. Many of BCSEA's members are ratepayers of one or more of BC's energy public utilities. BCSEA represents individuals and organizations in BC who care about energy sustainability and climate change mitigation, and who want the energy they purchase and use to be sustainably produced and transported.<sup>3</sup>
4. BCSEA's interests in this proceeding are as a non-profit public interest organization and as a representative of its members' interests as ratepayers of BC Hydro.
5. BCSEA has participated actively in the current proceeding.

## **C. Procedural background**

6. Directive 28 of the BCUC's March 1, 2018 Decision and Order No. G-47-18 on BC Hydro's BC Hydro F2017 to F2019 Revenue Requirements Application (RRA) recommended that BC Hydro consider a Performance Based Ratemaking (PBR) plan and directed BC Hydro to file a report discussing, among other things, the opportunities and challenges associated with the adoption of PBR at BC Hydro and a possible approach to adopting PBR.<sup>4</sup>
7. In February 2019, BC Hydro filed a PBR Report as Chapter 11 of its F2020-F2021 RRA. In addition, BC Hydro filed two expert reports:
  - a. "Report on the Theory and Practice of Performance-Based Regulation," Dennis L. Weisman Ph.D., December 12, 2018,<sup>5</sup> and
  - b. "Assessing the Treatment of Capital Expenditures in PBR Plans," by David E. M. Sappington and Dennis L. Weisman, September 1, 2015.<sup>6</sup>

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<sup>3</sup> Exhibit C8-1 in the BCUC proceeding regarding BC Hydro's F2020-F2021 RRA.

<sup>4</sup> BCUC Decision and Order No. G-47-18, pages 111 and 117.

<sup>5</sup> Appendix FF of Exhibit B-1 in the F2022-F2021 RRA, and Exhibit A2-1, pdf p.77 in the current proceeding.

<sup>6</sup> Appendix GG of Exhibit B-1 in the F2022-F2021 RRA, and Exhibit A2-1, pdf p.163 in the current proceeding.

8. In the course of the BCUC's proceeding regarding the F2020-F2021 RRA, on October 11, 2019 the Commission established a separate proceeding for the review of BC Hydro's PBR Report.<sup>7</sup> Interveners in the F2020-F2021 RRA proceeding, including BCSEA, were automatically registered as interveners in the PBR Report proceeding (the current proceeding).<sup>8</sup> Relevant documents from the F2020-F2021 RRA proceeding were placed on the evidentiary record of the current proceeding.<sup>9</sup>
9. On November 22, 2019, a procedural conference was held.<sup>10</sup> In December 2019, the Panel established a further regulatory timetable to include a report by a BCUC Staff Consultant, clarifying questions or high level topics by parties to the BCUC Staff Consultant, and a BCUC-facilitated PBR workshop to be held in March 2020<sup>11</sup> (later postponed to September 2020 due to COVID-19<sup>12</sup>).
10. In February 2020, the Commission Staff filed a report by Staff Consultant Pacific Economics Group Research, LLC (PEG) titled "Performance-Based Regulation: Basic Features and Possible Applications to BC Hydro" (PEG Report).<sup>13</sup>
11. By June 2020, BCSEA,<sup>14</sup> as well as other interveners and BC Hydro,<sup>15</sup> filed "clarifying questions and high-level topics" regarding the PEG Report.
12. On September 8, 2020, the BCUC staff facilitated a workshop attended by the Panel, BC Hydro, interveners, BCUC staff and Dr. Lowry, the author of the PEG Report.<sup>16</sup> The Commission made a presentation titled "Performance Based Regulation: An Introduction."<sup>17</sup> Dr. Lowry made a presentation reviewing BC Hydro's PBR Report and expert reports, and responding to the questions and topics raised by interveners and BC Hydro.<sup>18</sup>
13. On September 17, 2020, the Commission invited the parties to make submissions on the scope of the further review of BC Hydro's Report and the next steps in the

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<sup>7</sup> Order G-245-19, Exhibit A-1.

<sup>8</sup> Order G-246-19, Exhibit A-2.

<sup>9</sup> Exhibits A2-1, A2-2, A2-3, A2-4.

<sup>10</sup> Transcript Volume 1, Procedural Conference, November 22, 2019.

<sup>11</sup> Order G-326-19, Exhibit A-4.

<sup>12</sup> Exhibit A-6.

<sup>13</sup> Exhibit A2-5.

<sup>14</sup> Exhibit C1-3.

<sup>15</sup> Exhibit B-6.

<sup>16</sup> Transcript Volume 2, Workshop, September 8, 2020.

<sup>17</sup> Exhibit A2-6.

<sup>18</sup> Exhibit A2-7.

proceeding.<sup>19</sup> Interveners, including BCSEA,<sup>20</sup> filed submissions in late September, 2020. BC Hydro also filed a submission, and proposed to file supplementary evidence.<sup>21</sup>

