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December 21, 2020

Sent via email/eFile

BCUC REVIEW OF BC HYDRO PBR REPORT
EXHIBIT A-12

Mr. Fred James
Chief Regulatory Officer
Regulatory & Rates Group
British Columbia Hydro and Power Authority
16th Floor - 333 Dunsmuir Street
Vancouver, BC V6B 5R3
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Re: British Columbia Utilities Commission – Review of British Columbia Hydro and Power Authority's Performance Based Regulation Report – Project No. 1599045 – BCUC IRs on Supplementary Evidence

Dear Mr. James:

Further to the above-noted proceeding, enclosed please find BCUC Information Request No. 1 on Supplementary Evidence. Please file your responses by no later than Thursday, February 4, 2021.

Sincerely,

Original signed by:

Marija Tresoglavic
Acting Commission Secretary

/jo
Enclosure

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British Columbia Hydro and Power Authority
Review of the Performance Based Regulation Report

INFORMATION REQUEST NO. 1 TO BC HYDRO ON SUPPLEMENTARY EVIDENCE

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A. BC HYDRO SUPPLEMENTARY EVIDENCE

1.0 Reference: BC HYDRO SUPPLEMENTARY EVIDENCE
Exhibit B-8, BC Hydro Supplementary Evidence, p. 3.
Goals of Regulation

British Columbia Hydro and Power Authority (BC Hydro or the Company) states on page 3 of Exhibit B-8 (Supplementary Evidence) that:

> 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...
>
> … The question to consider in this proceeding is what form of regulation will provide the most effective incentives for BC Hydro to operate efficiently and provide safe and reliable service, given its unique aspects.

1.1 Please discuss whether regulatory efficiency should be another important aspect with respect to regulation of BC Hydro's revenue requirement. Please discuss why or why not?

1.2 Please discuss which aspects of the current form of regulation for BC Hydro provides "the most effective incentives to…operate efficiently and provide safe and reliable service."

2.0 Reference: BC HYDRO SUPPLEMENTARY EVIDENCE
Exhibit B-8, BC Hydro Supplementary Evidence, p. 1.
Company's Proposal

BC Hydro proposes to base its revenue requirements on rate cases with three forward test years.

2.1 Please explain if the proposed plan would include an off-ramp provision. If not, please explain why not.

In BC Hydro's Fiscal 2009/2010 Revenue Requirements Application, BC Hydro proposed to base its operations, maintenance and administration (OM&A) cost forecast on some form of indexing. In that filing the Company stated the following.

> This RRA is BC Hydro's third such application to the BCUC in the space of five years. In each of the previous regulatory processes the BCUC and intervenors have reviewed in detail BC Hydro's business activities and functions. On this basis, BC Hydro submits, the BCUC and intervenors have become very familiar with the contextual issues impacting BC Hydro's business, the business functions and cost structure of the corporation, through review processes that have taken many months and involved a significant exchange of detailed information…
>
> BC Hydro has taken the opportunity to present this application in a more streamlined and consolidated manner, focusing more on the incremental view of what is changing since the last test period, as opposed to the entire portfolio of costs and activities. BC Hydro believes this meets the interests of the BCUC and intervenors for regulatory efficiency, and provides detailed information to explain the main drivers behind the proposed rate increases. The Application has been shortened significantly in comparison to the past two revenue requirement applications….
>
> In particular the approach to presenting operating costs differs from past years' applications, in part to reflect the approach that BC Hydro took in the development of its operating budgets for the forecast period, and in part in recognition of the feedback from intervenors to provide more succinct and consistent forecast information. This approach includes a "growth and inflation formula" for the base running costs of BC Hydro's business along with details and justifications of significant initiatives, as opposed to very granular details of every cost and activity.[1]

2.2 Please discuss whether the indexation of OM&A revenue should be considered in this or any successor proceeding on performance based regulation (PBR) for BC Hydro. Please explain why or why not.

2.3 Please explain why Dr. Lowry's proposal to escalate allowed revenue by some non-controversial means following the last test year isn't reasonable.

2.4 Please discuss what form of indexing could be considered non-controversial? BC-CPI?

2.5 FortisBC Energy Inc. uses a combination of an AWE:BC and CPI:BC to index its O&M costs.[2] Please discuss whether this form of indexing would or not be appropriate for BC Hydro, and why.

[1] BC Hydro Fiscal 2009/2010 Revenue Requirements Application, pp. 1-15 and 1-16.

[2] Decision and Orders G-165-20 and G-166-20, FortisBC Energy Inc. and FortisBC Inc. Application for Approval of a Multi-Year Rate Plan for the Years 2020 through 2024, June 22, 2020, p. 46.

