

1 June 2021

VIA E-FILING

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



Reply to: Leigha Worth
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Ph: 604-687-3034
Our File: 7500.121

Dear Mr. Wruck,

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

Please note that I continue to represent the client groups known collectively in BC Hydro Regulatory Proceedings as BCOAPO or BCOAPO *et al.* These clients are a collection of community-based organizations that intervene on behalf of the over 100,000 diverse clients and members located throughout the province including a large number who live in BC Hydro's service area and whose interests are inevitably engaged by any consideration of a change to the regulatory format under which BC Hydro operates.

We submit the Final Argument in accordance with the regulatory scheduled as set out in BCUC Order G-92.21.

Thank you.

Sincerely,
BC PUBLIC INTEREST ADVOCACY CENTRE

Original on file signed by

Leigha Worth
Executive Director | General Counsel

**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 ("BCOAPO ET AL.")**

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

1 June 2021

Please be advised that we make the following final argument regarding the above-noted Application on behalf of our client groups known in this and other BC Hydro regulatory processes as BCOAPO or BCOAPO *et al.* The constituent groups of BCOAPO represent the interests of over one hundred thousand residential energy consumers in British Columbia, and more specifically in this process, the interests of these BC Hydro's residential ratepayers.

1. INTRODUCTION

In its Decision on BC Hydro's F2017-F2019 Revenue Requirements Application¹, the BCUC Panel expressed its concern regarding the quantum of BC Hydro's base operating costs and suggested that a rate setting mechanism like PBR could potentially help BC Hydro kill two birds with one stone: accomplishing cost control objectives while providing the utility with incentives to improve its productivity without compromising service quality. Because the industry views PBR as a means of accomplishing these goals, the Panel recommended that BC Hydro consider a PBR plan and directed it to file a PBR report addressing the following issues:

- A discussion of the types of PBR plans that might be suitable for BC Hydro (i.e., Revenue Cap, Price Cap, hybrid);
- The length of PBR term that might be appropriate;
- A discussion of potential earnings sharing mechanisms that might be suitable for BC Hydro;
- The appropriateness of off-ramps;
- How capital spending could be managed as part of a possible PBR program;
- A list of potential key performance indicators to assist BC Hydro and the BCUC to evaluate progress during a possible PBR term;

¹ Order G-47-18, pages iv and 118

- An Annual Review process and/or other monitoring processes during a PBR term; and
- An implementation timetable, including a proposed schedule of consultation with representatives of key customer groups and BCUC staff.

As expected, BC Hydro filed the ordered PBR Report accompanied by two expert reports as part of its F2020–F2021 RRA but on October 11, 2019, by Order G-244-19, the Panel for the F2020–F2021 RRA proceeding directed that the PBR Report would not be reviewed as part of the Utility’s F2020–F2021 RRA process: recommending that the BCUC hold a separate proceeding. Subsequently, the BCUC issued Order G-245-19, establishing a separate proceeding for the review of the PBR Report and related materials.

Following that Decision, the BCUC scheduled a procedural conference for November 22, 2019, soliciting input from those parties from the RRA with an interest in the PBR Review Process regarding the approach and processes that should be used in reviewing the PBR Report. In advance of the procedural conference BC Hydro provided comments which, in part, suggested the matters raised in the PBR Report and related materials could be broadly grouped into four issues and be addressed in two phases:

Phase 1 (“threshold issues”):

1. What are the objectives of adopting PBR?
2. Considering the objectives identified, if PBR is adopted for BC Hydro, what are the key principles that should inform a future PBR application and what are the design issues that should be addressed by BC Hydro, in that application?
3. Should PBR be adopted for BC Hydro? If yes, when and how should it be implemented?

Phase 2 (if required):

1. If PBR is adopted for BC Hydro, what are the specific details of BC Hydro’s PBR plan?²

² Exhibit B-2

In Order G-326-19 the BCUC generally agreed with BC Hydro's two-phased approach but properly concluded that the foundational issue "*Should PBR be implemented?*" (BC Hydro's Issue 3) should be examined prior to issue (2) "*key principles and design issues*", noting that if the result of the Review found that PBR was not warranted or would not be effective for BC Hydro, then spending time on the key principles and design issues would be wasted effort and, in our view, wasted ratepayer money.

Order G-326-19 and subsequent Orders issued by the Commission established a regulatory timetable for the review that consisted of a number of steps:

- i) a BCUC Staff Consultant Report,
- ii) a BCUC facilitated PBR Workshop,
- iii) Information Requests with respect to the BCUC Staff Consultant Report,
- iv) Supplementary Evidence from BC Hydro,
- v) Information Requests regarding BCH's Supplementary Evidence, and
- vi) Final Submissions.

Set out below are BCOAPO's final submissions.

2. BCOAPO'S FINAL SUBMISSIONS

2.1 What Are the Objectives of Possibly Adopting PBR

Overall Objectives of BCUC Rate Regulation

Competition and competitive markets where a number of parties all seek to meet customers' needs for a particular product. We are all taught that parties whose products are inferior or unjustifiably expensive when compared to those offered by others will lose customers and go under. This results in competition and competitive markets being generally considered desirable both for consumers and for the economy overall because consumers benefit as suppliers are forced to compete for business based on price, product quality and service. This means that prices will tend to be in line with costs (assuming, of course, that the seller recoups their costs

plus a reasonable return on their investment) and suppliers will be encouraged to lower costs through improvements in efficiency and innovation. It also means that suppliers provide the level of product quality and service that customers want commensurate with price and the economy benefits as competition helps allocate resources to their most effective uses and ensures they are used efficiently.

Regulation under a regime like the *Utilities Commission Act (UCA)* is typically introduced in situations where competition, as a practical matter, cannot exist or survive for long and an unregulated market will not produce competitive results. It is considered as a substitute for competition with its objective being to produce results similar to what would be expected in a competitive market³.

Sections 59 and 60 of the *UCA* set out the matters the BCUC must take into consideration when setting/approving rates for BC Hydro and other utilities under its jurisdiction:

Section 60 requires that:

(1) In setting a rate under this Act

- (a) the commission must consider all matters that it considers proper and relevant affecting the rate,
- (b) the commission must have due regard to the setting of a rate that
 - (i) is not unjust or unreasonable within the meaning of section 59,
 - (ii) provides to the public utility for which the rate is set a fair and reasonable return on any expenditure made by it to reduce energy demands, and
 - (iii) encourages public utilities to increase efficiency, reduce costs and enhance performance.

Section 59 of the Act requires that:

(1) A public utility must not make, demand or receive

- (a) an unjust, unreasonable, unduly discriminatory or unduly preferential rate for a service provided by it in British Columbia, or
- (b) a rate that otherwise contravenes this Act, the regulations, orders of the commission or any other law.

³ Exhibit A2-5, page 4

(2) A public utility must not

(a) as to rate or service, subject any person or locality, or a particular description of traffic, to an undue prejudice or disadvantage, or

(b) extend to any person a form of agreement, a rule or a facility or privilege, unless the agreement, rule, facility or privilege is regularly and uniformly extended to all persons under substantially similar circumstances and conditions for service of the same description.