14. On October 6, 2020, the Panel issued an amended regulatory timetable that provided for information requests to the Staff Consultant, the Staff Consultant's responses, supplementary evidence by BC Hydro, information requests to BC Hydro on the supplementary evidence, and BC Hydro's responses.<sup>22</sup>
15. In late October 2020, BCSEA<sup>23</sup> and other interveners made information requests to the Staff Consultant. Dr. Lowry of PEG responded in November 2020.<sup>24</sup>
16. On November 30, 2020, BC Hydro filed supplementary evidence, a supplementary report by Dr. Denis Weisman, and an expert opinion by Mr. Mark Kolesar.<sup>25</sup>
17. In early January 2021, information requests on BC Hydro's supplementary evidence were made by Commission staff<sup>26</sup> and the interveners including BCSEA.<sup>27</sup> BC Hydro provided responses on February 4, 2021.<sup>28</sup>
18. After receiving submissions regarding further process from BC Hydro and the interveners including BCSEA, the Commission scheduled oral submissions for March 22, 2021 on hypothetical outcomes and how they might affect the timing of future BC Hydro rate applications, including the 3-year RRA BC Hydro expects to file in August 2021.<sup>29</sup> Oral submissions were made during an online session on March 22, 2021.<sup>30</sup> Three interveners made additional written submissions March 19, 2021. On March 23, 2021, the Panel issued Order G-92-21 establishing the dates for a final written argument by BC Hydro, final written arguments by interveners, and a BC Hydro final written reply argument.<sup>31</sup>

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<sup>19</sup> Exhibit A-9.

<sup>20</sup> Exhibit C1-6.

<sup>21</sup> Exhibit B-7.

<sup>22</sup> Decision and Order G-251-20, Exhibit A-10.

<sup>23</sup> Exhibit C1-7.

<sup>24</sup> Exhibits A2-8, A2-9, A2-10, A2-11, A2-12, A2-13.

<sup>25</sup> Exhibit B-8.

<sup>26</sup> Exhibit A-12.

<sup>27</sup> Exhibit C1-8.

<sup>28</sup> Exhibit B-9; Exhibit B-10.

<sup>29</sup> Exhibit A-13.

<sup>30</sup> Transcript Volume 3, Oral Submissions, March 22, 2021.

<sup>31</sup> Exhibit A-14.

19. Order G-92-21 also states that “Any change to the test period that is requested in the August 2021 RRA filing is a matter that should be addressed in that proceeding.”

#### **D. Outcomes requested**

20. This is not a typical proceeding in which an applicant seeks specified orders or remedies from the Commission. Rather, this is a proceeding in which the Commission is reviewing a compliance report (BC Hydro’s PBR Report, filed as directed by Decision and Order G-47-18).
21. The narrow purpose of the Commission’s review of a compliance report is to determine if the report meets the objectives of the Commission’s direction that required the report to be filed. BCSEA submits that BC Hydro’s PBR Report and supporting evidence complies with Direction 28 of Order G-47-18, and that the Panel should make a finding to that effect.
22. However, the current proceeding has (properly) gone much further than simply determining whether the PBR Report complies with Direction 28. The current proceeding has explored in considerable depth the elements of “PBR” and “COSR” (cost of service regulation), the commonalities and differences between these elements in theory and as applied to BC Hydro, and the pros and cons of adopting some of these elements in the Commission’s regulation of BC Hydro.
23. “PBR” and “COSR” are in quotation marks in the previous paragraph because the meaning and suitability of these terms was itself the subject of analysis and debate during the proceeding.
24. BCSEA respectfully submits that the Panel should conclude that an important outcome of the proceeding is the understanding that PBR and COSR are not mutually exclusive alternatives as forms of economic regulation of BC Hydro under the *Utilities Commission Act*. In fact, the BCUC’s regulation of BC Hydro already includes elements associated with both COSR and PBR. As BC Hydro states:
- “Although it is common to refer to BC Hydro’s existing regulatory regime as “COSR”, it differs from “textbook” COSR. It incorporates, to varying degrees, each of the four PBR approaches identified by Dr. Lowry.”<sup>32</sup>
25. BCSEA agrees with BC Hydro’s description as follows:

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<sup>32</sup> BC Hydro Final Argument, para.50.

“...The experts also concur that BC Hydro’s current regulatory regime falls part-way along the incentive continuum, incorporating various mechanisms that may be characterized as Performance Based Regulation (“PBR”).

In that context, characterizing the central issue in this proceeding as a choice between Cost of Service regulation (“COSR”) and PBR would present an overly simplistic, and ultimately false, dichotomy. It would also prompt unnecessary disputes over nomenclature. The analytical exercise is, rather, one of assessing whether the existing incentives for good performance can be strengthened in a way that the assumed benefits outweigh the disadvantages.”<sup>33</sup>

26. If the central question at the beginning of the proceeding had been, ‘Is PBR appropriate for BC Hydro?’, then BCSEA submits that the question for the Panel is now, ‘What new regulatory elements for BC Hydro should be advanced and what possibilities should be rejected?’

27. This formulation has three features:

- a. It focuses on specific regulatory elements rather than broad generalized terms such as PBR and COSR;
- b. It respects the authority of future BCUC panels to make decisions regarding specific applications under the UCA on the filed evidence in those proceedings unfettered by categorical statements in the current review proceeding; and
- c. It consolidates the learnings in the review proceeding by separating ideas that should be pursued from ideas that should be left behind.

28. BCSEA’s formulation of the question for the Panel aligns with BC Hydro’s articulation of the central issue before the BCUC, although BC Hydro populates the framework with three regulatory elements it says should be moved forward and four regulatory elements it says should be set aside.<sup>34</sup>

29. BCSEA agrees with BC Hydro’s description of the appropriate nature of the findings the Panel will make in the current proceeding:

“Since the BCUC will consider BC Hydro’s three proposals in the Fiscal 2023-Fiscal 2025 RRA proceeding, its decision in the present proceeding should be devoted to findings about how certain characteristics of BC Hydro would affect the efficacy and implementation of the various

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<sup>33</sup> BC Hydro Final Argument, paras.1, 2.

