

**BC HYDRO
Revenue Requirements
2004/05 and 2005/06**

**Counsel's Reply Argument
on behalf of
British Columbia Hydro and Power Authority**

August 3, 2004

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I. INTRODUCTION TO REPLY ARGUMENT

A. Introduction

In this Reply Argument BC Hydro responds to the significant issues raised in arguments by Intervenors that were not addressed in BC Hydro's Argument of June 30, 2004. Where this Reply does not directly respond to an argument, BC Hydro relies on its Argument, the Application and the exhibits it has filed in this proceeding.

The Reply is organised under the four applications BC Hydro has before the Commission and, where possible, follows the textual (but not necessarily the numeric) headings in BC Hydro's Argument. Tables of concordance to the Issues List and to issues raised by the Commission Chair are attached as Schedules A and B, respectively, and a list of authorities relied on is attached as Schedule C.

B. Role of the Energy Plan

As anticipated in BC Hydro's Argument, there is considerable confusion in some of the Intervenor Arguments concerning the role of the Energy Plan. JIESC, CEC and IPPBC are dealt with in turn below.

1. JIESC

At pages 1 to 2 and 13 to 14 of its Argument, JIESC recognizes the Energy Plan's focus on the importance of low stable rates in British Columbia. To serve that objective, the Energy Plan contemplated, and government has since provided, for the Heritage Contract to ensure the availability of low-cost resources to domestic consumers and the return of BC Hydro to normal regulation under the *Utilities Commission Act*.

The Energy Plan does not identify, and government has not taken, steps to provide for regulating of BC Hydro on a basis different than other utilities, except as mandated by the special directions. Thus, the Commission's responsibility is to strike the appropriate balance in rates under section 59 of the *Utilities Commission Act* and the extensive case law considering that and equivalent sections, while serving the requirements of Heritage Special Direction No. HC2 ("HSD#2"). The attempt by JIESC to politicize the Commission's process by invoking the current state of the BC economy or the importance of industrial customers to it is not justified by the Energy Plan and is generally not constructive.¹ Moreover, the Commission would err if it departed from the rate setting methodology that follows from a correct interpretation of HSD#2 and allowed concern for low rates to override the rates that would otherwise be determined just and reasonable in accordance with HSD#2.²

2. CEC

At pages 11 to 17 of its Argument, CEC, like JIESC, emphasizes the importance of low rates in the Energy Plan. Its discussion evidences an additional confusion when it suggests that the reference to "government policy directives" in HSD#2 includes the Energy Plan. However, the Energy Plan does not meet the definition of "government policy directive" in HSD#2, which is:

"government policy directive" means a directive in writing to the authority from the minister charged with the administration of the *Hydro and Power Authority Act*;

Pursuant to section 4(c) of HSD#2, the Commission must ensure that BC Hydro's rates are sufficient to enable BC Hydro to comply with such government policy directives (to BC Hydro).

¹ JIESC Argument at p.10.

² *TransCanada Pipelines Limited v. National Energy Board et al*, 2004, FCA 149, para. 32. Note that this decision limiting the extent to which the National Energy Board can consider low rates as an independent objective was made

As the Energy Plan is clearly not a government policy directive to BC Hydro as contemplated in HSD#2, it must not be employed to override the Commission's obligations under the Act and special directions.

At page 12 of its Argument, CEC also argues that the Commission is required to employ section 7(b) of HSD#2, and the Commission's jurisdiction there under to allow BC Hydro to establish deferral accounts for "other purposes", to use deferral accounts to meet the policy objectives of the Energy Plan. Again, the Commission is not "bound" by the Energy Plan. BC Hydro's reply submissions on the appropriate use of deferral accounts are in Part IV of this Reply Argument.

3. IPPBC

At pages 1, 3 to 7, and Appendix 1 of its Argument, IPPBC focuses on the Energy Plan's discussion of the development of a secure reliable supply and the encouragement of private sector opportunities in providing that supply. However, IPPBC errs when it characterizes the Energy Plan's policy statements as "requirements" binding upon the Commission.

In particular, IPPBC seeks Commission intervention to require BC Hydro to evaluate all investments using a common approach. Mr. Elton's evidence is clear that BC Hydro does not employ a common financial screen for all of its investments.³ It is unfortunate that IPPBC missed the main message Mr. Elton was trying to convey. His very clear point in the quoted passage is that the different character of BC Hydro's various assets and the different responsibilities of BC Hydro's lines of business means that the criteria employed in making investments should and must be different. A decision to maintain or extend a distribution line to

in circumstances where the Board was free to choose its own methodology – a choice that is made in the context of BC Hydro by the mandatory direction contained in HSD#2.

³ T6: 622-629, referenced in IPPBC Argument at pp. 4-7.

ensure ongoing service should not be subject to the same financial analysis as a decision to purchase a new source of supply. For example, BC Hydro is obliged to extend its distribution system to a new customer pursuant to its tariff whether or not that hook-up is, by itself, a good investment. It has an obligation, not an option, to serve. Similarly, BC Hydro is charged with maintaining and operating the Heritage assets. On the other hand, BC Hydro is not obliged to construct new sources of generation and, pursuant to the Energy Plan, would only consider doing so in the context of a very few projects, and only then where they are demonstrably the least cost options. Thus, it is absolutely clear that different financial criteria have to be applied to different types of investments made by BC Hydro. This becomes even clearer when taking into account BCTC, which is responsible for directing the type of investment that will occur in transmission.

This point is analogous to the distinction referenced in BC Hydro's Argument that Mr. Elton made between the ability of a private sector gold mining company and a public utility to cut costs in response to changed economic circumstances.⁴

What the Energy Plan *does* contemplate, and what BC Hydro is committed to, is evaluating resource options on a comparable basis. For all of IPPBC's cross-examination and argument, there is no credible evidence that there is any bias or lack of comparability in the manner in which BC Hydro evaluates its resource options.

As discussed in BC Hydro's Argument,⁵ the Commission must exercise its authority under the Act and regulations (including HSD#2), and must not fetter itself by blindly following the Energy Plan, or following it where it is inconsistent with legislation. The recent BC Court of

⁴ BC Hydro Argument at p. 36, note 61. For the full discussion see T6: 733/3-734/18.

⁵ BC Hydro Argument at pp. 7-9.

Appeal decision referred to by BCOAPO makes plain the importance of a special direction as an instrument of government policy relating to the jurisdiction of the Commission.⁶

C. Burden of Proof, and Role of Commission in Adversarial Process

BCOAPO and JIESC devote considerable attention to BC Hydro's Argument with respect to the onus of proof. Both fundamentally misapprehend it.

BC Hydro filed its Application on the basis that the rates in effect at the time the Application was filed were no longer just and reasonable. It undeniably has the onus of proving that a change in rates is required. BC Hydro has filed extensive financial data the Commission can accept as proof that the revenues in the test years in the absence of a rate increase will not provide a fair return for the service that it provides.⁷ BC Hydro does not suggest that the Commission is bound to accept this evidence, but it does suggest that those who would have the Commission reject it should provide contrary evidence or demonstrate, through cross-examination or documentation, that BC Hydro's evidence is unreliable. The Intervenors have manifestly failed to provide that evidence and it is for that reason that BC Hydro submitted in its Argument that the Commission ought to reject any suggestion of arbitrary across-the-board reductions in BC Hydro's revenue requirements or any component of it.

The regulatory process depends for its integrity on the Commission basing its decisions on its assessment of the record before it. The Intervenors cannot escape the obligation to build that

⁶ *BC Hydro and Power Authority v. Terasen Gas (Vancouver Island) Inc.*, 2004 BCCA 346 (*BC Hydro v. Terasen*) is referred to in BCOAPO's Argument at p.4. It is clear from paragraph 23 of Mr. Justice Mackenzie's decision that special directions have the full force of law and that there exists a "close policy connection between the government and the Commission **through the mechanism of special directions**" [emphasis added].

⁷ JIESC relies, at p. 10 of its Argument, on a reference to T6: 692 to suggest that BC Hydro seeks a rate increase on the basis of faith, not evidence. That reference does not support the JIESC's contention and BC Hydro fails to see any justification for JIESC's statement that there is no strong evidence in light of the written evidence and testimony in this proceeding.

record by simply complaining that the process is onerous or expensive and urging the Commission to arbitrarily reject the evidence.

This proceeding is primarily an adversarial one in which the parties bring their dispute to the Commission for resolution. It is not, as almost all the Intervenors would have it, an inquisitorial one in which the Commission ought to assume the skeptical perspective of a ratepayer group or other party to the proceeding. This is not to say that the Commission does not have an overarching responsibility to ensure that the rates it sets are just and reasonable. However, it would be inappropriate for the Commission to allow its consideration of the evidence to be skewed by the fact that the record in this proceeding is daunting, and that Intervenors may have had difficulties grasping it in its entirety.

The Intervenors chose not to call evidence on the vast majority of the cost issues that made up the Application. They also failed to demonstrate through cross-examination any obvious flaws in the estimates of costs provided by BC Hydro's witnesses. This last point is best illustrated by the similarity between the opening address of JIESC and its Argument, with limited reference to the evidentiary record in the middle. That is, in his opening submission and during cross-examination of BC Hydro witnesses, counsel for JIESC made a number of bold assertions with respect to excess costs. What was often missing from JIESC's Argument was acknowledgement of what was said by those witnesses in response to the allegations. CEC and Mr. Craig revised their positions on a number of issues in Argument compared to their initial positions. However, CEC also neglected to acknowledge a number of responses CEC's counsel received during his cross-examination of BC Hydro witnesses. Some examples of this are as follows:

- JIESC asserts there is no evidence that BC Hydro is able to prioritize capital investment, but does not address the extensive evidence of BC Hydro and BCTC witnesses on the topic;⁸
- JIESC speculates that BC Hydro might have made a different cost of energy and Heritage Deferral Account proposal if snow packs were greater than normal on January 1, 2004, but does not address the testimony of Mr. Morris to the contrary;⁹
- JIESC suggests that OMA expense increases should be consistent with inflation and customer growth, but does not address the extensive testimony of BC Hydro witnesses about the drivers of those cost increases;¹⁰
- JIESC asserts that First Nations negotiations and water use planning costs should be tied to the remaining life of generation or transmission assets, but does not address the testimony of Mr. Morris to the contrary;¹¹
- JIESC and CEC assert that the depreciation rate for Burrard Generating Station should not be changed, but neither of them address the extensive evidence of Mr. Spafford and other BC Hydro witnesses on the topic;¹²
- CEC asserts that accounting for post retirement benefits should continue to be on a cash basis, but does not address the evidence of Ms. Hardy to the contrary;¹³

⁸ See pp. 20-23 of this Reply Argument and pp. 41-42 of BC Hydro Argument.

⁹ See p. 32 of this Reply Argument.

¹⁰ See p. 21 of this Reply Argument.

¹¹ See p. 16 of this Reply Argument.

¹² See pp. 16-17 of this Reply Argument.