In BCOAPO's submission, the considerations set for the BCUC in the *UCA* are consistent with the results one would expect from a competitive market. In particular, the requirement under Section 59 that a rate not be unjust or unreasonable sets the expectation that the rates will be based on costs the utility can demonstrate are just, reasonable and prudently incurred, as would be the result in a competitive market. Similarly, the requirements, under Section 60, that rates encourage public utilities to increase efficiency, reduce costs and enhance performance are also reflective of outcomes of a competitive market.

In its evidence BC Hydro has set out its views as to the goals of BCUC regulation of BC Hydro as follows⁴:

“The BCUC should have three broad goals with respect to its regulation of BC Hydro's revenue requirement: to set rates at efficient levels, to maintain adequate, safe and reliable service and to ensure financial integrity through the recovery of reasonable and prudently incurred costs and by providing an opportunity to earn a fair return on investment.”

When asked what was meant by “efficient levels” BC Hydro responded: “In BC Hydro's view, the goal to set rates at efficient levels means that the BCUC should strive to set rates that are no higher than what is required to allow BC Hydro to recover its reasonable and prudently incurred costs and to provide an opportunity to earn a fair return on investment.”⁵

BCOAPO considers the goals put forward by BC Hydro to generally be reflective of the requirements set out in the *UCA*. The one point of issue BCOAPO takes with those goals is that

⁴ Exhibit B-8, page 3

⁵ Exhibit B-10, BCOAPO 1.1.1

while they recognize rates should be set at an efficient level, they do not explicitly capture the need for rate regulation to encourage further efficiencies and improved performance which is an explicit requirement of the UCA (Section 60 (1) (iii)) and one of the beneficial outcomes of competition.

Approaches to Regulation: COSR vs. PBR

Considerable evidence has been filed in this proceeding regarding what constitutes Cost of Service Regulation (COSR) versus Performance Based Regulation (PBR)⁶. From its reading of the evidence BCOAPO has drawn the following conclusions regarding these two forms of cost regulation.

COSR and PBR both seek to achieve the goals of regulation and results similar to that of competitive markets but focus on different “results”. COSR focuses on emulating competitive markets by limiting the utility’s financial returns to what companies in comparable competitive markets could be expected to achieve and approving rates that reflect these returns plus reasonable and prudently incurred costs⁷. In contrast, PBR focuses on incenting utilities to seek out further cost efficiencies which may not be pursued and achieved under COSR⁸, another favourable result achieved through competitive markets with the intention that savings will eventually be captured at the time of rebasing and passed on to consumers although they also can be passed on sooner through the use a stretch factor⁹. PBR can also focus on incenting utilities to pursue other activities which are beneficial to consumer and the economy overall but which utilities might not be incented to do under COSR¹⁰.

There is a continuum between what could be viewed a strict COSR approach to regulation at one end and a strict approach to PBR at the other with most existing regulatory regimes inhabiting

⁶ For example, see: i) BC Hydro’s initial PBR Report, B-1, F2020-21 RRA, Exhibit Chapter 11 (pages 11-3 to 11-5 & 11-8 to 11-12) and Appendix FF (pages 1-10), ii) Exhibit A2-5 (PEG Report, pages 4-9 and 15-21); and iii) Exhibit B-8 (Appendix A, pages 5-12 and Appendix B, pages 4-8)

⁷ BC Hydro’s F2020-21 RRA, Exhibit B-1, page 11-8, Appendix FF, page 7 & Appendix GG, page 6 and Exhibit A2-5, page 7

⁸ BC Hydro’s F2020-21 RRA, Exhibit B-1, page 11-8, Appendix FF, pages 9-10 & Appendix GG, pages 17-18 Exhibit A2-5, pages 15-17; Exhibit A2-11, CEC 1.1.1 and Exhibit B-9, BCUC 1.15.2

⁹ Exhibit A2-5, page 8 and Exhibit A2-9, BCOAPO 11.1

¹⁰ An example of this would be DSM. See also the Staff Consultant evidence regarding PIMs and Incentives for Disfavoured Inputs (Exhibit A2-5, pages 22-26 and 29)

that continuum and showing elements of both COSR and PBR¹¹. Indeed, there are regulatory approaches such as the creation of variance accounts for uncontrollable costs that can be viewed as supporting both in that while such accounts provide for full matching of cost and revenues (per COSR) they are often a critical element in allowing regulators to adopt multi-year rate plans which is seen as one of the elements of PBR¹².

There are, in our submission, short-comings and concerns with both approaches.

COSR requires considerable regulatory resources and, even then, there is an asymmetry of information between the utility and regulator such that it is difficult for the regulator to truly know what the efficient cost of service would be¹³. While frequent re-basing (e.g. annually) may ensure that prices match costs, they provide little incentive for utilities to pursue cost efficiency savings as they are captured in rates (and thereby lost to the shareholders) upon rebasing.

In contrast, PBR regulation allows regulated prices to change¹⁴ without a review of the company's costs, thereby lengthening regulatory lag. While this better exposes the utility to the types of incentives faced by competitive firms, it can create concerns about the extent to which prices are deviating from costs. If prices are too low, a utility's returns may fall such that the company may have difficulty accessing the capital necessary to finance investment required to maintain adequate service. In contrast, if prices are too high such that returns are viewed as excessive then there will be public concerns regarding the effectiveness of regulation. These concerns can lead to considerable debate and investment in regulatory resources regarding the appropriate revenue adjustment mechanisms and what other measures (e.g. earnings sharing) should be used between rebasings. Also, the treatment of capital expenditures and their revenue requirement impacts have proven to be a challenge for PBR-based approaches¹⁵.

While PBR is frequently view as a formula approach to setting rates (e.g., I-X), the rates between rebasing do not necessarily have to be set by formula. The key point of PBR is that it delinks revenues/prices from costs and, thereby, provides additional incentives for utilities to achieve

¹¹ BC Hydro's F2020-21 RRA, Appendix FF, page 1

¹² Exhibit A2-5, page 47

¹³ Exhibit A2-5, BCOAPO 7.1; Exhibit B-8, Appendix B, page 5 and Exhibit B-9, BCUC 1.17.2

¹⁴ An approach that, without a review, allowed prices to remain constant for a period of time could also be considered a form of PBR.

¹⁵ Exhibit B-9, BCUC 1.18.2.1; Exhibit A2-5, page 48; Exhibit A2-9, BCOAPO 1.19.1 and ¹⁵ BC Hydro's F2020-21 RRA, pages 11-40 to 11-46

efficiencies that might not otherwise be gained. The rates between rebasing could be set using a cost forecast established at the outset of the test period and this would provide similar incentives for efficiency¹⁶.

Overall, there is not a binary choice between COSR and PBR but rather the question becomes one of how best to combine the elements of both¹⁷. Furthermore, the answer will vary depending upon the utility concerned and business conditions it is facing¹⁸. There is no one answer that is applicable to all.

Approaches to and Objectives in Adopting PBR

As noted previously, the objective behind adopting PBR (or hybrid approaches that combine elements of PBR with COSR) is to incent utilities to pursue/achieve additional cost efficiencies that will be passed on to consumers, either at rebasing or earlier using an earnings sharing mechanism.