<sup>34</sup> BC Hydro Final Argument, paras.8, 4.

measures raised in this proceeding, and whether any potential benefits can be expected to outweigh the identified challenges. While an outcome of this proceeding could be to rule out certain mechanisms or direct BC Hydro to file a proposal in the future (i.e., determinations ‘in principle’), the BCUC should refrain from directing the implementation of any mechanism without the benefit of a specific proposal and evidence on its implications that would come in a future RRA proceeding.”<sup>35</sup>

### **E. Outline of argument**

30. Following this introductory Part, Part Two sets out four main points. Part Three examines in detail the responses to BCSEA’s information requests. Part Four expresses BCSEA’s support for BC Hydro’s itemized points. Part Five is a brief conclusion.

## **PART TWO: BCSEA’S FOUR MAIN POINTS**

31. In this Part, BCSEA expresses four main points:

- a. BCSEA takes a practical approach to PBR;
- b. BC Hydro’s shareholder lacks a profit motive;
- c. Demand-Side Management is already fostered; and
- d. Increased marketing flexibility for BC Hydro would not be achieved by applying a PBR regime to BC Hydro.

### **A. BCSEA takes a practical approach to PBR**

32. BCSEA takes a practical approach to the suitability of financial incentive mechanisms as a component of the Commission’s economic regulation of a given public utility at given point in time. For example, in the Commission’s recent proceeding regarding Multi-year Ratemaking Plans for FortisBC Energy Inc. (natural gas) and FortisBC Inc. (electricity), BCSEA supported continuation of PBR-type plans for the next five years. BCSEA concluded that neither the previously-approved PBR Plans nor the then-proposed MRPs (later approved) inhibit the utilities’ ability to carry out Demand-Side Management activities or to carry out and expand their carbon-reduction activities.<sup>36</sup> BCSEA also pointed out that FEI and FBC, the

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<sup>35</sup> BC Hydro Final Argument, para.7, footnote removed.

<sup>36</sup> BCSEA Final Argument, February 9, 2020, FortisBC Multi-Year Rate Plan Application for 2020

Commission, and the stakeholders had (then) six years' experience with the PBR-type rate-setting approach for FEI and FBC. BCSEA noted that switching to a COS rate-setting approach for FEI and FBC at the present time would entail a substantial new allocation of time and resources by all parties, beyond the considerable amount of effort that has gone into preparation and review of the Proposed MRPs.<sup>37</sup>

33. Similarly, BCSEA takes a practical approach to PBR and BC Hydro. For BCSEA, the issue is less about whether in theory a PBR regime could benefit the economic regulation of BC Hydro and should be given serious consideration, and more about whether in practice a PBR regime would benefit the economic regulation of BC Hydro and should be actually implemented.

#### **B. BC Hydro's shareholder lacks a profit motive**

34. In terms of choosing the appropriate elements of economic regulation, BCSEA's view is that BC Hydro is fundamentally different than FEI and FBC because BC Hydro is (a) a Crown Corporation and (b) not a profit maximizing utility.

35. As BC Hydro's shareholder, the BC Government can and does direct BC Hydro to achieve objectives such as low rates, clean renewable electricity, DSM, low-carbon electrification, and achieving its allowed return. BC Hydro has no mandate to exceed its expected return. It is clear to BCSEA that the BC Government would rather have BC Hydro keep rates lower than they would otherwise be than have BC Hydro earn excess profit (above the allowed return).

36. In BCSEA's view, the fact that BC Hydro is a Crown Corporation that is not a profit maximizing utility<sup>38</sup> is a full answer to the question of whether adoption of a PBR regime would benefit the economic regulation of BC Hydro. It would not.

37. If the original question can be simplified to, 'Is PBR appropriate for BC Hydro?', then the simple answer is, 'No, because BC Hydro is a Crown Corporation that is not a profit maximizing utility.' A PBR regime, such as the Multi-year Ratemaking Plans recently approved for FEI and FBC, relies at its core on a financial incentive to the utility's shareholder to achieve the desired conduct by the utility. There is no financial incentive where BC Hydro has no mandate to exceed its allowed return.

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to 2024, para.7(a).

<sup>37</sup> BCSEA Final Argument, February 9, 2020, FortisBC Multi-Year Rate Plan Application for 2020 to 2024, para.33.

<sup>38</sup> See BC Hydro Final Argument, para.10, fifth bullet.

38. This is a simple but fundamental flaw in the idea of applying a PBR regime to BC Hydro. None of the evidence supporting consideration of a PBR regime for BC Hydro has openly grappled with, let alone resolved, this fundamental flaw. This topic is addressed in more detail in Part Three, Section A.

### **C. Demand-Side Management is already fostered**

39. BCSEA strongly supports Demand-Side Management by BC Hydro (and other public utilities) to cost-effectively reduce energy consumption. One of the arguments for applying PBR to BC Hydro is that PBR includes “revenue decoupling” that allows a regulated utility to achieve DSM energy savings without losing revenue from sales.<sup>39</sup> However, the BCUC’s economic regulation of BC Hydro already includes BC Hydro’s Load Variance Regulatory Account, which provides revenue decoupling and removes the revenue-based disincentive for BC Hydro to pursue Demand-Side Management.<sup>40</sup> In BCSEA’s view, therefore, there is no need for a new revenue decoupling mechanism for BC Hydro.

40. BCSEA endorses BC Hydro’s three succinct points on this topic:

“Incentives intended to overcome a disincentive to invest in DSM are of no value in BC Hydro’s case. There is a disincentive for an investor owned utility because DSM reduces revenues and can reduce the need for capital investment, upon which a utility earns its regulated rate of return. BC Hydro does not have that disincentive, given its mandate to promote energy conservation and its revenue decoupling mechanism (the Load Forecast Variance Account).