3.0 Reference: BC HYDRO SUPPLEMENTARY EVIDENCE
Exhibit B-8, BC Hydro Supplementary Evidence, pp. 12–14, p. 20
Changes to the existing cost of service framework

On pages 12 to 14, BC Hydro states it does not support the use of indexing, stating as one of its reasons that:

- Third, replacing a multi-year cost forecast with an index or formula, may cause the BCUC or interveners to be less certain about whether allowed revenue has been set too high or may cause BC Hydro to advance mechanisms that guard against the possibility that allowed revenue was set too low. This could prompt the introduction of one or both of the most controversial elements of PBR: and earnings sharing mechanism or a productivity factor;

On page 20, BC Hydro identifies three changes that it believes would improve BC Hydro's existing cost of service framework:

- A three-year test period;
- Regularly scheduled statistical benchmarking; and
- Information-only performance metrics.

3.1 Please explain how BC Hydro's proposed approach provides incentives to find productivity improvements, in particular, when performance metrics are for information only

3.2 To what extent is BC Hydro incented to control costs under the existing cost of service framework? Please identify the specific elements in the current regulatory framework to support your response.

3.3 To what extent is BC Hydro incented to increase performance under the existing cost of service framework? Please identify the specific elements in the current regulatory framework to support your response.

3.4 To what extent is BC Hydro incented to control costs under the proposed changes to the existing cost of service framework?

3.5 To what extent is BC Hydro incented to increase performance under the proposed changes to the existing cost of service framework.

3.6 Please explain how the proposed changes to the existing cost of service framework will allow BC Hydro to accomplish its initiatives for electrification, maintaining low electricity rates, and maintaining a safe reliable service?

3.7 Please discuss BC Hydro's understanding of test period versus test year. Does BC Hydro believe that rate approvals obtained for a test period should be indefinite, or should its effectiveness end with the test period, and why? For example, please discuss whether it is appropriate for BC Hydro to provide a one year forecast and maintain rates until a future need (outside of the one year test period) arises necessitating a rate adjustment.

4.0 Reference: BC HYDRO SUPPLEMENTARY EVIDENCE
Exhibit B-8, BC Hydro Supplementary Evidence, p. 8.
PBR in Québec

BC Hydro states on page 8 of its Supplementary Evidence that:

> … it is important to recognize that the public may not accept profit maximization as a legitimate objective of a Crown Corporation. This is demonstrated by the

experience of Hydro-Quebec where public backlash saw efficiency gains under PBR as customers being "overcharged" and the Government of B.C. subsequently introduced legislation to set electricity distribution rates and remove the requirement for a PBR mechanism to be established.

4.1 Please state whether BC Hydro agrees with the following statements about Québec's experience with PBR, which Dr. Lowry provided on pages 95 to 96 of his report. For statements in which BC Hydro disagrees, please explain why:

- The new law removed the mandate for PBR for power transmission, but PBR continues for this division of Hydro-Québec and the Regie de l'Energie is currently considering transmission benchmarking and productivity evidence.
- The rate that Hydro-Québec Production can charge for the low-cost "heritage block" of power which is available to provincial end users has been indexed for several years.[3]
- Rather than suspending PBR for Hydro-Québec, the new law codified an alternative multiyear rate plan ("MRP") for this division.
- Hydro-Quebec supported this legislation.

5.0 Reference: BC HYDRO SUPPLEMENTARY EVIDENCE
Exhibit B-8, BC Hydro Supplementary Evidence, p. 15.
Statistical Benchmarking

BC Hydro states on page 15 of its Supplementary Evidence that:

> 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. These studies can provide another tool for the BCUC to set rates at efficient levels… Benchmarking does have limitations and the results can often be controversial. Therefore, BC Hydro suggests that a beneficial first step would be to involve the BCUC and interveners in a process to set out a terms of reference to guide the objective, scope and frequency of future benchmarking studies. This process would also provide an opportunity for all parties to consider the suggestions on benchmarking that were put forward by Dr. Lowry.

5.1 What would be a sensible schedule for such a process? For example, would this schedule preclude the use of benchmarking in the establishment of the new multi-year rate plan? Could terms of reference be considered on an expedited basis so as not to delay commencement of such studies?

6.0 Reference: BC HYDRO SUPPLEMENTARY EVIDENCE
Exhibit B-8, BC Hydro Supplementary Evidence, p. 16.
Low Carbon Electrification

BC Hydro states on page 16 of its Supplementary Evidence that

> Partial decoupling of low-carbon electrification revenues would mean that customers

[3] Act Respecting the Regie de l'energie, Chapter IV Rate Determination, Section 52.2.

would not receive all of the incremental revenue from BC Hydro's electrification activities. Rather, the Government of B.C. would retain some of the incremental revenue in the form of higher actual net income.