A fundamental premise underlying PBR is that a utility operates (and management is compensated) with a view to maximizing earnings (i.e. profits) and will be incented to pursue efficiencies if it serves to maximize profits. PBR seeks to introduce this “incentive” into the regulatory regime by de-linking rates from costs and allowing utilities to retain the savings achieved through efficiency improvements as increased earnings for a longer period of time (as compared to COSR). The thinking behind this is that this will incent regulated utilities to more aggressively pursue cost efficiencies over and above those simply required to achieve their allowed rate of return¹⁹ and a similar perspective applies with respect to activities that increase earnings by increasing sales.

Another premise regarding competitive markets is that all suppliers will be pursuing improvements in cost efficiency in order to improve their price competitiveness. As a result, the industry as a whole will become more efficient over time. Elements of PBR seek to mimic this aspect of the competitive market by linking prices (and more specifically price changes) to external business

¹⁶ Exhibit B-8, Appendix A, page 8

¹⁷ BC Hydro's F2020-21 RRA, Appendix FF, page 46 and Exhibit A2-11, CEC 3.2

¹⁸ Exhibit A2-11, CEC 2.1 and 42.1

¹⁹ Exhibit B-8, Appendix A, page 7 and Exhibit B-10, BCOAPO 1.12.2

conditions²⁰. Indeed, this is a key premise underlying the (I-X) formula used in many PBR regimes seeking to link changes in prices/rates to changes in the overall efficiency/productivity of the industry.

Furthermore, competitive firms compete not only based on price, but also on the basis of product quality and service. Elements of PBR seek to mimic this aspect of competition by identifying and setting targets for those measures of product quality and service that are seen as being of particular concern to customers. A utility's performance regarding these measures can then be used as a consideration in the setting of the utility's rates or specific financial incentives can be developed to encourage utilities to meet and/or exceed established targets.

The Staff Consultant's evidence sets out four general approaches to PBR²¹:

- i) Multi-Year Rate Plans,
- ii) Revenue Decoupling,
- iii) Performance Metric Systems, and
- iv) Targeted Encouragement to Use Strategic Inputs.

All of these rely on or support one or more of the elements of a competitive market discussed above.

Multi-Year Rate Plans

Multi-year rate plans increase the number of years between general rate cases where the utility's costs would be reviewed and rates set to as to align with costs. They seek to capitalize on the "profit-motive" of utilities by creating a multi-year disconnect between allowed revenue and actual costs so a utility must perform within a pre-determined revenue envelope to achieve its allowed return²² and increasing the incentive to achieve cost savings by increasing the period of time during which utilities can retain (as increased earnings) the savings achieved from cost efficiency improvements²³.

²⁰ Exhibit A2-5, page 18

²¹ Exhibit A2-5, page 5

²² Exhibit B-8, page 11

²³ Exhibit B-9, BCUC 1.13.1 and Exhibit A2-4, BCUC 2.287.1

Multi-year rate plans still require that there be rates (or revenues upon which to set rates) established for the period of “plan”. This is frequently done through the use of what the Staff Consultants²⁴ have referred to as an Attrition Relief Mechanism established at the onset of the plan. Such adjustments can be based on a forecast of costs for the period or linked to change in industry cost inflation and productivity.²⁵ The latter approach seeks to further mimic competitive markets by incorporating into the MRP changes in the general business conditions for the industry. However, those costs that are difficult to address through an ARM are frequently dealt with using a cost tracker (i.e. variance account)²⁶. While this effectively eliminates the “profit” incentive for utilities to pursue additional efficiencies related to these costs²⁷, the effectiveness of the MRP will not be reduced if the costs concerned are beyond the control of the utility. Furthermore, using such cost trackers for costs that are outside of BC Hydro’s control will allow for longer MRP periods²⁸.

Revenue Decoupling

Revenue decoupling adjusts a utility’s rates mechanistically to so that its actual revenue tracks its allowed revenue more closely. In their evidence the Staff Consultants state that most decoupling systems have two basic components: i) a revenue decoupling mechanism (“RDM”) and ii) a revenue adjustment mechanism (RAM)²⁹.

The RDM tracks variances between actual and allowed revenue and adjusts rates periodically to reduce them. BC Hydro’s current Load Variance Account is an RDM. RDM’s eliminate the risk associated with loads being higher/lower than forecast³⁰ and thereby support the user of MRPs with longer periods. They also eliminate the disincentive utilities (seeking to maximize profits) have to pursue initiatives such as DSM and distributed generation which may be beneficial to customers but which would otherwise reduce earnings by reducing sales³¹. To this extent they incent/support desired behaviours by utilities with a profit seeking motive

²⁴ Exhibit A2-5, page 37

²⁵ Exhibit B-8, Appendix A, paragraph 18

²⁶ Exhibit A2-5, page 33

²⁷ Exhibit B-10, BCOAPO 1.4.1

²⁸ Exhibit A2-5, page 47 and Exhibit B-10, BCOAPO 1.4.2

²⁹ Exhibit A2-5, page 19

³⁰ Exhibit A2-5, pages 19-20

³¹ Exhibit A2-5, page 18

According to the Staff Consultants³² the revenue adjustment mechanism escalates allowed base rate revenue to provide relief for cost pressures. In BCOAPO's view such adjustments are not revenue decoupling but cost adjustment mechanisms and would consist of approaches such as the ARMs and cost trackers described previously.

Performance Metric Systems

Performance metrics quantify aspects of utility operations which matter to customers and the public. Such metrics usually focus on the cost of service and the quality of service, where the latter would include metrics related to both reliability and customer service. A performance metric system is a system for routinely monitoring select metrics and using them in performance appraisals. In a performance metric system, target (aka "benchmark") values are usually established for some metrics. Performance can then be measured by comparing a utility's values for these metrics to the targets. "Scorecards" summarizing results for key metrics are often tabulated and may be posted on a publicly-available website or included in customer mailings³³.

Most utilities are concerned regarding their public image/reputation and simply publishing performance results can provide some incentive for them to maintain/improve performance³⁴. However, performance metrics and results can also be used in the regulation of utility rates. This can range from performance results being one of the "considerations" taken into account by regulators in making their decision as to whether proposed rates are "just and reasonable" to actually linking allowed revenue mechanistically to the outcomes of performance appraisals based on established metrics³⁵. In the latter instance, there is a direct "earnings based" incentive to maintain/improve the established performance metrics.

However, it can be difficult to correctly value performance and establish appropriate award/penalty rates for such mechanisms and incorrect valuation can lead to counter-productive results. For example, customer interests are not well served if awards to the utility exceed those needed to incentivize good behavior or exceed the true value of the improved performance³⁶. In addition, the use of specific performance incentives will tend to focus the utility on the areas selected which

³² Exhibit A2-5, page 19

³³ Exhibit A2-5, pages 22-23

³⁴ Exhibit A2-5, page 25

³⁵ Exhibit A2-5, page 22 and Exhibit A2-7, page 9

³⁶ Exhibit A2-5, page 26

may lead to a reduced emphasis on other areas of performance (particularly if there are financial rewards/penalties involved) to the detriment of their ratepayers. On the other hand, if there are too many performance measures, there may be areas of overlap or even measures that conflict and resolving issues as to relative importance and assigning proper weights to individual measures can be a difficult and controversial task³⁷.