If the concern is that BC Hydro may be pursuing excessive levels of DSM and initiatives that are not cost-effective, that premise is also incorrect. The Demand-Side Measure Regulation sets out requirements for measures to be cost-effective, which BC Hydro’s initiatives meet. BC Hydro applies the additional test of requiring measures to be lower than the market price under the Utility Cost Test.

The introduction of a shared savings performance incentive mechanism for conservation could discourage measures aimed at providing equitable opportunities across customer classes or targeted opportunities for certain customer groups. In other words, a shared savings performance incentive mechanism could incent BC Hydro to pursue the most cost-effective DSM initiatives instead of initiatives driven by policy, regulatory or equity considerations.”<sup>41</sup>

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<sup>39</sup> For example, Exhibit A2-5, pp.19-20.

<sup>40</sup> BC Hydro Final Argument, para.164.

<sup>41</sup> BC Hydro Final Argument, para.176, footnotes removed. And see BC Hydro Final Argument,

41. In BCSEA's view, adopting a PBR regime for BC Hydro would hinder, rather than help, BC Hydro's implementation of Demand-Side Management.

**D. Increased marketing flexibility for BC Hydro would not be achieved by applying a PBR regime to BC Hydro**

42. BCSEA strongly supports BC Hydro achieving low-carbon electrification for BC to meet its GHG emissions reduction targets. However, BCSEA respectfully disagrees with Dr. Lowry's suggestion that applying PBR to BC Hydro would increase BC Hydro's marketing flexibility and facilitate, among other things, electrification of transportation.<sup>42</sup>

43. The suggestion is based on the incorrect premise that PBR would enable BC Hydro to implement targeted rate designs and offerings without BCUC approval. In fact, the UCA requires BC Hydro to obtain BCUC approval of all rates and service offerings.<sup>43</sup>

44. Further, in BCSEA's view it would be unreasonable to imagine the BC Government boosting its existing pressure on BC Hydro to achieve electrification in response to a financial incentive when, as emphasized above, BC Hydro has no mandate to exceed its expected return and, for context, the size of the incentive would be miniscule in relation to the size of BC Hydro's many Government-driven electrification investments.

45. In BCSEA's view, the BC Government is already highly motivated both to maximize low-carbon electrification and to put downward pressure on BC Hydro's rates. Downward pressure on BC Hydro's rates for clean renewable electricity makes it that much easier to boost low-carbon electrification, which in turn puts downward pressure on BC Hydro's rates. This 'virtuous circle' would be weakened by moving from full to partial decoupling as Dr. Lowry suggests.

46. To be clear, BCSEA strongly advocates that the BC Government should strengthen BC Hydro's role in achieving the large amounts of low-carbon electrification needed to help BC achieve its GHG emissions reduction commitments. However, BCSEA is well aware that the Government faces real impediments to taking stronger action on climate change. The absence of a PBR financial incentive is not one of them.

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paras.61-64.

<sup>42</sup> Exhibit A2-5, pp.20, 54-55; Exhibit A2-8, BCUC-PEG Response to BCSEA IR 5.

<sup>43</sup> BCSEA concurs with BC Hydro Final Argument, para.155, citing UCA s.61(3) and s.63.

## **PART THREE: RESPONSES TO BCSEA'S INFORMATION REQUESTS**

47. This Part focuses on Dr. Lowry's responses to BCSEA's information requests. Three topics are addressed:

- a. Financial incentives to BC Hydro's shareholder would not be effective regulatory tools;
- b. Experience with PBR and publicly-owned utilities does not support PBR for BC Hydro; and
- c. Marketing flexibility does not support applying PBR to BC Hydro.

### **A. Financial incentives to BC Hydro's shareholder would not be effective regulatory tools**

48. Dr. Lowry says applying PBR to BC Hydro merits "serious consideration."<sup>44</sup> BCSEA submits that serious consideration to applying a PBR regime to BC Hydro has indeed been given during the current proceeding and that the idea of applying a PBR regime to BC Hydro should be rejected.

49. BCSEA respectfully submits that Dr. Lowry's evidence is strong on the application of PBR generally but weak on the application of PBR to BC Hydro in particular.

50. In BCSEA's view, applying the financial incentive mechanisms typical of PBR regimes to BC Hydro would not be effective because BC Hydro is not a profit maximizing utility and BC Hydro has no mandate to exceed its expected return.

51. In response to PEG's February 2020 PBR Report, BCSEA described its high-level questions and concern to Dr. Lowry as follows:

"1. Shareholder's lack of a profit motive

Would the prospect of enhanced earnings under PBR be an effective motivator for the BC Government (BC Hydro's Shareholder) to cause BC Hydro to contain costs more under PBR than it would under COSR?

Have the authors of the PEG Report considered that the BC Government may be more interested in reducing upward pressure on BC Hydro's rates and in achieving policy objectives such as low-carbon electrification than in increasing the government's earnings from BC Hydro? How does this affect the merits of moving BC Hydro to a PBR framework, in the authors' view? Please address factors such as the following:

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<sup>44</sup> Exhibit A2-8, BCUC-PEG Response to BCSEA IR 2.1.

The BC Government has numerous levers, such as setting water rentals and payments in lieu of taxes, for adjusting the amount of revenue it receives from BC Hydro, separate from earnings based on a return on equity (whether under PBR or COSR).