- CEC disputes that low rates are an objective of BC Hydro's management, but does not address the evidence of Mr. Elton to the contrary and does not address the low-cost objectives set out in BC Hydro's Service Plan beyond mere speculation about what the key objectives mean;¹⁴ and
- CEC asserts that BC Hydro's variable pay program does not benefit ratepayers, but fails to address the evidence of its witness Mr. Craig that safe, secure and reliable supply is an objective that should "absolutely, unequivocally" be reflected in BC Hydro's variable pay scheme, and fails to address the evidence of Ms. Webb on this topic.¹⁵

Thus, the Commission is left to choose between bold but unsubstantiated assertions by JIESC, CEC and others, and sworn testimony from BC Hydro. The Intervenors have failed to discharge the burden upon them to provide the Commission with any evidence in support of their arguments for across-the-board reductions. In these circumstances, the Commission should conclude that this failure results not from any shortcoming of the Commission's process, the Intervenors or their counsel, but rather from the cogent, comprehensive and compelling documentary and oral evidence presented by BC Hydro and its witnesses.

¹³ See p. 18 of this Reply Argument.

¹⁴ At p. 21 of its Argument, CEC discusses the four key objectives in BC Hydro's Service Plan (Ex. A-38) and refers to p. 32 of BC Hydro's Argument where those objectives are listed. Immediately below them, however, is testimony of Mr. Elton explaining that low rates is one of two basic objectives in financial terms. The low-cost objectives of BC Hydro are explained throughout the Service Plan (e.g., pp. 12, 19, 21, and 22).

¹⁵ T21: 3955/22-3956/7 and T10: 1588/5-1589/1. See also BC Hydro's responses to BCUC IR #s 1.1.4 and 1.84.1.

II. THE REVENUE REQUIREMENTS AND RATE APPLICATION

A. Accounting / Legal Issues

1. Proper Accounting Treatment to Eliminate FRSR Accounts

Most Intervenors object to the transfer of \$233 million currently carried on BC Hydro's books as Future Removal and Site Restoration (FRSR) provisions into retained earnings by virtue of the change in accounting rules.¹⁶ Representatives of all ratepayer groups object to this, largely on the basis that recovery of these costs in equity after previous accounting treatment recorded them as a cost would amount to double counting.

JIESC in particular takes umbrage at any suggestion that these costs have not been previously recovered in rates. However, as BC Hydro explained in its Argument, it is not possible to draw a direct line between costs and rates during the period of the rate freeze. In predicting dire consequences from accepting this proposition,¹⁷ JIESC misses the point that BC Hydro's argument is based on the fact that during the relevant period, rates were frozen, not determined by the Commission.

In fact, the issue is quite straightforward. All the Intervenors who represent ratepayers have argued that the Commission has jurisdiction to order BC Hydro to keep its books for ratemaking purposes on a basis that varies from GAAP. However, none of them have provided argument as to how the Commission can do so in this instance in light of HSD#2. JIESC attempts to argue that HSD#2 does not apply to the reversal of the FRSR provisions, apparently because the

¹⁶ See the Application (Ex. B1-1), Chapter 2, pp. 2-17 to 2-18 for discussions of the accounting treatment and impact on retained earnings.

¹⁷ JIESC Argument at p. 16, lines 6-9.

FRSRs are not specifically identified as retained earnings in HSD#2.¹⁸ However, the implication of the evidence of JIESC's witness, Mr. Johnson, is that the reversal of the FRSR provision should be recorded through retained earnings under CICA Handbook, Section 3110,¹⁹ unless the Commission orders otherwise.²⁰ BC Hydro submits that these are not appropriate circumstances for the Commission to do that because to do so would be to frustrate the clear intention of HSD#2, which provides that BC Hydro's shareholder is entitled to earn a return on, amongst other things, BC Hydro's retained earnings. There can be, and there has been, no serious argument that as a matter of statutory interpretation the words "retained earnings" in HSD#2 were intended to mean anything other than retained earnings in their ordinary (i.e., GAAP) sense.

The Commission is being urged to circumvent the ordinary meaning of "retained earnings" by taking steps to adjust BC Hydro's retained earnings from what GAAP otherwise dictates they are. In essence, the Intervenors are either asking the Commission to interpret the term "retained earnings" in a manner inconsistent with its ordinary meaning or to accept the ordinary meaning and make an order intended to deliberately circumvent it, in either case, to frustrate what they see

¹⁸ JIESC Argument at p. 17, line 20 to p. 18, line 2.

¹⁹ Evidence of Mr. Johnson, Ex. C23-5, at p. 5, lines 11-17. Mr. Johnson notes there that the relevant part of Section 3110 of the CICA Handbook is a "suggestion not a requirement", but backed away from that position when questioned by the Chairperson and instead said, "If it's in italics it's a requirement unless there's some very very good reason. If it's not in italics it's – some are requirements, some are recommendations and that sort of thing. So there's a little bit of judgment or more judgment that can be applied to them" (T20: 3613/24-3615/16). See also the testimony of Ms. Hardy that recommendations and non-italicised paragraphs in the CICA Handbook have equal authority at T8: 1141/6-1142/6.

²⁰ T20: 3616/13-3618/17.

to be "a direct transfer of \$233 million held beneficially for customers to the benefit of the shareholder."²¹

While BC Hydro does not accept these characterizations for the reasons set out in its Argument, the Government's right to provide for this result, however it is characterized, is beyond dispute. Any doubt in that respect is removed by the decision of the British Columbia Court of Appeal in *BC Hydro v. Terasen*.²²

In *BC Hydro v. Terasen*, the Commission had been called upon to interpret a Special Direction relevant to Terasen's rates. In considering an appeal from that determination by the Commission, Mr. Justice Mackenzie, on behalf of the court, describes the close policy connection between the Government and the Commission affected through special directions.

At page 5 of its Argument, BCOAPO argues that the Commission has significant discretion in interpreting the requirement of a special direction. With respect, Mackenzie J.A.'s decision does not support BCOAPO's argument, but makes clear that the Commission's interpretation of mandatory terms in a special direction will be held to a correctness standard by a reviewing court, and be given little deference.²³

In BC Hydro's respectful submission, the direction to the Commission to permit BC Hydro to earn a return on its "retained earnings" is mandatory and an interpretation of those words is one to which the Commission must apply normal interpretive principles to best ensure the attainment of the Special Direction's objects, as distinct from exercising its specialized discretion.

²¹ It is noteworthy that even where the Commission adopts its own method of determining just and reasonable rates, it cannot alter the result of that methodology to achieve a particular rate result. *TransCanada Pipelines Ltd. v. National Energy Board*, 2004 FCA 149.

²² See note 6.

Here, the Commission is called upon to ask what Government meant when it passed HSD#2 and then apply it. It has no discretion in that regard. The fact that ratepayers consider the application of the plain meaning of the words unfair provides no basis for the Commission to defeat the clear objectives of Government.

CEC suggests that section 7 of HSD#2 is relevant in some way. Section 7 of the Special Direction merely makes express the Commission's authority to establish deferral accounts to adjust the timing of cost recovery by BC Hydro. There is nothing in the dispute over FRSRs which has anything to do with timing. BC Hydro's position is that by the terms of the Special Direction, it is entitled to recover on an annual basis a return on equity, which includes retained earnings as defined by GAAP. JIESC and other Intervenors take the position that the Commission should prevent this result. Deferral has nothing to do with it.

2. Proposal to Establish a Deferral Account in Relation to Retained Earnings

In its opening and through its witness, Mr. Craig, CEC seemed to suggest that the financial cost component of BC Hydro's revenue requirements be calculated on a basis other than the actual debt and equity that BC Hydro indicated it would have by application of Special Directive No. HC1 ("HSD#1") and HSD#2 during the test years. However, in Argument, rather than contest BC Hydro's assertion that case law prohibits the appropriation of retained earnings previously realized by BC Hydro, CEC backs away from that suggestion.²⁴ The deferral account proposal that CEC presents in Argument instead does not solve the problem. CEC acknowledges that it continues to argue that the deferral account it envisages is for the purpose of reducing the cost of capital prescribed by the Special Direction because, in CEC's view, it is not just and

²³ See note 6, at paras. 23 and 47.

²⁴ CEC Argument at p. 29, last paragraph.

reasonable.²⁵ For the reasons set out above, the Commission cannot judge the justness and reasonableness of the directions it receives from Government.

At pages 44 to 45 of its Argument, JIESC takes a similar approach. It correctly points out that what matters is the level of equity that the utility earns, but then complains that the formulas in the Special Directions yield too much equity. As JIESC puts it, "what matters is the level of equity that the utility earns a return on" and it is the Special Directions that prescribe that level in the context of BC Hydro.²⁶

3. The Jurisdiction of the Commission to Deem a Capital Structure

In BC Hydro's submission, because the Special Directions remove any discretionary element in the determination of equity and as JIESC points out, it is the level of equity that matters, there is no jurisdiction in the Commission to deem a capital structure for BC Hydro. BC Hydro agrees with BCOAPO that the Commission must assess how each element of the definition of equity is to be determined and is not necessarily bound by BC Hydro's evidence in that regard. However, there is no evidence to suggest that BC Hydro has inaccurately quantified the individual elements contained in the definition of equity contained in the Special Directions.

4. The System Extension Test and Contributions in Aid of Construction (CIAC)

Both JIESC and CEC urge the Commission to require BC Hydro to develop alternative mechanisms to the current contributions made in aid of construction so as to reduce total equity as defined in HSD#2.

²⁵ CEC Argument at p. 29, last sentence.

²⁶ JIESC Argument at p. 45, lines 1-2, and p. 8, lines 4-7.

At page 20 of its Argument, JIESC proposes "two reasonable and acceptable accounting practices" that would 'mitigate' what it sees to be 'a perverse result'. As submitted in argument and also in reply with respect to FRSRs, the Commission does not have a mandate to mitigate the clear objectives of a special direction. In any event, there is not sufficient explanation of the mitigation measures proposed to really address them, other than to say that amortizing the existing balance of CIAC is required to be done in a manner consistent with the Special Direction, i.e., permitting BC Hydro to earn its allowed rate of return in association with all of it.

BC Hydro notes that CEC, at least initially, steps back from an immediate reduction in the revenue requirements. It acknowledges this matter is better pursued as a matter of rate design.²⁷ This would seem to accept the point on process at the bottom of page 22 and top of page 23 of BC Hydro's Argument.

CEC later returns to the issue at pages 40 to 41 of its Argument, and argues there that Mr. Craig's revenue requirements reductions on account of CIA should be implemented. In support of its position, CEC says:

While the Heritage Special Directions do include contributions in aid of construction in the definitions of equity and retained earnings that does not necessarily prevent interveners, the Commission, or BC Hydro from assessing creative ways to avoid the categorization of any system growth as requiring CIA as has historically been done.²⁸

This statement simply confirms BC Hydro's position that Intervenors seek to subvert the objectives of HSD#2. The Commission does not have a mandate to find "creative ways" to avoid the characterization of CIAC as CIAC.