Targeted Encouragement to Use Strategic Inputs

Under COSR allowed earnings are based on the utility's level of capital investment. It is a common view that, given this link, the incentive under COSR is to underutilize inputs/alternatives that would reduce capital spending. Similarly, the motive of profit/earnings maximization will mean that utilities are less motivated to contain costs that are tracked via variance accounts or external to the company's finances³⁸. In order to offset this, various financial incentives are often introduced to encourage the use of such inputs. Examples cited by the Staff Consultants include DSM, behind-the-meter distributed generation and activities that support low carbon electrification³⁹. The first two examples represent situations where the utility might otherwise prefer to address perceived needs through increased capital spending on its own part while the last represents a situation where major costs reductions can be achieved for society but do not represent a cost reduction for the utility.

2.2 Should PBR be adopted for BC Hydro? If yes, when and how should it be implemented?

As noted in the previous section, there are a number of approaches to regulation that can be considered as PBR in that they provide additional incentives (beyond those inherent in COSR) to innovate and pursue cost efficiencies and/or to pursue activities that are considered beneficial to consumers and to society overall by mimicking elements of the competitive market.

Some of these approaches have already been adopted by the BCUC for application to BC Hydro⁴⁰ (or other utilities⁴¹). During the course of this proceeding the Staff Consultants⁴² have made

³⁷ Exhibit A2-5, page 26

³⁸ Exhibit A2-5, page 29

³⁹ Exhibit A2-5, page 30

⁴⁰ Exhibit B-9, BCUC 1.1.2 & 1.15.1. See also discussion in following section of these submissions

⁴¹ For example, FortisBC

⁴² Exhibit A2-5, page 112 and Exhibit A2-7, slides 73-77

suggestions as to the additional PBR elements that should be considered by the BCUC. In addition, BC Hydro⁴³ has made specific proposals as to the additional PBR elements it would recommend that the BCUC adopt.

When considering the additional PBR elements put forward by either the Staff Consultants or BC Hydro, BCOAPO submits that it is important for the Commission to carefully consider the extent to which the proposed PBR elements will further incent BC Hydro to pursue the desired outcomes when they interact with the following circumstances:

- BC Hydro's ownership and mandate as a crown corporation,
- BC Hydro's current regulatory regime, and
- BC Hydro's ongoing and emerging business challenges.

Current Ownership and Mandate

In its evidence BC Hydro notes that it is Crown Corporation and that its mandate is set out through a Mandate Letter from the Government and a Service Plan⁴⁴ prepared by BC Hydro that aligns with the government's strategic priorities and fiscal plan. It further notes that exceeding allowed net income is not identified as an expectation or desirable outcome anywhere in either of these two documents. Rather, efficiency and cost control are emphasized throughout with the focus of these efforts being to keep rates affordable for customers⁴⁵, not to increase shareholder returns. As a result, BC Hydro questions the effectiveness of PBR approaches that rely on the profit maximization motivation of competitive markets as an incentive to achieve desired outcomes⁴⁶.

BC Hydro further explained in response to an information request⁴⁷ that:

“BC Hydro's evidence is that the Government of B.C. does not expect BC Hydro to exceed its allowed net income and has not mandated BC Hydro to maximize profits. In addition, the Government of B.C. has set out various expectations for BC Hydro with regard to providing safe, reliable, affordable and clean electricity. Accordingly, BC Hydro is incented

⁴³ Exhibit B-8, page 20

⁴⁴ BC Hydro's F2022 RRA, Exhibit B-2-2, Appendix Q, pages 3 & 5 of 29

⁴⁵ Exhibit B-10, CEC 1.15.3

⁴⁶ Exhibit B-8, page 5 and Exhibit B-10, Zone II 1.6.1

⁴⁷ Exhibit B-9, BCUC 1.19.1

to seek out incremental efficiency gains in response to incremental cost pressures so that it can achieve its allowed return. To the extent that BC Hydro is able to achieve incremental efficiency gains that exceed its incremental cost pressures, the mandate provided to BC Hydro by the Government of B.C. incents BC Hydro to re-invest any cost savings from efficiency gains into initiatives that support the provision of safe and reliable electricity service or other identified policy priorities.”

Evidence sponsored by BC Hydro and submitted by two experts – Mr. Kolesar⁴⁸ and Dr. Weisman⁴⁹ – supported by this view. In his evidence, Dr. Weisman did make the point that this problem can be overcome through the implementation of a compensation structure that encourages management to behave as if profit-maximization is mandated. However, BC Hydro notes that the Public Sector Employers’ Council policy restricts incentive-pay to a limited number of senior management employees, and it comes in the form of a capped salary holdback. Furthermore, this holdback reflects individual employee performance as well as BC Hydro’s results against its Service Plan performance measures, which are based on the mandate provided to BC Hydro by the Government of BC⁵⁰.

In their evidence, the Staff Consultants acknowledge that the objective functions of publicly- and privately-owned utilities differ. Their evidence is that private utility owners care mainly about the level and variability of profits but public utilities still care about profits, have other goals as well. The evidence cites some of the likely goals as being reasonable rates, good service quality, and benefiting citizens by other means such as good compensation for employees, retention of large-load customers (who are often large employers), attraction of new customers, energy conservation, greater reliance on clean energy resources (especially if it is sited within the same jurisdiction), and low-carbon electrification. They also note that Governments presumably have an interest in streamlining rate regulation and ministry oversight of the utilities that they own and PBR can potentially achieve this streamlining.⁵¹

Given this context, the Staff Consultants assert that public utilities can benefit from PBR-based incentives that encourage efficiency in their operations, that PBR-based incentives can assist in

⁴⁸ Exhibit B-8, Appendix B, page 12

⁴⁹ BC Hydro F2020&F2021 RRA, Exhibit B-1, Appendix FF, Section 5.2, Exhibit B-9, BCUC 1.14.1 and Exhibit B-10, MOVEUP 1.4.1

⁵⁰ Exhibit B-8, page 8 and Exhibit B-10, BCSEA 1.6.4

⁵¹ Exhibit A2-5, page 70

achieving some of their other goals, and that the regulatory process itself can be made more efficient through the use of PBR approaches such as Multi-Year Rate Plans. They further note that the emphasis on operating efficiency can be bolstered by linking management compensation more explicitly to efficiency metrics.⁵²

In BCOAPO's submission, one of the key differences between the positions taken by BC Hydro and the Staff Consultants with respect to the implications of BC Hydro being crown corporation is that the Staff Consultants suggest profit maximization is still a goal (albeit one of many) and that profit-maximization-based incentives can still drive operational efficiencies which are clearly in the interest of a crown corporation. In contrast, BC Hydro argues that profit maximization is not part of its mandate and therefore profit maximization-based incentives will not lead to greater operational efficiencies. BC Hydro also argues that incentives for management are linked to its Mandate and Service Plan which it notes does not include profit maximization.