6.1 Please confirm that partial decoupling would only permit BC Hydro to keep incremental margins from electrification between rate cases.

6.2 In the event that low-carbon electrification activities generate incremental costs, instead of incremental revenues, please discuss the impacts under the partial decoupling scenario.

6.3 The multi-year rate plan that BC Hydro proposes would permit it to keep all benefits of incremental efficiency gains between rate cases. Please discuss why a multi-year rate plan makes sense for BC Hydro but strengthened incentives to promote beneficial load growth does not make sense.

7.0 Reference: BC HYDRO SUPPLEMENTARY EVIDENCE
Exhibit B-8, BC Hydro Supplementary Evidence, pp. 4–10, p. 21
Application of PBR

On pages 4 to 10, BC Hydro discusses the unique aspects that it believes could affect the application of PBR.

On page 21, BC Hydro references Mr. Kolesar's evidence, which states:

> Alberta experienced an increase in regulatory filings under PBR, in part because of the nature of some of the Commission's PBR plans, for which the Alberta commission was often criticized. The Commission should carefully analyze and consider the potential regulatory burden under both COSR and PBR.

7.1 Please provide distinctions in the industry and regulatory landscape in Alberta that may explain the increase of regulatory filings under PBR (for example, Alberta's initial approach to developing a PBR framework for all distribution utilities, different proposals with respect to capital expenditures, etc.)

7.1.1 Please explain if the reasons described above are unique to Alberta, or would also be applicable to BC Hydro, given BC Hydro's unique aspects as presented in pages 4 to 10?

8.0 Reference: BC HYDRO SUPPLEMENTARY EVIDENCE
Exhibit B-8, BC Hydro Supplementary Evidence, p. 6
Approach to Trade Income and Sale of Surplus Properties

On page 6, BC Hydro states that:

- Fifth, BC Hydro's approach to Trade Income and the sale of surplus properties demonstrates that BC Hydro does not have a profit maximization mandate and is instead focused on affordability and keeping rates low for customers, consistent with the Government of B.C.'s expectations. The Government of B.C. and BC Hydro have consistently taken the position that all Trade Income and net gains from the sale of surplus properties should benefit ratepayers even though there are alternative approaches that could increase revenues to the Government of B.C., as BC Hydro's shareholder.

8.1 Please explain in further detail the alternative approaches that BC Hydro could use to increase revenues to the Government of B.C., as BC Hydro's shareholder, and in what circumstances these approaches would be used.

In the BC Hydro Fiscal 2020 to Fiscal 2021 Revenue Requirements Application (F2020-F2021 RRA), BC Hydro proposed to change its methodology to have project write-off costs recovered from its ratepayers instead of its historical approach in which the shareholder absorbed these costs.[4]

8.2 Please discuss how this proposed change in methodology also supports the lack of profit maximization mandate.

B. DR. DENNIS WEISMAN SUPPLEMENTARY REPORT

9.0 Reference: DR. DENNIS WEISMAN SUPPLEMENTARY REPORT
Exhibit B-8, Appendix A, Dr. Dennis Weisman Supplementary Report, pp. 5–6
Employee Incentives

Dr. Weisman states on pages 5 and 6 of his report that:

> An example of financial incentives is an employee incentive-compensation plan that rewards (punishes) superior (inferior) performance by putting compensation dollars at risk. This would be expected to induce the company to operate as if it were a profit-maximizing entity even though it is not… Because effort is costly (i.e., leisure is preferred to work), the requisite carrots and sticks must be put in place to motivate superior performance. A carefully designed employee compensation plan can succeed in doing just that even though BC Hydro may not have profit maximization as its primary or even its secondary objective.

9.1 Please explain whether the incentive provisions of BC Hydro's employee compensation plan merit consideration by the British Columbia Utilities Commission (BCUC) in this or any successor proceeding on PBR for the Company.

10.0 Reference: DR. DENNIS WEISMAN SUPPLEMENTARY REPORT
Exhibit B-9, Appendix A, Dr. Dennis Weisman Supplementary Report, p. 6
Revenue Decoupling

Dr. Weisman states on page 6 of his supplemental report that:

> Revenue decoupling can represent an important element of a regulatory regime. The additional revenue stability provided by decoupling (i.e., delinking revenues from system use) can potentially extend the period between rate cases or rebasing (i.e., regulatory lag) and thereby strengthen incentives for performance.

He states on pages 16 and 17 of this report that: "the share of the efficiency gains retained by the regulated firm has a pronounced effect on the power of the regulatory regime."

10.1 Dr. Lowry states in his report that a key additional rationale for decoupling is its ability to remove the throughput (i.e. lost margin) disincentive that can otherwise cause utilities to resist

[4] BC Hydro F2020–F2021 RRA proceeding, Exhibit B-1, pp. 8-21–8-22; Exhibit B-5, BCUC IR 161.1.

demand-side management (DSM) programs and rate designs that encourage DSM. Does Dr. Weisman agree? Why or why not?