²⁷ CEC Argument at p. 30.

²⁸ CEC Argument at p. 40.

At page 41 of its Argument, CEC also disputes BC Hydro's contention that to vary the system extension test would be a denial of natural justice. Its submissions fundamentally misapprehend BC Hydro's point.

Issue 2.3 in this proceeding raised the question of the rate at which the existing contributions should be amortized and also whether future payments for facilities by customers should be deducted from the cost of the facilities, rather than booked as CIAC. These are accounting issues that are properly before the Commission in this hearing and which BC Hydro and other parties have dealt with fully in argument.

What is not before the Commission in a proper form is an application to redesign BC Hydro's system extension test so as to reduce CIAC or avoid them being made at all. That is a rate design issue and raises significant questions of fairness as between customers. Neither BC Hydro nor those customers had notice that that issue was being pursued in this proceeding and it would be inappropriate for the Commission to make any decision based solely on Mr. Craig's evidence in this respect.

5. Assumed Reservoir Levels for Calculating Current Rates

BC Hydro's reply to the Arguments of CEC and JIESC that average or normal water conditions should be used as the basis for revenue requirements and the HDA is included in Part IV of this Reply Argument.

6. Depreciation Rates

CEC does not seem to be pursuing the comprehensive reassessment of depreciation rates advocated by its witness, Mr. Craig. CEC does, however, disapprove of the conclusions in the

Gannett Fleming depreciation study, finding the study to be inadequate.²⁹ Counsel for CEC cross-examined Ms. Hardy on this very issue and her uncontradicted testimony was that the Gannett Fleming study was a depreciation study and involved statistical data, discussions with engineers, and comparisons to other utilities.³⁰ Instead, CEC requested the Commission to direct BC Hydro to conduct depreciation studies in advance of its next revenue requirement application. BC Hydro does not object to the Commission making such a direction and intends to carry out depreciation studies in advance of the next revenue requirements proceeding in any event.

JIESC also complains about the depreciation rates employed for First Nations and water use planning costs. Regarding the former, the issue was decided in Commission Order G-53-02. JIESC has not provided a basis on which this Commission order should be reconsidered. JIESC did not provide any evidence of its own to support a longer depreciation period for either of these intangible assets. Mr. Morris, on the other hand, provided testimony that the costs do not specifically relate to the life of a dam, and that as a whole package, 10 years is an appropriate time period to depreciate these assets.³¹

CEC, JIESC, and indeed BCOAPO, all object to the proposal to accelerate depreciation of the Burrard Generating Station (Burrard). BC Hydro's reply submissions on that topic are set out in the next section.

²⁹ CEC Argument at p. 41.

³⁰ T8: 1185/23-1186/24 and Ex. B1-48.

³¹ T8: 1125-1128.

7. Burrard Thermal Generating Station

Except for IPPBC, all Intervenors who commented on the issue agree that Burrard provides and is expected to continue to provide for the foreseeable future valuable benefits to the operation of BC Hydro's system. The question is whether the Commission ought to approve a depreciation rate that would see Burrard written off over 10 years. In the face of BC Hydro's evidence that if Burrard has a longer term future than 10 years it will be through re-powering,³² the basis for the position is transparently to avoid the rate impacts that such a decision will have. Certainly no Intervenor brought forward any evidence contrary to that put forward by BC Hydro on Burrard's expected life under its current configuration. BC Hydro submits that the rate impact of a depreciation rate is an improper consideration, and that the relevant criterion is the expected useful life of the asset.³³ Under Burrard's current configuration and in light of anticipated natural gas electricity market prices the evidence that a 10-year depreciation period is appropriate ought to be accepted.

All Intervenors that addressed the point agreed that the current operating plan for Burrard is appropriate, and none have taken issue with the inclusion in the revenue requirement of costs arising from the recent capital expenditure programs at Burrard. Indeed, in light of Mr. Spafford's testimony that Burrard provided significant system value as recently as 2001,³⁴ a contrary view would be untenable.

³² T18: 3242/4-3243/22, and T20: 3485/13-3488/15.

³³ Subsection 56(3) of the *Utilities Commission Act* requires depreciation rates to be set on the basis of maintaining equipment in "a state of efficiency in accordance with technical and engineering progress in that industry of the utility." In other words, depreciation rates ought to reflect the economic life of the asset from time to time, in light of changing technology.

³⁴ T19: 3266/8-14. Note also that Burrard provided 1,300 MWh in January 2004 during the cold snap: T18: 3254/16-19.

Regarding IPPBC, it argues that Burrard has an inappropriate role in BC Hydro resource portfolio, and, implicitly, that Burrard ought to be decommissioned. The evidence and submissions of IPPBC do not challenge the inclusion of costs related to Burrard in BC Hydro's revenue requirements for the test periods. By its silence on the specific point, IPPBC would seem to accept that Burrard is necessary at least through the test periods to provide VAR support, and until equivalent capacity and energy could be procured from IPPs (self-evidently not possible in F2005 and F2006).

8. Accounting Change for Post-Retirement Benefits

JIESC and CEC argue that the Commission should order BC Hydro to account for post-retirement benefits on a cash basis rather than on an accrual basis as required by the CICA Handbook.³⁵ JIESC relies on two prior Commission orders,³⁶ but both of those orders involved negotiated settlements, unlike this proceeding.

In F2001 BC Hydro changed the way it accounts for these benefits, which include medical, extended health, life insurance and dental, from a cash basis to an accrual basis in accordance with the requirements of CICA Handbook section 3461, prior to which only pension benefit plans had to be accounted for on an accrual basis. The other postretirement benefit plans were accounted for on a pay-as-you-go (cash) basis. The new section required all other postretirement benefit plans to be accounted for on an accrual basis.³⁷

The required accounting change adds a \$16 million liability to BC Hydro's books each year, however, as Ms. Hardy testified, "the accrual basis is a much better matching of costs to the

³⁵ See JIESC Argument at pp. 18-19; and CEC Argument at p. 27.

³⁶ JIESC Argument at p. 19.

period of time in which the service is provided, and results in a better matching in terms of not having inter-generational shifting, and in fact this better matching is the reason that the CICA changed these rules to begin with."³⁸ Thus, BC Hydro submits that there are good reasons for the Commission to approve the revenue requirements associated with accounting for post-retirement benefits on an accrual basis and that it should do so.

9. Interest Earned on Deferred Revenue Under Skagit River Treaty

JIESC and Mr. Wait dislike the fact that deferred revenue earned under the Skagit River Treaty agreements earns interest for BC Hydro, and at the same time is included in the definition of equity. As admitted by all Intervenors, the latter issue is beyond the Commission's jurisdiction. Regarding the former, the accounting treatment is designed to return "a uniformly increasing payment, increasing at the rate of inflation, such that we are paid in constant real terms a uniform amount over the 80-year life of the agreement".³⁹ The effect of "reversing the interest charges" as urged by JIESC was not on the Issues List, nor was it put to BC Hydro witnesses in cross-examination. For these reasons alone the JIESC submission should not be accepted by the Commission in this hearing. Moreover, it can be readily inferred from the explanation given of the purpose of the accounting treatment that reversing the interest charge will re-allocate costs currently spread uniformly between past, current and future ratepayers, to future ratepayers.

³⁷ BC Hydro's response to BCUC IR #2.192.6.2.

³⁸ T9: 1376 and T10: 1550-51.

³⁹ T19: 3433/9-11 (Spafford).

B. OMA, Capital Expenditures, Energy Costs, and Finance Charge Issues

1. The Appropriate "Evidentiary Cut-Off Date"

BCOAPO and CEC accept BC Hydro's Argument that for the purposes of determining the test years revenue requirements, a February 20, 2004 perspective should be employed. JIESC previously agreed to this,⁴⁰ but now, without any real argument to support its change in position, suggests later data should be employed. JIESC has not responded to the numerous considerations in support of the February 20, 2004 date provided by BC Hydro in its Argument.

2. Expenditure Prioritization: Capital and OMA Budgets

BCOAPO, JIESC and CEC each take issue with the planning and prioritization processes used to allocate financial resources within BC Hydro,⁴¹ arguing that there are insufficient internal controls to ensure resources are expended where needed to ensure adequate reliability and safety. In doing so they ignore or distort the evidence put forward by BC Hydro witnesses on the necessary focus BC Hydro has had regarding the implementation of the Energy Plan; the continuing development of its focus on cost-effectiveness and low rates (which on the customer disconnection issue is one that BCOAPO is overtly conflicted on); the initiatives already in place to ensure that performance targets are met, including variable pay contracts; and the robustness of the various prioritization tools BC Hydro does employ. Each of these issues was addressed in BC Hydro's Argument, with references to the evidence, and is not re-stated in this Reply.

What the Intervenors seem to be grasping for is some sort of comprehensive, utility-wide cost control and prioritization tool that would allow BC Hydro's management, and Intervenors, to

⁴⁰ T1: 23/13-24/16.

⁴¹ BCOAPO Argument at pp. 24-27; JIESC Argument at pp. 26-28; CEC Argument at pp. 18-26.

model changes to safety and reliability arising from changes to expenditures. This is simply not possible with an organization as large and complex as BC Hydro. No spreadsheet in the world can replicate the myriad technical and financial decisions that BC Hydro technicians, engineers and management must make every day in the course of the ongoing planning process necessary to satisfy electricity demand on time horizons ranging from minutes to years. The magic wand the Intervenors want to see simply does not exist within BC Hydro, or in any other large and complex organization. What there is – robust processes driven by employees committed to the over-arching concerns of safety, reliability and cost-effectiveness – is the only global approach to the issue that is available. Almost without exception, Intervenors in this proceeding have not attempted to undertake the line-by-line analysis that would be required to identify excess expenditures, and where they have undertaken such efforts, they have been superficial at best.

In the absence of such illusory tools, Intervenors would have the Commission make arbitrary cost disallowances. This issue was addressed in BC Hydro's Argument, but it worth noting the completely inappropriate rationale upon which JIESC at least would have the Commission make such cost disallowances, namely to "to send a message".⁴² With respect, the Commission is not called upon, and may not in law, disallow expenses in order to send messages.

Regarding proposed OMA expenses, JIESC says at page 36 of its Argument that the appropriate standard against which OMA costs ought to be assessed is customer growth and inflation.⁴³

JIESC ignores the cost drivers that are identified in the Application⁴⁴, including reliability and restructuring, pretending they do not exist. If JIESC believes that these factors have not had a

⁴² JIESC Argument at p. 43.

⁴³ CEC says the same thing at p. 19 of its Argument.