The evidence is clear that profit-maximization (i.e., achieving high actual earnings than planned) is not part of BC Hydro's mandate, that the scope for the providing financial incentives to management is limited and that management compensation is not (and should not be) designed to include such an objective. Indeed, BCOAPO concurs with BC Hydro's view that "the public may not accept profit maximization as a legitimate objective of a Crown Corporation"⁵³ although "may" is likely an understatement of the level of any resulting public outcry. As a result, BCOAPO submits that PBR approaches that rely on profit-maximization as the incentive for performance improvement are unlikely to be effective if applied to BC Hydro and are likely to draw the unwanted attention of the flaming eye of government legislators unhappy with the resulting controversy.

However, this should not be interpreted as meaning that PBR is not at all applicable to BC Hydro. As discussed earlier in these submissions, PBR approaches draw on more than just the profit-maximizing aspect of competitive markets. They also draw on the fact that businesses operating in such markets must maintain their competitive edge through efficiencies that match or exceed those of their rivals and that price is not the only matter of importance to customers. In BCOAPO's submission, there is opportunity for PBR-like approaches that mimic these aspects of competitive markets to be used and used effectively to improve BC Hydro's performance.

⁵² Exhibit A2-5, page 70 and 113-114, Exhibit A2-7, Slides 71-72 and Exhibit A2-11, Zone II 1.2.1

⁵³ Exhibit B-8, page 8

Current PBR Approaches Used in Regulating BC Hydro

PBR elements currently employed in the regulation of BC Hydro include:

- Multi-Year Rate Plans (i.e., plans for more than one year) have been used at various times in the past and as recently as the F2020&F2021 RRA. However, these plans have set each year's revenues/rates based on forecast costs as opposed to employing an indexed formula such as (I-X)⁵⁴.
- Revenue Decoupling as the Load Forecast Variance Account captures revenue variances due to variances between actual and forecasted sales volumes⁵⁵.
- Performance Metrics used by BC Hydro to manage its operations were included in the most recent F2022 RRA⁵⁶ based on direction from the BCUC in Order 246-20. The F2022 Application also provided BC Hydro's Service Plan performance measures and targets⁵⁷.
- Regulatory Accounts for costs that are beyond BC Hydro's control, similar to the Y factors and Z factors used in PBR plans⁵⁸.

Business Challenges

In considering the applicability of PBR approaches to BC Hydro, it is important to consider the challenges that BC Hydro and the BCUC currently face when setting BC Hydro's rates.

First, looking at BC Hydro's most recent Revenue Requirement Application the three key drivers behind the forecasted F2022 increase in base operating costs were:

- i) Mandatory Reliability Standards,
- ii) Vegetation Management and
- iii) Current Service Pension Costs⁵⁹.

⁵⁴ Exhibit A2-5, page 108 and Exhibit B-9, BCUC 1.3.2

⁵⁵ Exhibit A2-5, page 109

⁵⁶ Appendix O

⁵⁷ Appendix Q

⁵⁸ Exhibit B-10, AMPC 1.1.1 and Exhibit A2-4, BCUC 2.284.1

⁵⁹ F2022 RRA, Exhibit B-2, page 5-15

Two of these (Mandatory Reliability Standards and Current Service Pension Costs) are largely beyond BC Hydro's control and in any PBR scheme would likely be treated as Y-factors requiring separate consideration. Indeed, FortisBC's current PBR (MRP) plan considers both of these costs outside of the formula-based OM&A. Furthermore, with respect to Vegetation Management, BC Hydro has indicated that it is developing a new vegetation management strategy along with metrics and targets which will inform its next rate application⁶⁰.

Second, Site C's generators are scheduled to be on line in 2024 and the project completed in 2025⁶¹. Once the generators are in-service, the station's costs will become part BC Hydro's revenue requirement. Changes in the in-service date or overall cost of the station could have a material impact on forecast for BC Hydro's F2025 revenue requirement.

Third, BC Hydro is currently in the process of developing its 2021 Integrated Resource Plan (IRP) and plans on submitting it to the BCUC later this year⁶². BC Hydro is also developing an Electrification Plan to be included in its next Revenue Requirements Application⁶³. There is potential for these plans to have material impacts on the Utility's revenue requirements going forward to such a degree that if a full, traditionally designed PBR scheme is implemented, costs may need to be carved out of and dealt with separately in any PBR-based plan.

Fourth, the Clean Energy Act⁶⁴ requires that in setting rates under the *Utilities Commission Act* for a public utility carrying out a prescribed undertaking, the Commission must set rates that allow the public utility to collect sufficient revenue in each fiscal year to enable it to recover its costs incurred with respect to the prescribed undertaking. As a result, costs associated with prescribed undertakings would likely need to be carved out of and dealt with separately in any PBR-based plan.

Fifth, BC Hydro has a significant number of variance accounts and management (i.e. minimization) of the annual additions to these accounts is important for purposes of both year over year rate stability and inter-generational equity. This requires that the baseline forecast

⁶⁰ F2022 RRA, Exhibit B-2, pages 5-48 to 5-49

⁶¹ <https://www.sitecproject.com/about-site-c/project-overview>

⁶² <https://www.bchydro.com/toolbar/about/planning-for-our-future/clean-power-2040/we-want-your-input.html>

⁶³ BC Hydro's Public Electric Vehicle Fast Charging Service Rates Application, Exhibit B-5, BCSEA 1.5.1

⁶⁴ Section 18 (2)

amounts included in rates reasonably reflect the expected actual amounts. Also, BC Hydro's ability to manage its costs to achieve its allowed return within a pre-determined revenue envelope is limited to those costs that are not subject to deferral treatment⁶⁵.

Finally, it is generally recognized that capital expenditures present a challenge for PBR-based approaches and that capital costs generally need to be dealt with using forecasts as opposed to formula approach⁶⁶. That certainly proved to be true in the last Fortis PBR.

BCOAPO submits that these factors will significantly reduce the extent to which PBR-approaches that rely on formulae could be applied to BC Hydro's revenue requirement. Furthermore, since the further out one forecasts the greater the uncertainty, these factors are also a consideration when assessing proposals for a multi-year rate plan.

BCH Proposals

In its Supplementary Evidence⁶⁷, BC Hydro identified three changes to BC Hydro's existing regulatory framework that could be advanced in the context of BC Hydro's upcoming RRA and which have their foundations in PBR-based approaches.

Three Year Test Period

BC Hydro proposes to move to a three-year test period as suggested by the Staff Consultants. In its Final Argument, BC Hydro notes that it has used a three-year test period in the past and there is unanimous support amongst the experts providing evidence in the proceeding for a return to a three-year test period⁶⁸.

BC Hydro notes that moving to a three-year test period will create a greater disconnect between allowed revenues and actual cost⁶⁹. In its Supplemental Evidence⁷⁰ and Final Argument⁷¹ BC Hydro cites the evidence both Dr. Weisman and Mr. Koselar that adding a third year to the test

⁶⁵ Exhibit B-10, CEABC 1.2.3

⁶⁶ Exhibit A2-5, page 48; Exhibit B-8, Appendix B, page 7 and Exhibit A2-4, BCUC 2.282.1

⁶⁷ BC Hydro Final Argument, page 47

⁶⁸ BC Hydro Final Argument, page 47

⁶⁹ Exhibit B-8, page

⁷⁰ Pages 47-48

⁷¹ Pages 48-50.

period would increase the incentive for efficient performance and in its Final Argument BC Hydro also notes consumers would benefit from an additional year of rate predictability and that adding a third year increases regulatory efficiency. Finally, BC Hydro contends that adequate protections are in place to ensure forecasting discipline over the extended period⁷².