Currently, the BC Government is transitioning to a more traditional mechanism in which its shareholder's income from BC Hydro is based on actual, not deemed, debt/equity and a return on equity to be determined by the BCUC (in a future proceeding). This comes after many years during which the BC Government had complete control over the size of its earnings from BC Hydro. The BC Government recently absorbed a \$1.1 billion write-off of BC Hydro's Rate Smoothing Regulatory Account in order to put BC Hydro's finances on a better footing for limiting future rate increases.

This suggests to BCSEA that it is unlikely that a financial incentive under a PBR framework would be large enough to motivate the shareholder to require BC Hydro to contain costs that BC Hydro would otherwise have incurred."<sup>45</sup>

52. Despite the emphasis on BC Hydro's lack of a profit motive by BCSEA, other interveners and BC Hydro, Dr. Lowry's written presentation to the September 8, 2020 staff-sponsored PBR Workshop is notably silent regarding BC Hydro's shareholder's lack of a profit motive and how that affects the merits of applying a PBR regime to BC Hydro.<sup>46</sup>

53. During the Workshop, Dr. Lowry did acknowledge that "it's true that profit motive doesn't work as well in a Crown corporation."<sup>47</sup> However, in BCSEA's view, Dr. Lowry did not grapple with the consequences of this factor for the merits of applying PBR to BC Hydro.

54. In its information requests after the Workshop, BCSEA put the question directly:

"2.1 In Dr. Lowry's view, would the prospect of enhanced earnings through incentives under PBR be an effective motivator for the BC Government (BC Hydro's Shareholder) to cause BC Hydro to contain costs more under PBR than it would under COSR?"

55. Dr. Lowry responded:

"PEG believes that PBR can improve BC Hydro's performance incentives and the efficiency of its regulation and therefore merits serious

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<sup>45</sup> Exhibit C1-3, p.2.

<sup>46</sup> Exhibit A2-7.

<sup>47</sup> T2:221, lines 25-26.

consideration. Please see the responses to Zone II ratepayers group questions 2.1 and 8.1 for further discussion of the incentive issue.”<sup>48</sup>

56. In BCSEA’s respectful submission, this merely restates Dr. Lowry’s theme and does not address whether financial incentives under PBR for BC Hydro would be effective and if so why.

57. Nor does the further discussion of the incentive issue in the responses to the Zone II Ratepayers Group provide any evidence that the BC Government would change its directions to BC Hydro in response to PBR financial incentives.

58. Zone II Ratepayers Group’s question 2.1 is:

“Since BC Hydro does not have a mandate to maximize profits, please identify the recommended incentives that could be used in a PBR model for regulating BC Hydro?”<sup>49</sup>

59. PEG’s response is lengthy. PEB begins:

“Section 60 (1) (b) of the BC Utilities Commission Act states that the commission must have due regard to the setting of a rate that... encourages public utilities to increase efficiency, reduce costs, and enhance performance.

While BC Hydro may not have an express mandate to maximize profits, a regulatory system with compensation that rewards good performance and penalizes bad performance can still provide material benefits.

- The government, as owner of BC Hydro, would presumably like to keep the Company’s rates low and slow-growing. Efficient operation is a good way to accomplish this, since the alternative of subsidizing the Company requires the government to borrow more money, spend less on other things, and/or to raise taxes. Thus, the government would like BC Hydro to efficiently provide quality services. ...”<sup>50</sup>

60. Pausing here, it is a certainty that the BC Government would like (and directs) BC Hydro to keep its rates low, and to efficiently provide quality services. The concern is that a PBR financial incentive would not cause the Government to direct BC Hydro to keep its rates low and to efficiently provide quality services any more forcefully or effectively than the Government already does. The Government has numerous available mechanisms to increase its revenue from BC Hydro if it so desired.

61. PEG continued:

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<sup>48</sup> Exhibit A2-8, BCUC-PEG Response to BCSEA IR 2.1.

<sup>49</sup> Exhibit A2-13, BCUC-PEG Response to Zone II RG IR 2.1.

<sup>50</sup> *Ibid.*

“• The BCUC is a government agency that has been assigned an important role in the oversight of the Company’s operating efficiency. One way to exercise this responsibility is to provide BC Hydro with revenue that is compensatory only for efficient operations. This question cites a statement by the Company that management has an obligation and commitment to deliver on the Company’s mandate “within the budget set by the BCUC. ...”<sup>51</sup>

62. With respect, the BCUC already “provide[s] BC Hydro with revenue that is compensatory only for efficient operations.” This does not address whether a financial incentive under PBR would cause BC Hydro to operate more efficiently (while maintaining acceptable levels of service).

63. PEG continued:

“• Even if the government requests a stream of earnings from BC Hydro that isn’t closely tied to its rate base, it is easier to provide this stream and pay lenders, employees, and service providers to the extent that performance is good. Earnings that exceed the stream that the government requests have many uses. For example, surplus earnings can be used to fund future capex surges that the BCUC is reluctant to fully fund. Surplus earnings can also fund popular programs. For example, they can be used to bolster subsidies for low-income customers.”<sup>52</sup>

64. In response, this line of argument does not support applying a PBR regime to BC Hydro. BC Hydro is already highly motivated to be efficient in order to meet the shareholder’s simultaneous demands for low rates, a financial return, adequate service, and achievement of policy goals such as DSM and low-carbon electrification. The Government expects BC Hydro to put “[e]arnings that exceed the return that government requests” toward reducing rates and achieving the other objectives set by the Government. It is unclear what PEG means by “future capex surges that the BCUC is reluctant to fully fund.” However, the UCA does not contemplate BC Hydro using “surplus earnings” without BCUC approval. Moreover, when the BC Government is concerned that the BCUC might not approve certain spending by BC Hydro the Government has the option, and frequently uses it (like it or not), to issue a legal directive requiring the BCUC to allow BC Hydro to recover the costs. Finally, if the Government was willing to fund subsidies for low-income customers (which BCSEA is inclined to support) then presumably the Government would go ahead and do it, without relying on PBR incentive payments from

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<sup>51</sup> *Ibid.*

<sup>52</sup> *Ibid.*

ratepayers that would otherwise have allowed BC Hydro to reduce rates for all customers.