10.2 Dr. Weisman is a former economist for a telecommunications utility and has written extensively on that industry's PBR experience. Please discuss the key differences in the telecommunications industry compared to vertically integrated crown-owned utilities, including incentives for marketing their services.

10.2.1 Please discuss whether effective marketing was one cause of the rapid productivity growth in the telecommunications industry that permitted these companies to operate under high X factors or rate freezes.

10.2.2 Please confirm, or otherwise explain, that the telecommunications industry operated for many years under price caps with no revenue decoupling.

10.3 Based on his telecommunications experience, does Dr. Weisman believe that revenue decoupling weakens the Company's incentive to promote beneficial electrification, power exports, and services to price-sensitive customers?

10.3.1 Please discuss whether this is a legitimate issue to consider in this and any successor proceeding on PBR for BC Hydro.

10.3.2 Are the options Dr. Lowry has discussed to remedy this problem, such as partial decoupling or performance incentive mechanisms (PIMs), worthy of further consideration?

10.4 Dr. Lowry has stated that, in the United States, revenue decoupling is usually combined with automatic escalation of allowed revenue on some sensible basis (e.g., customer growth) following any years in which revenue requirements have been established on the basis of rate cases. Can you confirm this?

10.5 Dr. Lowry reports that many utilities who have been able to operate for many years without rate cases or formal multi-year rate plans have improved their cost performance. Please discuss whether this kind of provision makes sense for BC Hydro.

11.0 Reference: DR. DENNIS WEISMAN SUPPLEMENTARY REPORT
Exhibit B-8, Appendix A, Dr. Dennis Weisman – Supplementary Report, pp. 7–8
Multi-year Rate Plans

Dr. Weisman states on pages 7 and 8 of his supplemental report that:

> Multi-year rate plans can strengthen the incentive power of the regulatory regime through a combination of external benchmarks (e.g., an *I – X* index) or a fixed rate trajectory based on cost forecasts for rate setting and by increasing the length of the test period. The degree to which the incentive power of the regulatory regime is increased will depend on the various parameters of the multi-year rate plan. These parameters include, but are not limited to, the length of the regulatory regime (i.e., regulatory lag), the existence and structure of the earnings-sharing mechanism and the efficiency-carryover mechanism.

11.1 Please confirm that the Hybrid approach, popular in California and described by Dr. Lowry in his report, which indexes OM&A and bases capex budgets on an average of the utility's recent historical plant additions, is a well-established alternative in energy utility regulation to the two approaches that he has mentioned.

11.1.1 Please discuss the pros and cons of this approach in an application to BC Hydro. In this

discussion, please do not assume that, in successive applications, the new capex budget would necessarily be based on the capex in the expiring plan.

11.2 Please confirm that, in testimony for EPCOR in Alberta, Dr. Weisman supported a K bar approach to the design of rate and revenue cap indexes that effectively links each company's capital revenue escalation to its recent historical capex.

11.2.1 Please confirm that an efficiency carryover mechanism (ECM) can have an especially large incentive impact in the context of a relatively short plan term such as the three years that BC Hydro proposes. Should ECMs, which have been included in the current and expired multi-year rate plans (MRPs) of the FortisBC companies, be considered for BC Hydro in this or any successor proceeding on PBR for BC Hydro? If not, why not?

12.0 Reference: DR. DENNIS WEISMAN SUPPLEMENTARY REPORT
Exhibit B-8, Appendix A, Dr. Dennis Weisman – Supplementary Report, p. 10.; Appendix A2-1, Appendix GG
Forecasting Cost Growth

Dr. Weisman states on page 10 of his supplemental report that:

> While the protracted technical debate over the proper value of the X factor is circumvented with this approach, the cost forecasts must still be scrutinized rigorously. This exercise can prove challenging in an environment in which there are pronounced informational asymmetries. In other words, the regulated firm typically knows far more about its costs (and its ability to reduce them) than the regulator and interveners. Furthermore, to the extent that this approach obviates the need for an earnings-sharing mechanism, it eliminates another one of the most controversial elements of PBR.

In Appendix GG of Exhibit A2-1, Dr. Weisman stated that with regard to Option E that "the forward-looking approach that the plan entails could provide the company with incentives to exaggerate capital investment needs… the initial forward-looking assessment of prudent capital investment requires substantial regulatory resources."

12.1 Given the material disadvantages of basing revenue requirements on cost forecasts, and the fact that many MRPs do not include earnings sharing, is the approach proposed by BC Hydro necessarily superior to the indexing and hybrid approaches to revenue cap escalation that Dr. Lowry discusses in his report?