In BCOAPO's submission, it is important to dissect the claim that extending the test period to three years will improve efficient performance. Given that BC Hydro does not have a mandate for profit maximization improvements the longer period time between rebasing will not encourage BC Hydro to be more aggressive in seeking out efficiency improvements on the basis that the enhanced earning will be retained for longer period of time. Rather, the case for increased efficiency lies in the premise that the additional year extends the length of time over which BC Hydro must manage upward cost pressures within a pre-defined revenue envelope to achieve the Service Plan performance measures and the allowed net income⁷³.

In BCOAPO's view, there are two problems with this rationale. First, BC Hydro's contention that an additional year will drive additional efficiencies hangs on the assumption that there will be future upward cost pressures on the revenue requirement that are not captured in the revenue envelope established for the third year of the test period. However, the forecast could be too high⁷⁴. If this were the case then rebasing the revenue requirement for the third year using updated forecasts could well lead to lower rates. The second is that not all of BC Hydro's costs are under its control and some of these are difficult to forecast: this is why we have situations where it is appropriate to have differences between forecast and actual values subject to eventual recovery through BC Hydro's variance accounts. In these cases, more current forecasts of these costs are likely to be more accurate.

BC Hydro's benchmarking proposal will help to inform both BC Hydro and the BCUC as to whether its cost forecasts are reasonable and would support the move to a longer test period⁷⁵. The problem is that, under BC Hydro's proposal, the first results of its planned benchmarking activities will not be available until the next rebasing after the F2023+ RRA⁷⁶.

⁷² BC Hydro Final Argument, pages 50-51

⁷³ Exhibit B-9, BCUC 1.6.3 and Exhibit B-10, CEABC 1.2.1 & 1.2.6

⁷⁴ Exhibit B-10, BCOAPO 1.5.1 and CEC 1.6.1.1

⁷⁵ Exhibit B-10, BCOAPO 1.6.2

⁷⁶ Exhibit B-9, BCUC 1.5.1

In its response to AMPC 1.2.1 BC Hydro indicates that, while it supports three-year test period, “it would not be practical to review a cost forecast for a period longer than three-years as beyond this point there are likely too many “unknowns” with regard to costs, needs and priorities in future years.” In BCOAPO’s view there is no “magic” dividing line between a three-year test and a four-year test period in terms of forecast credibility. The further out one attempts to forecast, the greater the uncertainty. BC Hydro claims⁷⁷ that “three-year test period strikes an appropriate balance between strengthening the incentive created by setting a pre-determined revenue envelope over multiple years and providing a reasonable cost forecast that is not subject to too many “unknowns”. However, no evidence has been provided that a three-year forecast would be “reasonable” and, as BCOAPO has noted, the strength of the incentive rests entirely on the credibility of the forecast.

Given these concerns and the business challenges discussed earlier, BCOAPO submits that the BCUC should seriously consider whether now is the time to move to a three-year test period. Furthermore, BCOAPO submits that any move to a three-year test period starting in F2023 should include an “Annual Review” prior to year three which would focus on updating the forecasts for a limited number of critical expense items. The discussion and ultimate decision as to which items would be reviewed and updated could then be part of the F2023-F2025 RRA. However, in BCOAPO’s submission, it would include items that are major cost contributors and for which there may considerable uncertainty. One example would be pension costs which are a major cost component and driven by factors (i.e., external discount rates) that are difficult to forecast and are clearly beyond BC Hydro’s control. Another could be the expenses related to prescribed undertakings (per the CEA) which may evolve with BC Hydro’s new Electrification Plan. A third could be vegetation management costs depending upon the expected outcomes from BC Hydro’s new Vegetation Management Strategy and fourth could be costs related to Site C. BCOAPO notes that BC Hydro has expressed similar concerns about understanding the nature of these types of costs but in the context of applying an indexed approach to forecasting future costs⁷⁸.

While BC Hydro supports the Staff Consultant’s suggested move to a three-year test period, it does not support the use of indexing (e.g. formulae such (I-X)) to established the revenue envelope during the three-year test period. Rather, BC Hydro supports the use of cost forecasts with the reason being that the main benefit from the multi-year test period is that it establishes a

⁷⁷ Exhibit B-10, BCOAPO 1.4.3

⁷⁸ Exhibit B-9, BCUC 1.2.2

revenue envelope that BC Hydro must work within. As result, what's important is the credibility of the revenue envelope and on this point a cost-based envelope is likely to be more realistic and gain support from stakeholders⁷⁹. Furthermore, indexing will not simplify the regulator process but rather could add additional complexity, controversy and uncertainty to the regulatory process⁸⁰.

BCOAPO agrees with these points raised by BC Hydro, particularly for a potential first multi-year plan when there will be no benchmarking results available to inform the development of a credible formula/index. Also, in any event there are likely to be costs (such as capital expenditure and certain O&M costs) that would need to be forecast even if a formula approach was implemented⁸¹.

Regularly Scheduled Statistical Benchmarking

BC Hydro supports Staff Consultant Dr. Lowry's suggestion of regularly scheduled statistical benchmarking studies. In BC Hydro's view, statistical benchmarking studies would help to address any concern with regard to information asymmetry or upward forecasts if multi-year cost forecasts are used to determine allowed revenue. Overall, it sees these studies as another tool for the BCUC to set rates at efficient levels⁸²

In its Supplementary Evidence BC Hydro indicated that a first step would be to involve the BCUC and interveners in a process to set out terms of reference to guide the objective, scope and frequency of future benchmarking studies. It also suggested that consideration would be given to the suggestions on benchmarking that were put forward by Dr. Lowry⁸³.

BCOAPO notes that there are different types of benchmarking although Dr. Lowry's references to statistical benchmarking appear to be more with respect to total cost econometric benchmarking as illustrated by the following comments:

“Okay, so the next idea would be to have regularly scheduled statistical benchmarking studies by the Commission and the company. And the Commission

⁷⁹ Exhibit B-8, pages 12-14

⁸⁰ Exhibit B-9, BCUC 1.2.3 and Exhibit B-10, AMPC 1.2.1 and MOVEUP 1.1.1

⁸¹ Exhibit B-9, BCUC 1.12.1; Exhibit B-10, BCOAPO 1.5.1 and Exhibit A2-13, Zone II 12.2

⁸² Exhibit B-8, page 15

⁸³ Exhibit B-8, page 15

could delegate that task to interveners, they could let the interveners hire the consultant. But that's not happening now. And there was just a halting step in that direction where this kind of crude study that the Brattle Group did.