⁴⁴ The cost drivers identified on Chapter 1, p. 1-15 of the Application are cost of energy; reliability; pension costs; finance costs; Power Smart investments; BCTC; and management of environmental and First Nations issues.

material impact on OMA costs, or capital costs for that matter, the proposition ought to have been put to the witness panels. It was not, and the JIESC standard ought to be rejected.⁴⁵

Similarly, JIESC disbelieves Mr. Maniago's evidence regarding the Accenture Leading Practice Review, to the effect that the figures in it were not net of costs.⁴⁶ In BC Hydro's submission Mr. Maniago's testimony demonstrated beyond any doubt his credibility and trustworthiness. If JIESC would have the Commission disbelieve any of his evidence, it ought to have put the proposition that he was being untruthful to him clearly and unequivocally. It failed to do that. It also failed to produce a witness to provide a basis for that conclusion. The speculation of counsel is not a substitute for sworn testimony. In consequence, the Commission ought to accept Mr. Maniago's evidence.⁴⁷

Regarding efficiency gains, it is important to note that while BC Hydro witnesses did not agree that any incremental efficiency gains might be achieved in the test periods over and above the costs and forecasts described in the Application, the evidence is that in most respects BC Hydro's overall costs are already first quartile,⁴⁸ indicating significant, existing efficiencies.

At page 3 of its Argument, BCOAPO misconstrues BC Hydro's evidence and submissions regarding the relationship between BC Hydro and the government. That relationship should not influence the Commission's interpretation of the legislation, but rather should properly inform the Commission's views of the motivations that BC Hydro has to forecast accurately.

⁴⁵ At p. 23 of its Argument, the BCOAPO similarly summarizes OMA increases, without regard to the evidence. At T15: 2435/4-2436/23, Mr. Sherlock makes it clear that the bulk of the apparent increase is a result of re-allocations of costs, and a significant amount – \$7 million – relates directly to customer service.

⁴⁶ T10: 1577/9-21; T10: 1580/15-1581/1.

⁴⁷ On a similar point, JIESC suggests that the agreement with the line contractors was entered into for the purpose of excluding their evidence (page 41). This proposition was not put to Mr. Maniago, and in any event is rebutted by his testimony at T10: 1538/10-1539/16.

At page 26 of its Argument, JIESC erroneously excludes the capital costs relating to GSX and VIGP in the \$895 million of capital costs for F2006. The evidence is that F2006 capital costs, excluding Power Smart and VIGP and GSX, is \$714 million.⁴⁹

Regarding BCTC's prioritization method and BCOAPO's assertion at page 25 of its Argument that the long-term impacts on costs is not assessed when prioritization of projects is done from the bottom up, BC Hydro notes that this assertion is not supported by the evidence. Mr. Mansour testified that the bottom-up process is reconciled against, among other things, rate impacts.⁵⁰

Finally, CEC bases its Argument on this topic in part on an audit report that is two years old and which was never put to the witness panels in a material way.⁵¹

3. Sustainability Expenditures

BC Hydro relies on its Argument submissions, on pages 45 to 46, on this issue.

4. Adjustment for Vacancies

BC Hydro relies on its Argument submissions, on page 46, on this issue.

5. Spending Lag

BC Hydro relies on its Argument submissions, on page 46, on this issue.

6. Sales Revenue Forecast/Load Forecast

No Intervenor raised or responded to this issue in Argument.

⁴⁸ Application Vol. 1 (Ex. B1-1), pp. 6-31 and 7-31.

⁴⁹ Exhibit B1-199, pp. 4 and 5 of attached table.

⁵⁰ T16: 2793/13-2794/3.

7. Prudence of Power Smart Expenditures

At pages 34 to 35 of its Argument, CEC seeks a reduction in amortized amounts for past DSM spending of \$12 million and \$6 million for F2005 and F2006 respectively. This is based on CEC's contention that reported savings for the Legacy Power Smart programs stayed constant at 2500 GWh per year from 1995 to 2001 and that Power Smart spending during this period "was not directed at energy efficiency or acquiring new energy savings."⁵² However, savings were not static from F1995 to F2001. In fact, the evidence shows that they accumulated as follows:⁵³

Fiscal Year Cumulative Energy Savings (GWh/Year)

1995:	1713
1996:	1968
1997:	2262
1998:	2448
1999:	2470
2000:	2478
2001:	2459

This excerpt from the Application shows that savings from the Legacy programs continued to accrue throughout the 1995-2001 period, including savings from commitments made before 1995 when program activity was reduced, and peaking at around 2500 GWh per year before the implementation of Power Smart 2.

Second, it is not the case that all Power Smart expenditures in the mid-1990s related to the type of market restructuring activities that Ms. Van Ruyven referred to as "not being particularly

⁵¹ Appendix 2 to Ex. B1-59. Counsel for the JIESC put that report to Panel 5, but only to confirm that certain statements were contained within it. Witnesses were not asked whether the statements were still true or characterized the current planning process accurately.

⁵² CEC Argument at p. 34.

⁵³ Application, Vol. 2 (Exhibit B1-2), Appendix M, p. 45, Table 1.3: Annual Energy Savings by Legacy Program (GWh). Figures rounded for simplicity of presentation.

successful."⁵⁴ No evidence was adduced that any of these market-restructuring activities were funded using deferral capital.

IPPBC suggests that there is some inconsistency between the load displacement program contracts entered into with Canfor and Weyerhaeuser and the Commission's questions with respect to the implementation of stepped rates and its effect on Power Smart. As pointed out in Argument, stepped rates have no impact at all on the Canfor and Weyerhaeuser projects because both are total load displacement projects. Dr. Shaffer acknowledged this during his testimony, and it is plainly correct.

With respect to stepped rates and Power Smart generally, BC Hydro relies on its Argument and also the points made by JIESC in its Argument at pages 34 to 35.

At page 23 of its Argument, IPPBC states that in the Heritage Contract proceedings, BC Hydro's position was that it did not want to lose industrial load, contrary to the purpose of its load displacement program. This ignores the distinction between long-term reductions in supply obligations under load displacement programs⁵⁵ and, in the face of yet-to-be developed access principles, uncertain changes to supply obligations. BC Hydro can plan around the former, but cannot in the case of stepped rates and an indeterminate right of customers to revert to utility supply.

8. Operating to Minimum Reservoir Levels in F2005

No Intervenor argued that BC Hydro should draft reservoirs lower in F2005 to transfer costs to F2006.

⁵⁴ T6: 706/12.

⁵⁵ Load displacement programs have a 15-year term.

9. Past Capital Expenditures on Burrard

This issue is dealt with in the discussion regarding Burrard depreciation at pages 16 to 17 of this Reply Argument.

10. Debt Portfolio

Both JIESC and CEC say that BC Hydro does not have sufficient short-term debt. CEC's complaints in this regard are much muted from those of its witness, Mr. Craig. BC Hydro assumes this is because Mr. Craig misunderstood the nature of BC Hydro's debt portfolio until after the hearing as explained in Exhibit B1-196. There was no credible testimony from Mr. Craig or any testimony at all from JIESC that would provide a basis for overriding Ms. Lambert's considered determination that in the market conditions anticipated during the test year, a 36% exposure to short-term rates is prudent.

11. Cost of Energy

BC Hydro relies on its Argument submissions, on page 55, on this issue.

12. Trade Income Forecast

CEC and JIESC both refer to the June 30, 2004 decision of Brown J. in connection with enforcement of the arbitral award obtained against Alcan by Powerex.⁵⁶ In that judgment, Brown J. concludes that Powerex should have access to the money owed to it by Alcan, provided that it is prepared to post sufficient security in the event that the US arbitral awards are reversed on appeal.

⁵⁶ *Powerex Corp. v. Alcan Inc.*, 2004 BCSC 876.

There are a number of points to make about this judgment. First, and perhaps most important, it occurred well after the February 20, 2004 evidentiary cut-off date on which the revenue forecast is prepared. It is really no more relevant than the continuing adverse reservoir conditions that BC Hydro has faced since February 20, 2004.

Second, Alcan has appealed the judgment and, in any event, it is simply one more step on a long and arduous path. In addition, the arbitral award in the US is under appeal and there is a possibility of complications arising from the Enron bankruptcy proceedings, as explained by Mr. O'Riley.⁵⁷ In short, despite the judgment, all the evidence suggests that there is a long torturous road ahead of Powerex before recovery can be obtained and deemed as income. Income recovery related to California faces even greater uncertainty as to both the amount and timing. BC Hydro agrees with JIESC that the proper question is whether the amounts will be recovered in the test period, but does not believe that they will. Since these recoveries will be placed in the Trade Income Deferral Account if and when they are finally recovered, BC Hydro sees little justification for prejudging these particular issues.

13. Customer Service Standards

At page 22 of its Argument, BCOAPO submits that the Commission ought to set quality of service standards in, presumably, its decision on BC Hydro's Application. This was not an issue on the Final Issues List nor did BCOAPO or any other party raise it in the evidentiary phase of the proceeding. Thus, it would be inappropriate for the Commission to accede to this request at this time. In addition, the Terasen example referred to is inappropriate as Terasen is regulated under performance-based ratemaking (PBR). Finally, as articulated on pages 9 and 10 of

⁵⁷ T8: 1089/3-1091/15.

BC Hydro's Argument, this is not a rate design proceeding. Concerns regarding disconnection provisions of the Electric Tariff ought to be raised in the rate design hearing next year.

14. Overloading of Costs to Transmission

The issue Mr. Wait raises on pages 7 to 8 of his Argument regarding cost loadings to the transmission system is a rate design issue. As discussed in BC Hydro's Argument, the Commission should refrain from dealing with rate design issues in this proceeding.

15. Gas Transportation Costs

At page 9 of its Argument, Terasen says that BC Hydro is not mitigating the cost of capacity it has on the Nova and TCPL(BC) systems. In BC Hydro's view the testimony does not support that inference and indeed firmly contradicts it.⁵⁸

16. Accenture Business Services (ABS) Contact Administration

At page 41 of its Argument, JIESC submits that ABS contact administration costs ought to be reduced by 50%. In the face of BC Hydro's uncontradicted evidence that the \$2.3 million is only 2% of the minimum aggregate spend, compared to an industry standard of 5-7%, and that the financial benefits of the arrangement were calculated net of this amount, the JIESC submission ought to be rejected.⁵⁹

17. Transmission Capacity Purchased for Skagit

At page 24 of its Argument, JIESC proposes that Powerex be allocated some or all of the US transmission costs incurred by BC Hydro in respect of its Skagit obligations. The merit of this

⁵⁸ T20: 3516/24-3517/18: To paraphrase, BC Hydro is analyzing its options regarding transportation capacity on the Southern Crossing pipeline and, depending on the outcome, will consider how to further mitigate its Alberta transportation contracts.

⁵⁹ BC Hydro's responses to BCUC IR #s 1.102.1 and 1.102.2.

proposal was not tested with any BC Hydro witness, and there is no basis on the record to determine what portion of the \$12 million it might be appropriate to allocate. In these circumstances, the Commission ought to reject the proposal.

III. WTS RATE APPLICATION

No Intervenor opposes BC Hydro's application to amend its WTS rates.

IV. DEFERRAL ACCOUNT APPLICATION

A. Jurisdiction regarding Heritage Payment Obligation (HPO) and Heritage Deferral Account (HDA)

No party appears to dispute the Commission's jurisdiction to approve the HPO and HDA as proposed by BC Hydro.