12.2 Please discuss if utilities in California and Alberta face more risk concerning the regulator's acceptance of their future costs, given the California and Alberta K bar approaches to the design of revenue cap escalators do not require the regulator to sign off on multi-year cost forecasts. Please discuss whether this mechanism provides an incentive advantage over the forecasting approach that BC Hydro proposes?

12.3 Please discuss if the California and Alberta K-Bar approaches also reduce the need for earnings sharing.

13.0 Reference: DR. DENNIS WEISMAN SUPPLEMENTARY REPORT
Exhibit B-8, Appendix A, Dr. Dennis Weisman – Supplementary Report, p. 11;
Appendix B, Mr. Mark Kolesar Submission
COSR

Dr. Weisman states on page 11 of his supplemental report that:

> In the textbook model of cost-of-service regulation, the earnings of the regulated firm are capped, and an earnings review can be triggered whenever earnings diverge sufficiently from target levels. In contrast, the form of cost-of service regulation that applies to BC Hydro specifies a fixed test period over which the regulated firm is not subject to an earnings review and a recalibration of rates to achieve a target rate of return. The distinction between textbook cost of-service regulation and PBR is often cast in terms of whether the term of the regulatory regime (i.e., regulatory lag) is fixed in advance or determined endogenously on the basis of the regulated firm's earnings.

Mr. Kolesar's discussion of cost of service regulation (COSR) in contrast contains the following passage on pages 6 to 7.

> Once the forecast revenue requirement is established by the regulator, rates are approved to recover the revenue requirement in each of the years that are the subject of the regulatory regime and the utility is set on a "revenue trajectory" for the duration of that regime. *Barring any sufficiently significant events that might compel the regulator to bring the utility in for a subsequent review* prior to the end of the current regime (or that might compel the utility to apply for a subsequent review), this revenue trajectory is not altered… the utility is expected to respond to this incentive and to seek productivity improvements under COSR, thereby emulating to some extent the results expected in a competitive market, and in so doing retain any return in excess of the allowed return. [*italics added*]

13.1 Please support Dr. Weisman's contention that "the textbook model" of COSR includes the earnings review he describes as an essential feature. In addition to a citation from his own academic work, please include a definition of COSR from another respected source that treats earnings reviews as an essential feature of COSR.

13.2 Are earnings reviews commonplace in contemporary COSR for energy utilities? Does Dr. Weisman agree with Dr. Lowry statement on page 100 of his report that "many U.S. electric utilities have over the years avoided general rate cases for lengthy periods without a formal rate case stayout"?

14.0 Reference: DR. DENNIS WEISMAN SUPPLEMENTARY REPORT
Exhibit B-8, Appendix A Dr. Dennis Weisman – Supplementary Report, p. 17
Performance Metrics

Dr. Weisman states on page 17 of his supplemental report that:

> Suppose the Commission identifies a set of performance metrics related to conservation and the use of disfavored inputs. The Commission may decide to make these performance metrics "informational only." This means that the regulated firm's performance on these metrics would be publicly disclosed, perhaps even reported on the Commission's web site, but it would not be rewarded or penalized financially for compliance or lack of compliance with these performance metrics… 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… it is *not necessarily* the case that financial incentives would be required to induce compliance with Commission's performance metrics. [*italics added*]

14.1 Please discuss whether targeted performance incentive mechanisms and special incentives that use disfavored inputs should merit consideration in this and any successor BC Hydro PBR proceeding.

14.1.1 Please discuss whether performance incentive mechanisms have the special advantage of being able to target weaknesses in the incentive power of the regulatory system. Why or Why not?

14.2 Please explain the basis for Dr. Weisman's position that information only performance metrics are generally *strong* (as opposed to having *some* impact)?

14.3 Can the incentive impact of such metrics be further strengthened by 1) assigning a target to the metric without adding awards and/or penalties and 2) linking performance to employee compensation?

14.4 Does Dr. Weisman believe that the incentive impact of service quality incentives is sufficiently strong that there is no need for them to be linked to awards and penalties in multi-year rate plans for energy and telecom utilities? Why or why not?

15.0 Reference: DR. DENNIS WEISMAN SUPPLEMENTARY REPORT
Exhibit B-8, Appendix A, Dr. Dennis Weisman – Supplementary Report, p. 19;
Exhibit A2-5, p. 58
Earnings Sharing

Dr. Weisman states on page 19 of his supplemental report that:

> It is conceivable that the cost-benefit test for a formal PBR regime is likely to be more difficult to pass in the case of BC Hydro. **The specific form of cost-of-service regulation under which the company currently operates is properly characterized as a form of PBR.** Moreover, with a three-year (or longer) test period this type of regulatory regime may well give rise to greater incentive power than an indexed form of PBR with a term of 5 years that incorporates a significant earnings-sharing component. This suggests that at least in terms of incentive power, the Commission may well be taking a step backward if it opted for this type of PBR regime. **[emphasis added]**

15.1 Does Dr. Weisman believe that BC Hydro's current regulatory system, which necessitates frequent rate cases, has some PBR attributes or that it is properly considered a form of PBR? Why or why not?