65. PEG then states:

“• The weaker profit motives of crown corporations can sometimes be advantageous. An example might be where only a small incentive for the utility to reduce externalities is politically feasible. The publicly owned utility might take this more to heart than the private one. ...”<sup>53</sup>

66. This point appears to assume that the BCUC would approve a PBR incentive for BC Hydro to “reduce externalities” that the BC Government had not directed BC Hydro to pursue. If so, this would be the opposite of the usual dynamic in which it would be the Government, not the BCUC, that would encourage (or require) BC Hydro to reduce externalities. Also, while Crown Corporations such as Hydro Québec may have a “weaker profit motive,” BC Hydro does not have a profit motive at all.

67. PEG states:

“• The government can adjust internal incentives to match the performance metrics and external incentives that the BCUC crafts.”

68. With respect, this appears to be wishful thinking. The Government’s rules for executive compensation apply across the board, and the Government would be highly unlikely to carve out an exception for BC Hydro<sup>54</sup> just to match PBR performance metrics and external incentives approved by the BCUC.

69. PEG concludes:

“The potential usefulness of incentives in the Company’s regulatory system is supported by the fact that there already are some incentive provisions. For example, BC Hydro is permitted to amortize its DSM expenses.”<sup>55</sup>

70. With respect, the issue is not the potential usefulness of incentives generically but whether specific PBR financial incentives have been identified that would actually be effective given that BC Hydro does not have a mandate to maximize profits. Notably, PEG’s response to the Zone II Ratepayers Group does not identify any incentives that could be used in a PBR model for regulating BC Hydro, although that was what the question asked for.

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<sup>53</sup> *Ibid.*

<sup>54</sup> Presumably many entities would like an exemption from the Government’s executive compensation rules.

<sup>55</sup> Exhibit A2-13, BCUC-PEG Response to Zone II RG IR 2.1.

**B. Experience with PBR and publicly-owned utilities does not support a PBR regime for BC Hydro**

71. BCSEA submits that the evidence of experiences with PBR and publicly-owned utilities in other jurisdictions does not support applying a PBR regime to BC Hydro.

72. BCSEA asked if Dr. Lowry would agree that the PEG Report's discussion of theoretical and empirical research regarding PBR and publicly-owned utilities indicates few if any positive results.<sup>56</sup>

73. Dr. Lowry's response was:

"The results of these studies provide grounds for concern but do not suggest that PBR should be eschewed. PEG found only a few papers that specifically addressed the effect of PBR on publicly-held utilities. The theoretical papers reviewed found that the impact of PBR would be greater for privately-held utilities but did not find that it would have no impact on publicly-held utilities. Profit may matter less because publicly-held utilities have other goals, but some of these goals are not antithetical to operating efficiently.

Results of empirical studies of power distributors in Australia and Sweden were not encouraging. However, such studies may not control adequately for pertinent business conditions. For example, publicly-held utilities may have had more need for replacement capex during the sample period. Other studies did not indicate that public utilities tended to be superior cost performers. PEG's own cost benchmarking in Alberta and Ontario has not found privately-held utilities to be superior performers on balance."<sup>57</sup>

74. With respect, BCSEA would characterize Dr. Lowry's response as gamely holding on to the potential for a BC Hydro PBR regime to be theoretically beneficial despite acknowledging that the experience of PBR and publicly-owned utilities in other jurisdictions provides no practical support for the idea.

75. Asked to comment on the implications of experiences with PBR and publicly-owned utilities in other jurisdictions for applying new PBR elements to BC Hydro, Dr. Lowry stated:

"Due attention should be paid to BC Hydro's provincial ownership in considering PBR provisions for the Company. There may, for example, be a special need to oversee internal employee incentives."<sup>58</sup>

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<sup>56</sup> Exhibit C1-5, BCSEA IR 4.1.

<sup>57</sup> Exhibit A2-8, BCUC-PEG Response to BCSEA IR 4.1.

<sup>58</sup> Exhibit A2-8, BCUC-PEG Response to BCSEA IR 4.1.1.

76. While due attention should always be paid, BCSEA respectfully submits that the main conclusion the Panel should reach is that the experience of PBR and publicly-owned utilities in other jurisdictions provides no practical support for applying PBR to BC Hydro and therefore supports rejecting the idea of applying a PBR regime to BC Hydro.
77. Regarding BCUC oversight of BC Hydro internal employee incentives, BCSEA agrees with BC Hydro that BC Hydro “is constrained in its ability to use employee compensation to emulate a corporate mandate to exceed the allowed ROE.”<sup>59</sup>