B. Deferral Account Issues

1. Appropriate Use of Deferral Accounts

At pages 6 to 7 of its Argument, CEC advocates numerous deferral accounts to "mitigate the impact of proposed rate increases made by BC Hydro which run contrary to the Energy Policy initiative of maintaining low rates", and to "deal with a number of equity issues, in the sense of equitable treatment of customers." For example, CEC proposes that deferral accounts be used to distribute the FRSR balance to future customers, to appropriate up to \$80 million per year of BC Hydro's retained earnings, and to record costs of energy over and above average water conditions.⁶⁰ JIESC also proposes that the HDA be used to record variances in the cost of energy based on "normal" water inflows.⁶¹

BC Hydro submits that the CEC and JIESC proposals are not appropriate uses of deferral accounts because their proposals would, among other things, base the deferral account on something other than a forecast. As discussed in BC Hydro's Argument, deferral accounts are used to accumulate variances between *forecast* and *actual* costs or revenues.⁶² This rationale for using deferral accounts was recently confirmed by the Alberta Court of Appeal in *ATCO Electric*

⁶⁰ CEC Argument at p.7-9.

⁶¹ JIESC Argument at pp. 48-49.

⁶² BC Hydro Argument at pp. 67, 71, and 76.

Limited v. Alberta (Energy and Utilities Board), 2004 ABCA 215, where Chief Justice Fraser, for the Court, stated:

To put the dispute about ATCO's deferral accounts under the Negotiated Settlements in perspective, I must first review the rationale for the use of deferral accounts in the rate-setting process.

By the end of 1999, the forecasting of electrical energy costs had become an extremely difficult exercise. This led to concerns about how to address the risks associated with potentially volatile changes in the market price of electricity and other variable costs. One option devised to allocate the risks inherent in fluctuating costs was the use of deferral accounts. **Deferral accounts allow a utility to accumulate variances between a utility's approved rate based on forecasted costs and the utility's actual costs for a given period.** Typically, at the end of the period, a utility will then collect from customers through a rate rider any balances in the deferral accounts owing by them and refund any balances owing to them.⁶³ [emphasis added]

In accordance with the principles confirmed by the Alberta Court of Appeal, and as required by section 7 of HSD#2, BC Hydro has proposed that deferral accounts be used to record the differences between forecast and actual costs or revenues.⁶⁴

At page 49 of its Argument, JIESC suggests that BC Hydro "reversed itself" in the Revised Evidentiary Update in an attempt to use the actual January 1, 2004 snow pack and water conditions to its advantage. Mr. Wallace on behalf of JIESC put this very issue to Mr. Spafford during the hearing,⁶⁵ and Mr. Spafford's response is quoted on page 71 of BC Hydro's Argument. As explained by Mr. Spafford, the forecasts in the original Application and in the evidentiary

⁶³ *ATCO Electric Limited v. Alberta (Energy and Utilities Board)*, 2004 ABCA 215 at paras. 25-26.

⁶⁴ For example, under BC Hydro's proposal the HDA will record the differences between forecast and actual HPO as proposed by BC Hydro (BC Hydro Argument at pp. 70-73).

⁶⁵ T18: 3227/11-24.

update were each based on the conditions that were known at the time, and the assumption of normal precipitation and normal water conditions going forward.⁶⁶

At page 49 of its Argument, JIESC also speculates that BC Hydro might have made a different proposal if snow packs were greater than normal on January 1, 2004. Mr. Wallace questioned Mr. Morris about this very issue during the hearing and received the following response:

No, I think I'd be saying exactly the same thing I'm saying now. It's just our starting point would be different.⁶⁷

For all these reasons, and the extensive reasons in BC Hydro's Argument at pages 70 to 73, BC Hydro submits the proposal of CEC and JIESC that rates and the HDA should be based on average or normal water conditions should be rejected.

At page 50 of its Argument, JIESC argues that \$1 million is too low a level of sensitivity for deferral of unplanned major maintenance and capital expenditures. As Mr. Morris testified during the hearing, the \$1 million threshold is a significant amount compared to total maintenance costs in a fiscal year and is appropriate because there is no money in the operating budget for items of this kind.⁶⁸ BC Hydro notes that no other Intervenor takes issue with the \$1 million threshold, and that the threshold is endorsed by BCOAPO and CEC.

At page 50 of its Argument, JIESC suggests that BC Hydro should have a deferral account for "unplanned major capital expenditure shortfalls". JIESC's suggestion is not appropriate for the following reasons. BC Hydro does not forecast for significant unplanned major capital expenditures (that is, the forecast for this component is zero) so BC Hydro cannot spend less

⁶⁶ See also T19: 3336/23-3338/18 (Spafford), T19: 3363/3-11 (Farrell), and T8: 1056/3-26 (Morris).

⁶⁷ T8: 1057/21-1058/10.

⁶⁸ T8: 1060/6-1061/11 and 1064/9-1065/14.

than forecast on unplanned major capital expenditures. Further, Mr. Morris provided testimony that under-spending on the capital plan is not significantly volatile, unpredictable or material, and it is generally within BC Hydro's control.⁶⁹ Indeed, JIESC concedes that BC Hydro has the ability to manage its planned capital expenditures.⁷⁰ Expenditures related to single event equipment or infrastructure failure or caused by weather related events, on the other hand, are appropriate for deferral treatment because they are not within BC Hydro's control, and are infrequent and unpredictable.⁷¹

2. CEC Deferral Accounts

CEC generally agrees with BC Hydro's proposals for the HDA, NHDA, TIDA, and BCTC TDA,⁷² but also proposes a number of further items for deferral treatment and makes the following request:

The CEC submits that the Commission should direct BC Hydro to use deferral accounts wherever the cost items or revenue items fit the criteria for use of deferral accounts (those that are; not easily and accurately predictable; variable but predictable around a norm; and low probability events with significant impacts), which have variability in excess of a \$1 million impact on net income and which are generally beyond management control to budget.⁷³

BC Hydro, the Commission and other Intervenors were not given an opportunity during the hearing or IR process to review or test CEC's criteria for the use of deferral accounts. While some of CEC's criteria appear to be similar to BC Hydro's principals for deferral accounts,⁷⁴ the

⁶⁹ T8: 1066/9-14; and T9: 1264/10-17.

⁷⁰ JIESC Argument at p. 50, lines 26-27.

⁷¹ T8: 1061/22-1062/12.

⁷² CEC Argument at p. 44.

⁷³ CEC Argument at p. 45.

⁷⁴ BC Hydro Argument at pp. 70 and 76.

are not sufficiently developed to determine whether a particular item would fit the criteria. CEC should have put forward written evidence and a witness so that its criteria could have been considered and reviewed by others during the hearing.

At pages 44 to 45 of its Argument, CEC also recommends a number of particular items for deferral treatment.⁷⁵ CEC's discussion of their deferral account proposals is confusing. Many of the items overlap each other, such as (d) Interest Rates, (e) Foreign Exchange Rates, (f) Sinking Fund Income, and (g) Debt Portfolio Mix, which each appear to be part of (c) Finance Charges. BC Hydro does not think finance charges are appropriate for deferral for the reasons set out in BC Hydro's Argument at pages 74 to 75. Furthermore, there is certainly no evidence in this proceeding that interest rates and/or foreign exchange rates would meet CEC's own criteria of "variable but predictable around a norm".

CEC items (h) Reservoir Level Standard and (j) Power Smart substantially overlap with the cost of energy, which BC Hydro has proposed for deferral treatment in the HDA and NHDA.

Furthermore, many of the items appear to be taken from CEC IR #1.3.1.1, which was based on BCUC IR #1.2.2 concerning the sensitivities of key variables in Table 2.2 on page 2-3 of the Application. It is not clear how these items fit CEC's criteria, or BC Hydro's principles, for deferral treatment and BC Hydro submits that the Commission should reject CEC's request in this regard.

3. BCTC Deferral Accounts

At page 53 of its Argument, JIESC asks that the risks addressed by two of BCTC's proposed deferral accounts be borne by BC Hydro. However, the Master Agreement specifically assigns

⁷⁵ CEC Argument at pp. 44-45 (items (a) through (g)), and pp. 45-53.

the subject matter of the Utilization and Credit Risk Deferral Account to BCTC where the Commission approves the deferral account (subsections 4.13(d) and (e)), and section 6(a) of Special Direction No. 9 requires the Commission to approve that deferral account.

Regarding the Emergency Maintenance and Expenditure Deferral Account, declining to approve this deferral account could potentially threaten the financial viability of BCTC. There is no sense in this.

V. REAP APPLICATION

A. Role of the Commission

All Intervenor had something to say about BC Hydro's planning process. Their comments can be grouped roughly in accordance with their interests. Intervenor claiming to represent ratepayers (BCOAPO, JIESC and CEC) urge the Commission to have sufficient involvement in BC Hydro's planning processes so as to ensure that no excess costs are incurred in meeting future supply requirements. Those with an interest in the type of resources selected for their own sake (IPPBC, Sierra Club) were more concerned to ensure that Commission review facilitated an opportunity to advance their particular resource option solutions. Finally, those with no obvious axe to grind (Terasen, Mr. Wait) focused on whether BC Hydro's approach yielded a sensible balance between its need to manage its business and the Commission and stakeholders' need to ensure that business was being managed in the public interest. The perspectives of each of these three groups are addressed in turn.

1. Intervenor Representing Ratepayer Classes

While BCOAPO dealt with the planning process at considerable length and JIESC and CEC dealt with it quite summarily, they all appear to have arrived at the same place. Each seems to accept that the IEP should not be subject to Commission review and that a REAP, or something like it, should. However, they argue that the four-year term of the REAP proposed by BC Hydro is insufficient and that the Commission should require BC Hydro to prepare a mid-term plan, identified by BCOAPO and JIESC as ten years, for filing and approval by the Commission after a full public review.

In making their submissions in this area, none of the ratepayer Intervenors responded to BC Hydro's arguments at pages 84 to 92. BCOAPO comments that the Argument raises more questions than answers, but fails to identify those questions or raise any express concerns with the answers given there. JIESC and CEC just ignore the Argument. BC Hydro's proposal provides the Commission and stakeholders with the complete planning context available to BC Hydro on a regular basis and requires BC Hydro to seek Commission approval annually for the specific expenditure decisions made in that context.⁷⁶ The result should be a flexible, transparent process that will allow informed participation by all stakeholders and informed decision-making by the Commission, while still permitting BC Hydro to adapt as circumstances change.

It is the wish to maintain that flexibility that lies at the heart of the difference between BC Hydro's position and those Intervenors. JIESC seems to want cost certainty;⁷⁷ BCOAPO, to know with confidence what resource options BC Hydro is going to pursue.⁷⁸ There was a time when utilities sought to serve those needs by committing to long-term mega-projects and proceeding with them regardless. BC Hydro believes that the lessons of the past ten years show that certainty is not attainable and the need to maintain flexibility is paramount.⁷⁹ The balanced and flexible portfolio approach put forth by Panel 4 leads, in BC Hydro's submission, to the regulatory review process laid out in BC Hydro's Argument.