15.2 Please discuss whether or not Dr. Weisman agrees with Dr. Lowry's statement that Earning Sharing Mechanisms (ESMs) are used on only half of current US and Canadian MRPs (p. 58 of Dr. Lowry's report, Exhibit A2-5) and that they are not used in Alberta and Ontario plans. Why or why not?

15.3 Does Dr. Weisman believe that earnings sharing would be a practical necessity in a plan for BC Hydro even if it only applied to OM&A?

C. MR. MARK KOLESAR SUBMISSION

16.0 Reference: MR. MARK KOLESAR SUBMISSION
Exhibit B-8, Appendix B Mr. Mark Kolesar – Supplementary Report, p. 2, p. 12; Alberta Utilities Commission Decision 2009-035, Enmax Power Corporation, 2007-2016 Formula Based Ratemaking, March 25, 2009
Crown Corporations

Mr. Kolesar states on page 2 of his report that: "BC Hydro is not a profit-maximizer and will be unlikely to fully respond to the incentives of PBR. Accordingly, I conclude that the benefits of PBR are unlikely to be fully realized."

Further, on page 12 of his report Mr. Kolesar states that:

> …under PBR, it is most likely BC Hydro will seek productivity improvements sufficient to earn the return expected by its shareholder, but no more. Given this finding, the Commission should consider whether BC Hydro's culture, processes and procedures, compensation scheme and the expectations of its shareholder are adequately attuned to the incentives of PBR, and whether, upon weighing all of the Commission's objectives, a form of COSR might better suit the circumstances of BC Hydro.

16.1 Please confirm whether Mr. Kolesar participated in the ENMAX PBR proceeding and the two Alberta Utilities Commission (AUC) generic energy PBR proceedings during his time at the AUC.

16.1.1 Please confirm if these proceedings resulted in the application of PBR to two municipal power distributors (ENMAX and EPCOR).

In AUC Decision 2009-035 approving a PBR plan for ENMAX the AUC stated on pages 12 to 13 that:

> The Commission considers that there are potentially many benefits of a well crafted [P]BR regulatory regime. These include better economic incentives for the utility that more closely mimic the incentives in a competitive market, a reduction over time in the overall regulatory burden, and an opportunity for the utility to capture greater productivity, subsequently allowing for lower rates than would otherwise be enjoyed by consumers.
>
> With respect to the specific criticism that [ENMAX], as a municipally owned utility, may not be a good candidate for an [P]BR plan, the Commission notes that despite the reservations referred to above, all parties agreed that an [P]BR plan could be adapted to [ENMAX] at this time…. The Commission is satisfied that an [P]BR can provide benefits for [ENMAX] and its customers through improved efficiency and predictability. The Commission is also satisfied by the testimony of Mr. Holden that the incentives and culture being created at [ENMAX] at least in part by competition in other related lines of business lend themselves to the adoption of an [P]BR plan. …
>
> The Commission finds that there is no compelling reason to conclude that a properly crafted [P]BR plan cannot be adopted for [ENMAX].

16.2 Please explain if Mr. Kolesar has changed his views on the propriety of PBR for municipal power distributors since this time, and if so, why?

16.3 Please present any statements the AUC made during the subsequent two generic PBR proceedings expressing a low expectation of the earnings potential of municipal utilities under PBR.

16.4 Do you believe that the current operating performances of ENMAX and EPCOR are inferior to those of the two investor-owned power distributors (ATCO and Fortis) which have been subject to the PBR plans?

16.5 EPCOR evidently retained Dr. Weisman as a witness to consider PBR alternatives in these proceedings. Did EPCOR oppose PBR for its power distribution services?

16.6 Please confirm that EPCOR operated for several years under a multi-year rate plan with a price cap index in the years prior to its regulation by the AUC.[5] Please confirm that EPCOR Water currently operates under such a plan in the City of Edmonton.[6]

16.7 Is there reason to suspect that PBR will work better for municipal utilities like ENMAX and EPCOR than for a crown corporation?

16.8 Even if the effect of PBR were diminished by BC Hydro's crown corporation status, is it your view that the BCUC as a regulator with extensive PBR experience, that BC Hydro and other Canadian crown corporations should be regulated under COSR instead?

16.9 If the Company is resistant to incentives due to its crown corporation status, should the incentives be stronger than the norm for private utilities operating under PBR?