But you know, you could kick that up a notch to a more professional study of the sort done in Ontario or in Quebec. And that would be an improvement as well.”⁸⁴

“Dr. Lowry believes that the BCUC should initiate a study undertaken in its own name (a common practice in Ontario) or in the name of intervenors (as is currently being done in a Quebec transmission PBR proceeding). This study should use econometric methods and could also use other methods (e.g., productivity level indexes).”⁸⁵

In contrast, when asked what types of statistical benchmarking it anticipated undertaking, BC Hydro referred to a benchmarking study on operating costs performed by The Brattle Group as well as benchmarking data on specific operating cost areas such as maintenance delivery costs and employee compensation⁸⁶. However, elsewhere in this process BC Hydro has referred to productivity factor benchmarking⁸⁷.

As a matter of principle, BCOAPO supports the use of benchmarking in establishing the reasonableness of the costs proposed by a utility in its revenue requirement application and supports BC Hydro's proposal to explore with stakeholders the types of benchmarking studies that would be useful and should be undertaken. An important part of this exercise will be to consider the different types of benchmarking available and their relative uses before BC Hydro sets out a particular benchmarking plan. That way, the “straw dog” can be informed by those discussions and BC Hydro's preliminary efforts are most likely to yield maximum value.

Also an issue is the role such benchmarking exercises will play in future revenue requirement applications. When asked about this BC Hydro responded⁸⁸:

⁸⁴ Transcript Volume 2, page 253

⁸⁵ Exhibit A2-9, BCOAPO 1.34.1

⁸⁶ Exhibit B-10, BCOAPO 1.6.1

⁸⁷ Exhibit B-10, BCOAPO 1.9.1

⁸⁸ Exhibit B-10, BCOAPO 1.6.3

“The results of statistical benchmarking studies would supplement multi-year cost forecasts and would help to inform decisions to set allowed revenue for a test period. They would not be used to actually set the level of costs for specific cost elements.”

In BCOAPO’s submission, it is important to have a clear understanding of exactly how benchmarking studies can and will inform future decisions regarding BC Hydro’s revenue requirements. BCOAPO submits that this issue should be part of the initial ‘stakeholdering’ as clarification will assist in determining the types of benchmarking that should be undertaken. It will also assist parties in determining whether there is real value in pursuing benchmarking studies (i.e., if they are going to be of little relevance and/or not play a material role then significant expenditures on benchmarking may not be warranted). Furthermore, to assist BC Hydro and stakeholders it would be useful if the BCUC, in its decision for this proceeding, could share any expectations it has as to the role benchmarking studies should play in future rate setting proceedings.

Performance Measures

In its Supplementary Evidence BC Hydro indicated that information-only performance metrics, determined through a public process with the BCUC and interveners would provide incremental incentives to BC Hydro. BC Hydro notes that it already collects and reports on performance measures with regard to both its Service Plan and to manage its own operations⁸⁹. However, information-only performance metrics, determined through a BCUC process, would provide an incentive for increased performance in areas that matter to the BCUC and interveners⁹⁰.

While BC Hydro supports the development of additional performance measures for informational purposes, it does not support using performance metrics to determine the application of financial rewards or penalties⁹¹. BC Hydro submits that since it is not motivated by increased earnings (i.e. profits) linking financial rewards and penalties to achievement of performance measures will not improve performance⁹².

⁸⁹ Exhibit B-8, pages 18-19

⁹⁰ Exhibit B-9, BCUC 1.3.2

⁹¹ Exhibit B-9, BCUC 1.3.2

⁹² Exhibit B-9, BCUC 1.3.1

BCOAPO generally agrees that the opportunity to increase earnings will not motivate BC Hydro to improve performance. However, BCOAPO notes that financial penalties and rewards can serve to make the achievement of BC Hydro's allowed net income more difficult or easier (respectively) and, in this manner, could incent management to achieve the outcomes targeted by the performance measures where the factors are within their control. However, the design of such incentives would be complex and would need to take into consideration not only the likely value of improved performance but the internal cost of doing so.

Another point raised by BC Hydro is the fact that the BCUC has previously recognized that financial penalties should only be applied against earnings in excess of allowed net income. Since BC Hydro has no mandate to achieve more than its allowed net income, the threat of withholding those additional earnings would be a poor incentive in the case of BC Hydro⁹³.

In BC Hydro's view, information only performance measures can enhance performance⁹⁴. For support of this view, BC Hydro also refers to the evidence of Dr. Weisman⁹⁵:

"The regulated firm may still have strong incentives to meet or exceed these performance metrics even though there are no financial rewards or penalties directly associated with compliance or non-compliance. This underscores an important observation that financial incentives are not the only type of incentives that can be used to motivate superior performance. This (is) the case for the following reasons. First, the regulated firm may have a sufficiently strong sense of social responsibility that it would not want its reputation impugned as a result of lack of compliance with these performance metrics. A company's reputation is a valuable asset, one that is markedly easier to maintain than it is to rehabilitate. Second, the company may believe that failure to comply with these performance metrics would increase the likelihood that at some future point in time the Commission would opt for financial rewards and penalties "to get the job done."

⁹³ Exhibit B-9, BCUC 1.3.1

⁹⁴ Exhibit B-10, CEC 1.9.1

⁹⁵ Exhibit B-8, Appendix A, page 15 and Exhibit B-9, BCUC 1.14.2

“In discussions with BC Hydro management over the past 3 years, I have formed the opinion that the company has a strong commitment to delivering reliable power to its customers at the lowest possible prices. It is also a company that seemingly takes great pride in its commitment to compliance with performance metrics that the Commission and its government owner have delineated.”

BCOAPO agrees with the two points raised by Dr. Weisman but believes that the reported results regarding information only performance measures should also be used by the BCUC to “inform” its decisions regarding revenue requirements requested by BC Hydro. BC Hydro makes a similar point in its response to CEC 1.9.1⁹⁶ stating “information-only performance metrics would provide an additional data point to inform the BCUC’s evaluation of areas that matter to the BCUC and interveners”. An understanding of this role for information only performance measures will also incent BC Hydro to meet (and exceed) the expectations established by performance measures. In this regard, BCOAPO considers it critical that performance measures have targets and notes Dr. Weisman’s support⁹⁷ for assigning targets to performance metrics. The basis for such targets could be discussed at the benchmark/performance measure workshop proposed by BC Hydro⁹⁸.

Overall, BCOAPO supports the development of performance measures (and associated targets) that matter to the BCUC and intervenors with the understanding that they will be used to inform RRA proceeding and decisions by the Commission regarding BC Hydro’s revenue requirement and rates. BCOAPO does not support the introduction of penalties and rewards linked to performance measures at this time.

Proposals Not Adopted by BC Hydro

In his evidence Dr. Lowry did not make any final recommendations regarding a PBR strategy for BC Hydro⁹⁹. However, in his evidence¹⁰⁰ a number of PBR-based approaches have been suggested for consideration. As noted above, some of these are reflected in BC Hydro’s proposals while others are not. Identified and discussed below are the steps that Dr. Lowry

⁹⁶ Exhibit B-10

⁹⁷ Exhibit B-9, BCUC 1.14.3

⁹⁸ Exhibit B-8, page 20

⁹⁹ Exhibit A2-8, BCSEA 1.1

¹⁰⁰ For example, see, Exhibit A2-5, page 112 and Exhibit A2-7, Slides 73-77

indicated¹⁰¹ could be implemented in a first-generation PBR for BC Hydro but were not incorporated into BC Hydro's proposals.