BC Hydro acknowledges that the choice of four years for its REAP is arbitrary. BC Hydro's planning outlook for government as contained in its service plan is five years and BC Hydro sees

⁷⁶ T8: 1003-17

⁷⁷ JIESC Argument.

⁷⁸ BCOAPO Argument.

⁷⁹ T12: 2013/22-2014/2; T13: 2139/3-2140/13; T14: 2230/13-2231/3; T19: 3388/13-3392/24.

no material difference between the two. While ten years is clearly too long because it requires BC Hydro to make choices too soon and in the absence of necessary facts, extending the REAP by one or two years would not do fundamental violence to the approach that BC Hydro is advocating.

There are some specific additional observations made by BCOAPO that require comment.

At page 11 of its Argument, BCOAPO says it is advised that like "many other utilities", Manitoba Hydro and Hydro Quebec use a ten-year planning horizon. BC Hydro does not know how that advice was obtained and knows of nothing on the record to support BCOAPO's comments. Quite apart from the fact that it is inappropriate to provide such evidence in argument, BCOAPO provides no understanding of the full planning context and review process that exists with respect to the plans of Manitoba Hydro and Hydro Quebec. In the absence of that evidence, BCOAPO's comments are not helpful.

At page 12 of its Argument, BCOAPO criticizes the prioritization process contained in the REAP. This is not a structural criticism, but one of detail relating to the REAP Application. In particular, BCOAPO expresses concern over the priority given to some investigatory expenses associated with Site C, Revelstoke, and Mica which were not included in the original capital expenditure plan. The explanation is quite simple. When the capital plan was filed in December 2003, the IEP and the REAP upon which it was based had not been prepared. BC Hydro adapted its capital plan to conform to the information contained in the IEP.⁸⁰ That is exactly the purpose of the planning process and BC Hydro would have been subjected to appropriate criticism if its proposed capital plan did not reflect what it had learned in preparing the IEP.

⁸⁰ Application, Vol. 1 (Ex. B1-1), Chapter 11, pp. 2, 4, 12 (February 20 revisions) and Ex. B1-13 (April 2 revisions).

At page 12 of its Argument, BCOAPO also suggests there is divided opinion within BC Hydro with respect to Site C. There is no divided opinion because there are no final opinions in BC Hydro with respect to Site C. BCOAPO's comment reflects a fundamental misunderstanding, shared with a number of Intervenors,⁸¹ of BC Hydro's proposal with respect to Site C expenditures.

BC Hydro seeks to spend \$1.9 million in F2005 to obtain information to assist Cabinet in deciding if any further work on Site C by BC Hydro is warranted. The Energy Plan makes clear that Cabinet will not permit BC Hydro to apply to the Commission for approval of Site C without Cabinet's express authorization. To obtain that authorization, BC Hydro must obtain further information. Because the IEP suggests that Site C may be a least cost option within the planning horizon,⁸² BC Hydro has concluded that seeking Cabinet authorization now is prudent and seeks Commission confirmation of that opinion through approval of the REAP before spending that money. That is how the iterative process proposed by BC Hydro for future planning is intended to work. By approving the expenditure, the Commission will be acknowledging that Site C has sufficient promise to warrant the contextually modest expenditure of \$1.9 million in order to permit Cabinet to decide whether there is any point in BC Hydro making further investigations. If that money is spent and Cabinet confirms the advisability of proceeding with further studies, BC Hydro has identified further studies that would then be undertaken, but does not ask that those expenditures be reviewed yet as they remain speculative

⁸¹ For example, Sierra Club Argument at pp. 14-16; IPPBC Argument at pp. 25-26.

⁸² 2004 IEP, Ex. B1-24, Vol. 3, pp. 37, 65.

and will be further elaborated in BC Hydro's next REAP if Cabinet approval to proceed to that stage has been obtained.⁸³

In essence, the Energy Plan's requirement for Cabinet approval is simply an additional prerequisite that BC Hydro has to satisfy outside the normal regulatory process. It has no bearing on determinations the Commission must make, except to serve as the backdrop for BC Hydro's request that the Commission recognize as prudent the expenditures BC Hydro intends to make to obtain that approval from its shareholder.

On page 12 of its Argument, BCOAPO says there is confusion with respect to expenditures on Revelstoke and Mica. However, as the evidence referred to by BCOAPO shows, Panel 7 witnesses testified that: no decision had been made regarding the optimum sequence of Mica 5 or Revelstoke 5; based on what was then known, it appeared that it would be preferable to proceed with Revelstoke 5 prior to Mica 5; the analysis indicating which project ought to go first was imminent; and the REAP shows expenditures for Revelstoke 5 in the expectation that preliminary views regarding the optimum sequence of the projects would be borne out.⁸⁴ If Revelstoke proceeds first, Mica will be constructed, if at all, after the increased capacity from Revelstoke is absorbed. Nothing Ms. Farrell or other witnesses said earlier in the proceeding conflicted with this evidence.

2. Specific Resource Option Proponents

Sierra Club and IPPBC raised different types of concerns, reflecting their interest in championing particular sources of new energy as distinct from minimizing rates.

⁸³ T19: 3287/20-3293/18.

⁸⁴ T19: 3365/6-3374/8.

Both initially raise a jurisdictional red herring. It is common ground among all parties, including BC Hydro, that the recently enacted section 45(6.1) of the *Utilities Commission Act* gives the Commission jurisdiction to require BC Hydro to file an intended expenditure plan covering a term that the Commission believes is appropriate. The issue before the Commission is not what jurisdiction it has, but rather how it should exercise it. Sierra Club's references to case law or Hansard, and IPPBC's lengthy historical review of its past submissions at pages 43 to 48, do not help the Commission decide how it ought to employ the discretion it has been given.

At page 16 of its Argument, Sierra Club says the Commission has already decided the issue of whether the IEP requires Commission review or approval, as well as the timing for any such review. In reaching that conclusion, it refers to the Commission's prehearing letter of April 8, 2004,⁸⁵ in which it states that the REAP would be reviewed as part of the hearing, and that "the Commission expects to commence the review of the IEP during the current calendar year." With respect, the Commission's words here were not meant to have the force of a "decision" with attendant process implications, such as reconsideration and appeal, as suggested in paragraph 38 of Sierra Club's argument. First, an "expectation" is not a decision; second, the submission does not take into account the prefiled direct evidence of Mr. Elton on this point;⁸⁶ and third, the Commission itself subsequently decided that argument on the nature and scope of IEP review would be submitted after the hearing. Therefore, the Commission cannot be taken to have determined the issue in its prehearing order.

Sierra Club goes on to deal with that substantive issue commencing at paragraph 45. In essence, its concern seems to be that BC Hydro will limit the REAP options to those it has unilaterally

⁸⁵ BCUC Letter No. L-25-04 (Ex. A-11).

⁸⁶ Ex. B1-9.

chosen to consider in its IEP and that the IEP process will not provide an alternative to look at other options through adversarial mechanisms. BC Hydro submits that these concerns are unfounded. First, any party would be free to question the advisability of an expenditure proposed in the REAP on the basis that there is an alternative source of supply, whether or not that source had been considered in the IEP. Thus, BC Hydro proposes no constraints on the extent to which the REAP process investigates optional expenditures that might be made during the REAP period on resources not discussed in the IEP.

Second, BC Hydro does not believe that the adversarial process, for all its strengths in testing disputed facts, is the best process for developing new ideas. The consultative process, which seeks to share information and develop consensus, is better suited to this type of long-range thinking.⁸⁷ When the IEP leads to conclusions identified in the REAP, those conclusions can then be tested in the conventional way through some form of adversarial process administered by the Commission. This is the essence of the proposed iterative approach and is preferable to trying to force long-term planning debates artificially into the adversarial process. This approach has been employed in the past, but in BC Hydro's submission, not with great success.

At pages 25 to 27 of its Argument, IPPBC also discusses Site C. Its argument here is contradictory. On the one hand, it says no money should be allowed for Site C, Revelstoke, and Mica in the current revenue requirement. On the other, it says that a full study of the transmission implications of these projects should be initiated before any further steps can be taken – studies, which presumably BC Hydro would have to pay for. BC Hydro acknowledges that there are questions associated with the total costs of Site C, Revelstoke, and Mica. Because of that, it intends to spend money over the next four years, subject to annual review by the

⁸⁷ Ex. B1-9 (Elton tab) at 2/32-3/19 and T8: 1002/16-1018/6.

Commission, to reduce that uncertainty and determine whether, with the additional knowledge thus gained, these projects continue to be attractive resource options. This step-by-step approach is prudent and sensible and will ensure that the Commission is able to review the appropriateness of BC Hydro's expenditures at every step.

3. Other Intervenors

Terasen and Alan Wait, neither of whom are ratepayers or obviously championing particular resources, provide some useful commentary on the IEP process. After discussing some concerns, Terasen concludes that, "The process described in [by BC Hydro's witnesses] in which a more extensive REAP filing is made annually for Commission approval and an IEP is filed every other year and forms the contextual background for two successive REAP filings may prove over time to provide an appropriate balance."⁸⁸ The implicit recognition that the process may evolve is one that BC Hydro accepts; the process it has identified simply provides the starting point for that evolution.

Terasen goes on to say that uniformity across utilities would be desirable. BC Hydro accepts that uniformity would be desirable, but not at the price of failing to take into account the unique circumstances of each utility, where appropriate. BC Hydro has laid out its timing needs with respect to the various processes and will not repeat them here, but suggests that the Commission should have due regard to the budgetary and legislative requirements that apply in the context of each utility before establishing across-the-board filing requirements.

Mr. Wait speaks less to the overall planning process and more to some specific aspects of it. In particular, he has comments on Revelstoke, Mica, and Site C. In BC Hydro's submission, it is

⁸⁸ Terasen Argument at p. 2.

premature to make any conclusions with respect to any of those projects, but his comments make clear the desirability of the iterative approach set out in BC Hydro's proposal.

B. Specific Issue With Respect to the Substance of the REAP: Power Smart

1. Cost-Effectiveness Tests and their Application

(a) JIESC

JIESC suggested that BC Hydro should be ordered to redesign all Power Smart programs so that the TRC benefit/cost ratio for each program is greater than 1. This request is unnecessary and ignores two things. The first is the distinction between planning estimates and business cases; the second is the use of pilot programs.

As explained in the hearing and discussed in BC Hydro's Argument, the planning estimates and assumptions for program design are based on conservative assumptions about savings and costs.⁸⁹ To ensure that all programs that might have a positive TRC ratio are considered at the conceptual planning stage, programs with sufficient promise of showing additional quantifiable benefits when put forth as business cases are included even if their initial evaluation suggests a TRC ratio slightly less than 1. The goal is to ensure that *actual* programs pass the TRC.⁹⁰

An exception may be pilot projects. There can be good reasons for implementing a pilot project, such as the residential pilot run in Courtney, Comox and Quesnel, that has a TRC less than 1. For instance, the small size of a pilot project may make it uneconomic, but the information gained (e.g., on the necessary incentive levels to induce the optimum level of program take-up) may help convert the project into a full-fledged program with attendant economies of scale,

⁸⁹ See also Sierra Club Argument.