17.0 Reference: MR. MARK KOLESAR SUBMISSION
Exhibit B-8, Appendix B Mr. Mark Kolesar – Supplementary Report, pp. 5–6; AUC Decision 2012-237, Rate Regulation Initiative, Distribution Performance-Based Regulation, September 12, 2012
Cost of Service Regulation

Mr. Kolesar stated on page 5 of his report that:

> a COSR regime establishes a forecast revenue requirement deemed necessary to satisfy the service obligations of the utility… and then approves rates intended to recover that revenue requirement. The process generally involves a line-by-line analysis of the utility's costs.

He states on page 6 that:

> There may be very good reasons to implement a COSR regime…, COSR may be a good alternative when certain conditions are present in the utility's market, precisely because it does not break the link between costs and revenues… The potential misalignment of revenues and costs may be more severe when the utility's billing determinants are fairly stable, but it has aging infrastructure that requires replacement, resulting in significant capital additions to serve existing customers. Although a PBR regime will include factors to account for capital additions, these may be less effective than COSR in adequately recognizing the effect of capital requirements on utility costs.

17.1 Does Mr. Kolesar agree with Dr. Lowry that, prior to the start of the generic PBR plan, three large Alberta power distributors had for many years filed frequent rate cases that produced

[5] City of Edmonton Bylaw 12367 outlined an MRP for EPCOR with a term from 2001-05

[6] This is laid out in City of Edmonton Bylaw 17698 EPCOR Water Services and Wastewater Treatment Bylaw. https://www.epcor.com/products-services/water/rates-terms-conditions/edmontonratestermsconditions/coe-bylaw-17698.pdf

rapid rate increases?

The AUC proceeding that ultimately led to the suspension of this regulatory system and its replacement with PBR featured a kickoff letter that stated in part that:

> This initiative proceeds from the assumption that rate-base rate of return regulation offers few incentives to improve efficiency, and produces incentives for regulated companies to maximize costs and inefficiently allocate resources… Regulators … must critically analyze in detail management judgments and decisions that, in competitive markets and under other forms of regulation, are made in response to market signals and economic incentives. The role of the regulator in this environment is limited to second guessing…The Commission is seeking a better way to carry out its mandate so that the legitimate expectations of the regulated utilities and of customers are respected.[7]

17.2 Does Mr. Kolesar agree with the quoted statement? Was Mr. Kolesar working for the AUC at the time of this AUC proceeding?

In Decision 2012-237, pages 2 and 3, the AUC stated concerning COSR with multiple forward test years that:

> this framework also creates an incentive for the companies to provide cost forecasts (both operating and maintenance (O&M), and capital) that are higher than what the company expects to be able to achieve or to provide conservative forecasts of the number customers and other billing units that are lower than what the company expects, thus increasing profits above the approved return.

17.3 Please discuss if this is a concern with the proposed changes to BC Hydro's existing cost of service framework. Why or why not?

17.3.1 If no, please identify where the above concerns with COSR may be mitigated with the proposed changes to BC Hydro's existing cost of service framework.

17.4 Please discuss if Mr. Kolesar is questioning the use of PBR in a setting of aging infrastructure, given his observations about the Alberta infrastructure and the AUC adopting a system of PBR that featured indexed rate and (for gas utilities) revenue caps without earnings sharing that continued this general approach with some refinements in a successor plan. The refined approach effectively links growth in each utility's capital revenue to its recent historical plant additions.

17.5 Is a linkage of capital revenue growth to a utility's recent historical capex a sensible way to reduce the regulatory cost of PBR and sidestep forecasting controversies? Please discuss why or why not.

[7] Alberta Utilities Commission, "AUC letter of February 26, 2010," pages 1-2, Exhibit 1.01 in Proceeding 566.

18.0 Reference: MR. MARK KOLESAR SUBMISSION
Exhibit B-8, Appendix B, Mr. Mark Kolesar – Supplementary Report, p. 7
PBR

Mr. Kolesar states on page 7 of his report that:

> There is no need in this discussion to go over the process of developing a PBR plan… However, it is noteworthy that, despite potential assumptions to the contrary, the process is no less onerous than that required under COSR to establish a revenue requirement and set rates, and both PBR and COSR require a significant amount of judgment on the part of the regulator.

18.1 Is Mr. Kolesar saying that the development of a PBR plan has a regulatory cost that is comparable to or larger than a single rate case, a rate case with multiple test years, or even multiple rate cases? If so, please substantiate this assertion.

18.1.1 In Alberta, for example, how has the number of hearing days needed to consider PBR plan design provisions compared to the hearing days for a 2-year rate case?

18.2 Does a regulatory community engaged in PBR go through a learning curve, finding ways to streamline PBR proceedings over the years? For example, did this happen between the first and second plans in Alberta that Mr. Kolesar was involved with?