**C. Marketing flexibility does not support applying a PBR regime to BC Hydro**

78. BCSEA respectfully submits that the Panel should reject the idea that “marketing flexibility” supports applying a PBR regime to BC Hydro.
79. Dr. Lowry says BC Hydro lacks marketing flexibility because all of BC Hydro’s rates and offerings must be approved by the BCUC, which he calls cumbersome.<sup>60</sup> However, applying PBR to BC Hydro would not change the legal fact that all of BC Hydro’s rates and offerings must be approved by the BCUC.
80. Dr. Lowry says “Multiyear rate plans can free up more time to address rate and service offerings... .”<sup>61</sup> However, a multiyear test period for BC Hydro’s RRA also can free up more time to address rate and service offerings without adopting a full PBR regime for BC Hydro.
81. Dr. Lowry says “Multiyear rate plans ... can potentially facilitate more light-handed regulation of optional offerings.” However, it is open to the BCUC to implement light-handed regulation of optional offerings without adopting a full PBR regime for BC Hydro.
82. BCSEA asked Dr. Lowry to provide examples of new marketing initiatives that BC Hydro could consider, and to discuss how these would be affected by the new PBR elements that he recommends. He stated:

“The Company could, for example, with stronger incentives and light-handed regulation of optional tariffs develop various green power (e.g.,

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<sup>59</sup> BC Hydro Final Argument, para.48. And see paras.46-48, 101-104.

<sup>60</sup> Exhibit A2-8, BCUC-PEG Response to BCSEA IR 5.1.

<sup>61</sup> Exhibit A2-8, BCUC-PEG Response to BCSEA IR 5.1.

100% renewable) packages and special rates for electrification of transportation.”<sup>62</sup>

83. In BCSEA’s view, these suggestions do not fit well with BC Hydro’s actual circumstances.<sup>63</sup> BC Hydro already has two strong incentives to implement measures to achieve substantially more low-carbon electrification (LCE) than it currently plans for: downward pressure on rates due to load-building, and contributing to reducing BC’s GHG emissions. Both of these objectives are heavily emphasized by the BC Government as BC Hydro’s shareholder. BCSEA is impatient that BC Hydro should be doing more LCE and sooner. However, BCSEA does not believe that a new PBR mechanism by which the BC Government would receive a share of the incremental revenue associated with LCE load growth would spur BC Hydro to boost its LCE activities.

#### **PART FOUR: BCSEA SUPPORTS BC HYDRO’S POINTS**

84. BC Hydro asks the Panel to find that, in principle, BC Hydro’s proposed three elements for its next RRA “merit consideration” in the upcoming RRA proceeding. BC Hydro also asks the Panel to find that four particular options should be set aside. BCSEA supports these requested findings, as discussed in this Part.

##### **A. Proposed three elements for the next BC Hydro RRA**

85. BC Hydro proposes to include the following three mechanisms “to strengthen the existing incentives for cost control, productivity improvements and performance”<sup>64</sup> in the upcoming RRA scheduled to be filed in August 2021:

- a. a three-year test period,
- b. information-only performance metrics, and
- c. regular statistical benchmarking.

86. BCSEA agrees that these three elements warrant consideration in the next RRA proceeding. BCSEA also agrees that “The BCUC can make this ‘in principle’ finding without fettering the discretion of the BCUC Panel hearing the RRA to consider the

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<sup>62</sup> Exhibit A2-8, BCUC-PEG Response to BCSEA IR 5.6.

<sup>63</sup> First, a 100% renewable offering would yield little if any incremental revenue, because the power BC Hydro delivers to all its customers is already almost 100% clean and renewable. Second, BC Hydro already develops optional rates for electrification of transportation.

<sup>64</sup> BC Hydro Final Argument, para.8.

merits of the specific proposals based on the evidentiary record in the RRA process.”<sup>65</sup>

87. BCSEA sees a three-year test period is a middle ground between, on the one hand, the two-year and one-year test periods for BC Hydro’s F2020-F2021 RRA and F2022 RRA, respectively, and, on the other hand, a lengthy test period such as FEI’s and FBC’s five-year 2020-2024 MRPs.

88. BCSEA agrees with BC Hydro that a three-year test period for the next RRA would strengthen incentives, increase regulatory efficiency and retain valued transparency.<sup>66</sup>

89. BCSEA supports inclusion of information-only performance metrics in BC Hydro’s next RRA. This would improve transparency in what can otherwise be detail-intensive proceedings. BC Hydro states:

“BC Hydro’s proposal for Information-only performance metrics, determined through a BCUC process, would provide an incentive for increased performance in areas that matter to the BCUC and interveners, including electrification.”<sup>67</sup>

90. The real issue will be to determine what performance metrics should be approved, and that is appropriately the role of the future RRA Panel.

91. BC Hydro is developing terms of reference to guide the objective, scope and frequency of future benchmarking studies.<sup>68</sup> BCSEA supports BC Hydro’s request that the Panel find that regular statistical benchmarking warrants consideration in the next RRA proceeding.<sup>69</sup>

## **B. The four options BC Hydro says should be set aside**

92. The four options BC Hydro says should be set aside are:

- a. an RRA test period longer than three years,
- b. indexing or formula approaches to determining revenues,

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<sup>65</sup> BC Hydro Final Argument, para.142.

<sup>66</sup> BC Hydro Final Argument, paras.122-133.

<sup>67</sup> Exhibit B-9, BC Hydro Response to BCUC IR 1.3.2, pdf p.22.

<sup>68</sup> BC Hydro Final Argument, para.135, citing Exhibit B-8, BC Hydro Supplementary Evidence, p. 15.

<sup>69</sup> BC Hydro Final Argument, paras.135-138.

- c. moving from full decoupling to partial decoupling to facilitate financial incentives for pursuing electrification, and
- d. attaching financial incentives to specific metrics or initiatives, i.e., Performance Incentive Mechanisms (“PIMs”).<sup>70</sup>

***(i) An RRA test period longer than three years***

93. In BCSEA’s respectful submission, on the basis of the factors considered during this proceeding, the current Panel should not endorse consideration of a BC Hydro RRA test period longer than three years.