⁹⁰ T14: 2258/26-2259/1.

making it much more economic than it would have been without the pilot. This enhances, rather than detracts, from the overall purpose of ensuring that the demand/supply portfolio with Power Smart continues to be the least cost portfolio.

At pages 30 to 31 of its Argument, JIESC says that BC Hydro argued that a RIM benefit/cost ratio greater than 1 is appropriate for industrials and thus conceded that it is also appropriate for all customer classes. This mischaracterizes the evidence and overstates the argument.

First, the commitment to ensuring that all projects with large incentives have a RIM ratio greater than 1 was a concession to a point made by Dr. Shaffer, which is that where there are few beneficiaries, the RIM test should be given more prominence to ensure that incentives to them do not impose too high a cost on ratepayers generally.⁹¹ One might say that the less broad-based the opportunity for participation, the greater opportunity for distributional inequity.

Second, BC Hydro committed to ensuring that all large programs/projects would have a positive RIM value (RIM ratio greater than 1), but did not say that for all types of programs and for all time, the RIM ratio for the industrial class should exceed 1. Nor does it follow that it should be for the other classes. Indeed, whether the RIM ratio is greater or less than 1 can be expected to vary among rate classes, depending on the relationship between the average rate for the class and the incremental cost of avoided supply. This will vary over time in response to rate design decisions. Accordingly, a cut-off for the RIM would not be robust over time. Moreover, as mentioned at page 96 of the Argument and as the evidence shows, ratios can be misleading and the actual dollar NPV of any shortfall associated with any program is probably a much better indicator of the equity issues associated with individual programs. Dr. Shaffer, for example,

⁹¹ BC Hydro Argument at p. 99.

noted that it is "arbitrary" where one puts the lost revenues when computing ratios,⁹² and Mr. Belland agreed that "if we keep our focus on the net present value and dispense with the ratios, we'll all be better off."⁹³

At page 31 of its Argument, JIESC says the use of the utility cost test is "disturbing". But this test is still regarded as a useful perspective in DSM methodology,⁹⁴ though, in any event, the primary screening criterion for Power Smart 2 is now the TRC test, not the UC test.⁹⁵ Thus, there is nothing to be disturbed about.

(b) IPPBC

In the Technical Appendix to its Argument, IPPBC replicates Mr. Belland's direct evidence, with some new features. It is not argument at all. The essential import of the Appendix is an unrelenting criticism of the TRC test as set out in the California Standard Practice, and the promotion of an alternative developed by Mr. Belland, which he labels the Economic Resource Test or ERIM ratio. BC Hydro has already made the point at page 99 of its Argument that IPPBC's effort in promoting this alternative test contributed nothing to the debate in the proceeding because it does not alter the RIM net present value. Rather, by using a ratio with a different formula from that used in the California Standard Practice, the ERIM ratio distorts program differences because of a leverage contained in the formula.⁹⁶

IPPBC goes further at page 4 of the Appendix and finds the TRC test "deeply flawed" on the basis that "[a]ccounting for the incentive/subsidy and the associated (lost) revenue impact twice

⁹² T20: 3696/14-15.

⁹³ T21: 3853/23-25.

⁹⁴ CPUC Manual, Ex. C35-5, p. 24.

⁹⁵ BC Hydro Argument at p. 98, note 217 and related text.

implies that two times the money is flowing when it is not."⁹⁷ This is simply incorrect and shows a basic misunderstanding of what the TRC does and what it is designed to accomplish. The TRC is an economic test. That is, it looks at actual cash outlays and savings: the full cost of an energy efficiency measure under a DSM program (e.g., a compact fluorescent light bulb), the direct cost of delivering the DSM program (e.g., utility staff salaries), and the savings in energy costs from the program. Revenue changes resulting from effects on energy consumption are ignored under the TRC test, but considered in the RIM test. Similarly, the *allocation of the cost of the energy efficiency measure* is ignored in the TRC test, but considered in the UC test, the RIM test and the Participant's test. The reason is that incentives paid towards the cost of such measures are transfer payments between the utility and its customer: they do not affect the underlying economic analysis of deciding whether the actual cost of implementing the measure is less than the actual savings in energy costs.⁹⁸ This is what the TRC measures, and it is a fundamental aspect of DSM program analysis—indeed, of any kind of discounted cash flow analysis.

To use IPPBC's "free lunch" analogy at page 7 of its Appendix, it is *not* the case that one must use either the perspective of party A or the perspective of party B in order to avoid the "erroneous conclusion that lunch was free". The TRC measures the total cost of the lunch and ignores who pays for it because such payments between parties constitute transfer payments. This is not to say that transfer payments are unimportant or ignored altogether; they are important and are considered under the RIM test. That is why the California Standard Practice emphasizes the need to look at the tests in combination, not isolation.

⁹⁶ BC Hydro Argument at p. 99.

⁹⁷ IPPBC Argument, Technical Appendix at pp. 4, 8.

At page 8 of the Appendix, IPPBC goes on to say that BC Hydro has adopted a "hybrid-TRC test" in its financial evaluation, and that, while still flawed, it is an "improvement" over the California approach. In fact, for programs aimed at energy savings, BC Hydro's approach to TRC is the same as California's.

(c) BCOAPO

At page 17 of its Argument, BCOAPO seems to accept BC Hydro's point that, from a consumer's point of view, bills matter more than rates, but says there is a remaining question as to whether a bill would be lower if the customer, or the customer's class, was not subsidizing other customers or customer classes. The correct reply is found in the Argument of Terasen Gas Inc. Terasen notes that in utility regulation, a host of things can lead to cross-subsidization, both between rate classes and among customers in a class. The answer, says Terasen, is not to expect that such cross-subsidization can be eliminated, but to ensure that it falls in a range of fairness and reasonableness. That is why BC Hydro considers the results of the RIM test. Terasen and BC Hydro agree that the effects of DSM programs on revenues and costs within and between customer classes is well within that zone, and that fairness results from a variety of such programs being available to all customers.⁹⁹

In their Arguments, BCOAPO (page 19) and IPPBC (page 23) ask that BC Hydro not be permitted to proceed with any further load displacement programs until stepped rates have been implemented. That ignores the importance of BC Hydro's momentum and continuity argument. Power Smart cannot be effective if it is constantly being turned on and off.¹⁰⁰ Moreover, both

⁹⁸ BC Hydro Argument at pp. 94-95, and CPUC Manual, Ex. C35-5, at pp. 18-22.

⁹⁹ Terasen Argument at pp. 5-6. Terasen's position echoes the view expressed by the Iowa Public Utilities Commission in the *Interstate Power and Light* case referred to at pp. 100-101 of BC Hydro's Argument.

¹⁰⁰ T14: 2255/12-15.

ignore BC Hydro's commitment during the hearing to improve its acquisition process for incentives over \$1 million by issuing a competitive call every 6 months beginning this fall.¹⁰¹

At page 21, BCOAPA lauds Fortis Inc.'s DSM programs without saying why it finds them to be superior. It did not give BC Hydro's witnesses an opportunity to comment on the particulars of those programs. In these circumstances nothing can be gained by comparing Power Smart to Fortis Inc.'s programs.

(d) CEC

For the most part, BC Hydro agrees with CEC's interpretation of the California Standard Practice Manual. CEC errs, though, when it concludes that the Manual implies that only the RIM should be used in considering the cost-effectiveness of fuel substitution or load displacement programs. The excerpt quoted by CEC at page 33 of its Argument reads:¹⁰²

For any program where more than one fuel is affected, the preferred unit of measurement for the RIM test is the lifecycle revenue impacts per customer, with gas and electric components reported separately for each fuel type and for combined fuels.

The excerpt says "the preferred unit of measurement *for* the RIM test", not "the preferred unit of measurement *is* the RIM test". The next excerpt goes on to explain that, for fuel substitution and load building programs, levelized cost is an inappropriate measure, because those programs either combine gas and electric effects, or build sales. BC Hydro agrees. But it does not follow from this that the TRC is an inappropriate measure for such programs. What is appropriate is to use the net present value of the TRC, the other measure the Manual refers to. In such an NPV calculation, the separate effects of gas and electricity, for example, are accounted for.

¹⁰¹ T12: 1861/21-1863/7.

¹⁰² CEC Argument at p. 33, citing CPUC Manual, Ex. C35-5 at p. 6 (cited in error to pp. 1-4 and 1-5).

2. Potential for Over-Estimating Savings

At page 20 of its Argument, BCOAPO notes that while the Compact Fluorescent Lighting Program may be an "intuitively" good way of achieving energy savings, it needs to be continually reviewed in order to determine whether customers are actually using the CFL bulbs and replacing them with similar bulbs. No doubt, Mr. Gathercole is extrapolating from his own experience, which he recounted at the hearing,¹⁰³ but Mr. Marchant and Mr. Hobson agreed with him that this was an issue that needed to be accounted for and monitored.¹⁰⁴ Indeed, BC Hydro's prefiled evidence shows that an evaluation plan is in place for the CFL program, and that plan anticipates no less than 13 distinct evaluation processes, commencing with a baseline assessment in September 2002 and ending with a market impact evaluation in March 2006.¹⁰⁵ Thus, a plan for the continuous review recommended by BCOAPO is already in place. Further, as noted in BC Hydro's Argument, the evaluations that have taken place on Power Smart programs so far under the International Performance Measurement & Verification Protocol have shown program energy savings coming in at 6% more than the expected level.¹⁰⁶

3. Adjustments to Calculations

At page 17 of its Argument, BCOAPO correctly notes that "[t]here is no major difference in the basic approach of Dr. Shaffer and BC Hydro," but goes on to cite one difference, that being the question of what price stream to use for estimating avoided costs—mid-Columbia prices or the weighted average of energy call prices. BC Hydro's position on the appropriateness of the latter

¹⁰³ T13: 2026/13-20.

¹⁰⁴ *Ibid.*

¹⁰⁵ Application, Vol. 2 (Ex. B1-2), Appendix M—*DSM Evaluation Summary and Plan*, p. 8.