18.2.1 Please discuss how BC can learn from Alberta's PBR experience, avoiding some of the problems that were encountered there.

18.3 BC, like Alberta, has extensive PBR experience. Would this not reduce the regulatory cost of developing a PBR system for BC Hydro? Please discuss why or why not.

18.4 Several years ago, BC Hydro proposed to use an index to forecast its OM&A expenses in rate cases. Based on your experience with index formulas in Alberta, and in light of the emerging consensus to develop some kind of multi-year rate plan for BC Hydro, does this seem like an idea worth considering in this and any successor proceeding on PBR for BC Hydro? Please discuss why or why not.

19.0 Reference: MR. MARK KOLESAR SUBMISSION
Exhibit B-8, Appendix B Mr. Mark Kolesar – Supplementary Report, p. 9
Crown Corporation

Mr. Kolesar states on page 9 of his report that:

> BC Hydro is expected to earn and provide to its shareholder, the government of British Columbia, a net income in the amount required by Direction 8. There is no expectation for the Company to deliver a net income in excess of that amount. Indeed, any earnings in excess of that amount may be viewed as unpalatable, as they may lead to allegations that rates have been higher than they otherwise should have been. While Direction 8 is time limited with respect to the matter of return and the determination of allowed return may be altered after fiscal 2021, there would still be no expectation that the Company's net income should exceed the approved amount, barring a change in the expectations of its shareholder.

19.1 Please provide evidence to support the notion that the government, having established a net income goal for BC Hydro, would not welcome higher income if it was the result of good operating performance.

19.2 Please discuss the use of potential surplus earnings for other uses, such as deferrals to fund future capex surges, mitigation of potential cost overruns of capital projects, investments in electrification, and other government policy objectives.

19.2.1 Could BC Hydro use these potential surplus earnings to invest in the above type of projects without the need for cross-subsidization from other ratepayers? Please discuss.

19.3 With respect to the statement that "there would still be no expectation that the Company's net income should exceed the approved amount," please discuss whether BC Hydro would be able to reinvest any surplus earnings back into the organization for the purposes of maintaining a healthy capital structure.

20.0 Reference: MR. MARK KOLESAR SUBMISSION
Exhibit B-8, Appendix B, Mr. Mark Kolesar – Supplementary Report, p. 2
Revenue Decoupling

Mr. Kolesar states on page 2 of his report that:

> I have over 30 years of experience in the regulated utilities sector, having worked in the areas of regulation and public policy, external relations, marketing, strategy and business development, and mergers and acquisitions. This includes over 20 years of corporate experience in the telecom sector, where I was Vice President, Economic Affairs at TELUS, one of Canada's largest telecommunications companies.

20.1 Based on his experience, does Mr. Kolesar dispute Dr. Lowry's contentions that 1) telecommunications utilities operated for many years under price cap regulation with no revenue decoupling, and some still do; 2) when operating under such regulatory systems, they have generally had strong incentives to market their services, and considerable flexibility in doing so; and 3) effective marketing was one of the reasons for the rapid productivity growth that permitted these companies to operate under high X factors and rate freezes?

20.2 During Mr. Kolesar's years as a Commissioner in Alberta, did the AUC approve revenue decoupling for its gas or electric utilities? If not, why not?

20.3 Based on these experiences, does Mr. Kolesar believe that revenue decoupling weakens the incentive for BC Hydro to promote beneficial electrification, profitable exports, and service to price-sensitive provincial customers? If so, is this problem and alternatives to full decoupling such as partial decoupling and PIMs a legitimate issue for this and any successor proceeding on PBR for BC Hydro?

21.0 Reference: MR. MARK KOLESAR SUBMISSION
Exhibit B-8, Appendix B Mr. Mark Kolesar – Supplementary Report, pp. 9–10
Executive Compensation

Mr. Kolesar states on pages 9 to10 of his report that:

> Executive compensation in the Company, as approved by its board of directors, includes incentive pay for executives and directors, based on BC Hydro's Service Plan performance measures. None of these performance measures can be interpreted as promoting profit maximization. On the contrary they support reliable and responsive service delivery, ensure that rates are "among the most affordable in North America," promote safety, and deliver on a number of other policy objectives such as energy conservation, clean energy and aboriginal relations… The Commission should

consider whether BC Hydro's culture, processes and procedures, compensation scheme and the expectations of its shareholder are attuned to the incentives of PBR.

21.1 Given the current surplus of electricity in BC, is a mandate to keep rates "among the most affordable in North America" sufficient to ensure efficient operation? Please discuss.

21.2 Please discuss how the incentive pay provisions of BC Hydro are aligned to ensure efficient operation.