94. The theoretical rationale for a four- or five-year test period would be the prospect of “stronger cost containment incentives.”<sup>71</sup> However, BCSEA agrees with BC Hydro that it is questionable whether this would achieve greater customer benefits in the case of BC Hydro.<sup>72</sup>

95. BCSEA notes the following factors:

- a. “[While] BC Hydro seeks efficiencies between rate cases to manage the risk of not being able to cover its costs and earn its allowed ROE [the] additional motivation present for investor-owned utilities to seek even greater savings so as to exceed its allowed ROE is absent.”<sup>73</sup>
- b. A lengthy test period will not necessarily reduce regulatory process. As BC Hydro paraphrases Mr. Kolesar, “The adoption of PBR in Alberta resulted in more, not less, regulatory process.”<sup>74</sup>
- c. The BCUC has only recently resumed detailed oversight of BC Hydro’s revenue requirement after a hiatus during which the Government imposed rate caps.<sup>75</sup> In BCSEA’s view, the BCUC’s existing mechanism for economic regulation of BC Hydro should be continued (perhaps with the incremental improvements proposed by BC Hydro for the next RRA) without drastic change for the time being.

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<sup>70</sup> BC Hydro Final Argument, para.4.

<sup>71</sup> Exhibit A2-7, pdf p.62.

<sup>72</sup> BC Hydro Final Argument, para.145.

<sup>73</sup> BC Hydro Final Argument, para.147.

<sup>74</sup> BC Hydro Final Argument, para.152.

<sup>75</sup> BC Hydro Final Argument, para.154, second bullet.

***(ii) Indexing or formula approaches to determining revenues***

96. BCSEA respectfully submits that the Panel should find that an indexing or formula approach to determining BC Hydro's revenue requirement is not advisable, based on the evidence in the current proceeding.
97. First and foremost, BCSEA submits that there would be no financial incentive where BC Hydro has no mandate to exceed its allowed return, as argued above in paragraphs 34-38 and 48-77.
98. Second, indexing and productivity studies are less readily understood than forecasts. As BC Hydro puts it, "indexing is opaque and it comes with an alphabet of factors (e.g., I, X, K, Y, Z)".<sup>76</sup> Ratemaking formulas and indexes are the domain of a small number of specialized experts. And BCSEA notes that the formula or index proposed by the expert is often adjusted on a judgment basis by the regulator.

***(iii) Moving from full decoupling to partial decoupling to facilitate financial incentives for pursuing electrification***

99. BCSEA has addressed this topic in Part Three, Section D, above.<sup>77</sup> BCSEA submits that increased marketing flexibility for BC Hydro would not be achieved by applying a PBR regime to BC Hydro.

***(iv) Attaching financial incentives to specific metrics or initiatives, i.e., Performance Incentive Mechanisms ("PIMs")***

100. BCSEA agrees with BC Hydro that adding financial incentives to performance metrics for BC Hydro would not increase the incentive on BC Hydro to meet or exceed the performance metrics.<sup>78</sup>
101. As BCSEA has emphasized throughout this Final Argument, it does not believe that financial incentives to meet performance metrics would be effective given that BC Hydro has no mandate to exceed its allowed return. BCSEA believes that BC Hydro's motivation to meet or exceed its performance metrics is grounded in its obligation to respond to directions from its shareholder the BC Government and in its highly publicly visible place within the BC body politic.

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<sup>76</sup> BC Hydro Final Argument, para.162.

<sup>77</sup> Paragraphs 42-46.

<sup>78</sup> BC Hydro Final Argument, para.173.

## PART FOUR: CONCLUSION

102. BCSEA submits that BC Hydro's PBR Report and supporting evidence complies with Direction 28 of Order G-47-18, and that the Panel should make a finding to that effect.
103. BCSEA submits that the Panel should conclude that an important outcome of the proceeding is the understanding that PBR and COSR are not mutually exclusive alternatives as forms of economic regulation of BC Hydro under the *Utilities Commission Act*.
104. BCSEA makes the following points:
- a. BCSEA takes a practical approach to PBR;
  - b. BC Hydro's shareholder lacks a profit motive;
  - c. Demand-Side Management is already fostered; and
  - d. Increased marketing flexibility for BC Hydro would not be achieved by applying a PBR regime to BC Hydro.
105. On review of the responses to BCSEA's information requests to the Staff Consultant, BCSEA offers the following conclusions:
- a. Financial incentives to BC Hydro's shareholder would not be effective regulatory tools;
  - b. Experience with PBR and publicly-owned utilities does not support PBR for BC Hydro; and
  - c. Marketing flexibility does not support applying PBR to BC Hydro.
106. BCSEA supports BC Hydro's request that the Panel find, in principle, that including a three-year test period, information-only performance metrics, and regular statistical benchmarking in BC Hydro's next RRA in order to strengthen the existing incentives for cost control, productivity improvements and performance warrants consideration.
107. BCSEA supports BC Hydro's request that the Panel find that, considering BC Hydro's unique circumstances, four particular options should not be adopted: an RRA test period longer than three years, indexing or formula approaches to determining revenues, moving from full decoupling to partial decoupling to facilitate

financial incentives for pursuing electrification, and attaching financial incentives to specific metrics or initiatives.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

June 1, 2021

A handwritten signature in black ink, appearing to read 'W. Andrews', written over a horizontal line.

William J. Andrews, Barrister & Solicitor  
Counsel for B.C. Sustainable Energy Association