¹⁰⁶ BC Hydro Argument at p. 109.

approach is set out in its Argument at page 103 and is not repeated here. However, BCOAPO also contends that "[i]f Mid-Columbia market prices are used, it is clear from Dr. Shaffer's evidence that these two projects (Canfor and Weyerhaeuser) would have a RIM of significantly less than 1."¹⁰⁷ With respect, it is not so clear. In fact, Ms. Hemmingsen's evidence indicates that the analysis would now yield about the same results, because the recent movement in the Canada/U.S. exchange rate means that the \$47.80/MWh used to estimate the avoided energy costs for the two projects at the time they were screened now equates to approximately \$54/MWh, just slightly less than the weighted average cost of the most recent energy calls.¹⁰⁸ Thus it is not correct to say that mid-C prices, even if used instead of the energy call prices, would yield a RIM ratio significantly less than 1.¹⁰⁹

4. Allocation of Portfolio-Level Costs to Individual Programs

At page 31 of its Argument, JIESC also criticizes non-program spending, calling it "non-productive". It does so without basis, and without setting out the testimony on the purpose of such expenditures. Regarding expenditures on Awareness, Information and Education, about 8% of the total Power Smart budget,¹¹⁰ Mr. Hobson said this was BC Hydro's assessment of the expenditures required to promote a lasting energy conservation ethic among BC Hydro's customers, to build a brand presence, and to generate interest in participating in the programs.¹¹¹ As to expenditures on Indirect and Other Enabling Initiatives, Mr. Hobson testified that these

¹⁰⁷ BCOAPO Argument at p. 17.

¹⁰⁸ BC Hydro Argument at p. 104.

¹⁰⁹ See also Ex. B1-114, which reconciles BC Hydro's and Dr. Shaffer's assumptions for the RIM test at the time of approval and shows that, under each set of assumptions, the project RIM ratios are greater than 1.

¹¹⁰ Application, Vol. 2 (Ex. B1-2), Appendix N—*Power Smart Program Summaries*, p. 48. (Calculated over both fiscal years.)

¹¹¹ T11: 1776/1-18.

costs, which work out to just over 10% of the total Power Smart budget,¹¹² cut across a variety of areas, including such things as administrative support, information management required to track program results, and sales staff to meet with customers and discuss energy efficiency opportunities that might not be specific to a particular program.¹¹³ BC Hydro submits that this is a productive use of funds, and indeed, that failure to spend money on this kind of brand presence and overall promotion could reduce program take-up, thereby putting at risk the economics of individual programs, or fail to provide sufficient information for the purposes of program evaluation and design. Neither JIESC nor any other party led evidence as to why these costs or the amounts budgeted for them should be considered *prima facie* unreasonable or unproductive. JIESC also argued for an allocation of indirect costs to specific programs. BC Hydro's position on that is articulated in the evidence and the Argument. Terasen Gas Inc., which has DSM program experience, also agrees that such an allocation of indirect costs would produce arbitrary results at the screening level, and that the question of the appropriate amount of these costs should be considered separately from DSM program selection.¹¹⁴

C. Specific Issues with respect to the Substance of the REAP: Acquisitions from IPPs

At page 44 of its Argument, IPPBC makes the startling argument that BC Hydro has claimed it does not need new supplies from IPPs except for 400 GWh. In fact, since F2001 BC Hydro has entered into a large number of EPAs¹¹⁵ that will cause it to acquire new energy from IPPs; the amounts involved by F2008 are in the order of 2,180 GWh per year, over and above the EPA

¹¹² Application, Vol. 2 (Ex. B1-2), Appendix N—*Power Smart Program Summaries*, p. 48. (Calculated over both fiscal years.)

¹¹³ T11: 1777/10-1778/16.

¹¹⁴ Terasen Gas Inc. Argument at p. 4.

¹¹⁵ For details, see Application, Vol. 1 (Ex. B1-1), Chapter 4, pp. 4-12 to 4-15.

amounts contracted before F2001.¹¹⁶ The net present value of these committed EPAs is almost \$900 million.¹¹⁷ In addition, it has committed to a new energy call of 400 GWh in the current fiscal year in order to hedge against future uncertainty.¹¹⁸

Contrary to the tenor of IPPBC's argument, BC Hydro expects to have a positive load resource balance until at least 2012.¹¹⁹ Nevertheless, BC Hydro will continue to build its portfolio of IPP resources as economic opportunities present themselves.¹²⁰

¹¹⁶ *Ibid.* at Chapter 4, p. 4-27 and Chapter 2A, p.20.

¹¹⁷ Ex. B1-124.

¹¹⁸ REAP, p. 7.

¹¹⁹ Application, Vol. I (Ex. B1-1), Chapter 4, p. 4-27 (Table 4-11).

¹²⁰ REAP, p. 7.

VI. OTHER ISSUES

A. BCTC Service Level Agreements

BC Hydro dealt with this issue fully at page 115 of its Argument.

B. Access to Storage

At pages 40 to 42 of its Argument, IPPBC argues that the BCUC ought to require BC Hydro to justify not providing IPP access to BC Hydro storage. However, the Commission has already concluded at page 71 of its Report and Recommendations on the Heritage Contract, Stepped Rates and Transmission Access (the Report) that storage should not be offered to third parties. Government agreed by enacting section 7 of Special Direction No. 9 that prohibits the Commission from compelling BC Hydro to provide storage services. JIESC also suggests, at page 60 of its Argument, that Powerex's operations ought to be subject to a fuller review than was done in this proceeding. This issue was also dealt with conclusively in the Report, and the Government's response thereto and should not be revisited at this late stage.

C. Review of Power Smart Programs

At page 33 of its Argument, JIESC says that BC Hydro was asked on what authority it was proceeding in assuming it did not require regulatory approval for Power Smart programs. Again, this mischaracterizes the evidence. BC Hydro is, in fact, applying for approval of DSM expenditures, both from a revenue requirements point of view as well as from a planning perspective, pursuant to s. 45(6.1)(c) of the *Utilities Commission Act*. The letter referred to by JIESC and filed in the hearing¹²¹ was provided in response to the Chair's question about

¹²¹ Ex. B1-80.

BC Hydro's historic *individual tariff sheets* for each program; why the tariff approach had not been followed since the early 1990s (except where programs involved rates or conditions of service); and why the Commission had accepted that approach.¹²² But that correspondence clearly contemplated an ongoing prudency test, and there is no evidence that BC Hydro thought "it could ignore" such a requirement, as JIESC says, or that it did not provide DSM information to the Commission on an ongoing basis. At any rate, the evidence now is that BC Hydro expects—and accepts—that the prudency of Power Smart expenditures will be reviewed with each REAP.¹²³ There is no attempt to proceed without authority.

D. Wait Complaint

At page 7 of his Argument, Mr. Wait speaks of a "reluctance on the part of Panel 4 to clarify on the record what exact financial analysis methods are used in choosing between different new energy supply options [and that] there is nothing which indicated that the actual affect [*sic*] on the ratepayer was a major factor in which energy supply option to choose." Mr. Wait also states that BC Hydro did not answer his information request at T13: 2090 and appends a spreadsheet of the kind of information he says he was expecting.

This aspect of his argument is both inaccurate and unfair. BC Hydro covered these issues in the Application. When Mr. Wait asked Panel 4 about them, Ms. Hemmingsen offered to, and subsequently did, arrange to meet with Mr. Wait to explain the relevant material at BC Hydro's offices. Mr. Wait appeared to accept this approach and did not raise the issue again.

Furthermore, Mr. Wait made no objection when BC Hydro's counsel put the Intervenors on notice as to which information requests were completed and which were still outstanding. In


¹²² T14: 2306/19-2308/15.

¹²³ The evidence at this point appears in various places, but see particularly T14: 2304/13-2306/18.

these circumstances, he cannot properly complain in his Argument about lack of responsiveness.¹²⁴

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

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¹²⁴ For relevant transcript references, see T13: 2084/20-23; 2084/24-2085/3; 2085/7-26; 2088/1-6; T14: 2340/16-22; T20: 3488/23-3489/13; T20: 3709/4-8; T21: 3715/15-18.

Schedule A – Table of Concordance to Issues List

The following table indicates where issues identified on the final Issues List to this proceeding are specifically addressed in BC Hydro’s Reply Argument. The Reply Argument, and this schedule, does not address issues from the Issues List that were not pursued by Intervenors in their arguments. As well, some issues from the Issues List are addressed implicitly in the discussion of other issues, and do not appear in this schedule.

Issue (Revised Issues List: Ex. A-33)	Page # in Reply Argument	Issue (Revised Issues List: Ex. A-33)	Page # in Reply Argument
1.1.....	Part IV (30-35)	4.2.2 (last bullet)	44-52
1.3 (2nd bullet).....	N/A	4.2.3.....	23-25; 44-52
1.4.....	Part V (36-53)	4.6.....	Part V (36-53)
1.5.....	36-43	5.2.....	13; 20-23
1.6.....	20-23	5.4.....	N/A
1.7.....	1-5; 9-13	5.5.....	28
1.9 (1st bullet).....	21	5.6.....	13-15
1.10.....	5-8; 16-17; 21-24	5.7.....	15-17
2.1.....	26-27	6.2.1 (2nd bullet).....	21
2.2.1.....	34	6.2.3.....	N/A
2.2.2.....	12-13	6.2.4 (1st bullet).....	N/A
2.3.....	13-15	6.3.2 (1st bullet).....	N/A
2.4.1.....	15-17	7.1.....	15-17
2.4.2.....	9-13	7.2.....	N/A
2.4.3.....	18	7.5 (in part)	25
2.6.....	25	7.7.....	3-4
2.7.....	Part IV (30-35)	7.9.....	3-4; 23-25
2.8 (2nd bullet).....	26-27	8.1 (in part)	44-52
3.1 (1st bullet).....	21-22	10.1.....	13
3.2 (1st bullet).....	8	10.2 (in part)	8; 30-32
3.3 (1st bullet).....	N/A	10.3 (in part)	9-13; 15-16; 25
3.4.....	N/A	11.1 (in part)	3-5; 44-53
4.1.....	N/A	12.1 (in part)	9-12
4.2.1 (1st 12 bullets) ..	23-25; 44-52	13.1 (in part)	44-52

Schedule B – Issues Raised by Commission Chair at Close of Hearing

The following issues were identified by the Chair at the close of the oral phase of the hearing, and are addressed in BC Hydro’s Reply Argument.

Issue	Page Number in Reply Argument
1. Is the Utilization and Credit Risk Deferral Account within scope of section 6 of Special Direction #9?	34-35
2. Commission’s jurisdiction regarding service level agreements.	N/A
3. Prudency test for HDA and NHDA.	N/A
4. Depreciation rates for Burrard in light of Ex. A-50.....	N/A
5. Commission jurisdiction regarding FRSR reserves and/or amortization.	9-12
6. Evidentiary basis for commission-determined capital structure for BC Hydro.	12-13
A. Commission jurisdiction regarding capital structure of BC Hydro.....	12-13
B. Commission jurisdiction regarding Heritage Payment Obligation and HDA, as proposed by BC Hydro.	30

Schedule C – List of Authorities Referred To

1. *ATCO Electric Limited v. Alberta (Energy and Utilities Board)*, 2004 ABCA 215
2. *BC Hydro and Power Authority v. Terasen Gas (Vancouver Island) Inc.*, 2004 BCCA 346
3. *Interstate Power and Light Company (Re)*, 225 P.U.R. 4th 165, 2003 (Iowa PUC)
4. *Powerex Corp. v. Alcan Inc.*, 2004 BCSC 876
5. *TransCanada Pipelines Limited v. National Energy Board et al*, 2004 FCA 149