Multi-Year Plans Greater Than Three Years

In response to information requests Dr. Lowry indicated that terms longer than 3 years create more opportunities for long-run cost containment¹⁰². As noted earlier in BCOAPO's submissions, the premise that a utility's ability to retain efficiency savings longer (i.e. before rebasing) will increase the incentive to more aggressively pursue cost savings assumes the utility main objective is to maximize profits. This is not the case for BC Hydro. Indeed, as discussed earlier profit maximization is not even one of its mandated objectives.

For BC Hydro there are really only two potential benefits.

First, increasing the years between rebasing will increase the period of time that BC Hydro must perform within a pre-determined revenue envelope to achieve its allowed return. However, this is only of benefit to consumers if the pre-determined revenue envelope is challenging but realistic. BC Hydro has indicated¹⁰³ that it would not be practical to review a cost forecast for a period longer than three-years because beyond this point there are likely too many "unknowns" with regard to costs, needs and priorities in future years. BCOAPO agrees and has already expressed in these submissions concern regarding the credibility of even a three-year forecast.

A second benefit would be an increase in regulatory efficiency as a result of less frequent rate cases. However, in BCOAPO's view, the value in this is one that is tempered by the fact that, from a residential ratepayer point of view, regulatory effectiveness takes precedence over regulatory efficiency and notes Dr. Lowry's agreement on this point¹⁰⁴.

As a result, BCOAPO submits that multi-year plans in excess of three years should not be considered at this time no matter what form of revenue regulation is determined to be appropriate.

Formulaic (Index-Based) Rates

¹⁰¹ Exhibit A2-12, Zone II 9.1 and 9.3

¹⁰² Exhibit A2-13, Zone II 9.5 & 9.6

¹⁰³ Exhibit B-10, AMPC 1.2.1

¹⁰⁴ Exhibit A2-9, BCOAPO 2.1

Dr. Lowry has suggested that formulaic (i.e. index-based) approaches could be used as the basis for establishing elements of revenue both during the first multi-year plan period and subsequently¹⁰⁵.

Earlier in these submissions, we indicated that we did not support this approach during any first iteration of either a COSR or PBR multi-year plan. For similar reasons BCOAPO does not support a scheme that would see the use of a formulaic or indexed approach to establish elements of the approved revenue requirements (as opposed to rebasing) after any COSR or PBR multi-year rate plan period has terminated, but particularly in the case of a PBR.

Add Financial Incentives to Performance Metrics

In his evidence, Dr. Lowry suggests that consideration should be given to introducing performance incentives for specific activities. Areas suggested included conservation, system-wide/local peak load management and local non-wire alternatives¹⁰⁶.

In its Supplementary Evidence¹⁰⁷ BC Hydro outlines a number of reasons why linking financial incentives to performance measure is not appropriate in its case and we agree that performance measures (and their achievement) should not be linked to financial incentives at this time. In BCOAPO's view the main reasons are:

- Such incentives are premised on profit maximization being one of the utility's prime objectives.
- BC Hydro's mandate to make rates affordable is consistent with the implementation of conservation and non-wires alternatives where cost-effective. Furthermore, through the DSM Regulation government has provided clear policy direction on how to determine the cost-effectiveness of DSM.
- Incentives would need to be carefully designed so as to avoid unintended or counter-productive consequences and it is unlikely that all the consequences of a proposed incentive scheme can be foreseen.

¹⁰⁵ Transcript Volume 2, pages 250-251 and Exhibit A2-7, Slide 73

¹⁰⁶ Exhibit A2-5, page 112; Transcript Volume 2, pages 254-255

¹⁰⁷ Exhibit B-8, pages 16-18

Partial Decoupling of Revenues

Dr. Lowry has suggested a partial decoupling of revenue in certain areas such as charging load for electric vehicles and loads for large customers¹⁰⁸. Currently all load variances (from forecast) are captured in the Load Forecast Variance Account. The premise is that partial decoupling (i.e., where BC Hydro retains a portion of an increase in load over forecast) would incent BC Hydro to more aggressively pursue opportunities in these areas¹⁰⁹. Again, we note that this suggestion is premised on the incorrect assumption that BC Hydro's mandate is to maximize earnings (i.e. profits). As a result, we note revenue decoupling will not provide the anticipated incentive to pursue these activities.

BCOAPO submits that BC Hydro is already motivated¹¹⁰ to increase low carbon electrification based on the mandate provided by the Government of B.C. which is premised on the following two outcomes: (1) helping customers and the Government of B.C. to achieve their objectives with regard to the reduction of greenhouse gas emissions, and (2) generating incremental tariff revenue that can help to offset cost pressures and keep rates low for customers. Further motivation has been provided by the Government in the *Clean Energy Act* and the associated Greenhouse Gas Reduction Regulation which together establish investments in certain electric vehicle charging stations as Prescribed Undertakings and directing the BCUC to ensure rates are set so as to allow the recovery of the associated costs¹¹¹. In the case of large customer loads, BC Hydro has been pursuing alternative rate designs¹¹² to encourage incremental use and the BCUC has adopted overall economic benefits as one of the criteria for such rates¹¹³.

BCOAPO also notes that, in the case of electrification and loads related to EV charging stations, under the current rate proposals before the BCUC the revenues from EV charging stations do not initially recover the full costs¹¹⁴ and other ratepayers are subsidizing the loads. In this instance, any revenue decoupling would further increase this subsidization.

¹⁰⁸ Exhibit A2-5, page 112 and Transcript Volume 2, page 255

¹⁰⁹ Transcript Volume 2, page 152

¹¹⁰ Exhibit B-9, BCUC 1.6.3

¹¹¹ CEA, Section 18 and GGRR, Section 5

¹¹² Examples include the Freshet Rate and the Incremental Energy Rate

¹¹³ BCUC Orders G-104-20 and G-256-20

¹¹⁴ BC Hydro Public Electric Vehicle Fast Charging Service Rates Application, Exhibit B-1, pages 28-32

BCOAPO submits that BC Hydro's regulatory regime should not be revised to include partial revenue decoupling.

CONCLUSION

As stated previously, BCOAPO does not support the application of a full or traditional PBR scheme to BC Hydro. In a universe where it is a quarter horse and Fortis is a zebra, we cannot simply slap stripes onto Hydro, throw it out onto the African Savannah and call it a job well done. However, as BC Hydro acknowledges in its evidence and submissions thus far, that does not mean there are not elements of a PBR-approach that could not potentially have some value to the utility and our clients as ratepayers. It is with that in mind that we have taken the positions we have throughout these submissions: we have endeavored to sift through the complex evidence and nuanced information regarding BC Hydro's context not only as a Crown Corporation, but also of the needs and objectives of its regulator, shareholder, and ratepayers to inform our submissions in this matter.

ALL OF WHICH IS RESPECTFULLY SUBMITTED:

Original on file signed by:

Leigha Worth, Executive Director