

**British Columbia Hydro and Power Authority (“BC Hydro”)
Project No. 3698360 – Order No. G-84-03
2004-05 and 2005-06 Revenue Requirements Application
and
British Columbia Transmission Corporation (“BCTC”)
Application for Deferral Accounts**

216.0 Reference: BC Hydro Resource Expenditure and Acquisition Plan (“REAP”) dated March 31, 2004

- 216.1 The introduction on page 1 of REAP states that REAP will be filed annually. Table 1 in REAP is based on Table 11-2 of the Revenue Requirements Application and is supported by documentation in Chapter 3 through 9 of that Application. Please outline the level of detail regarding forecast capital expenditures that BC Hydro intends to include in future REAP filings, referring to the information in specific sections of the Revenue Requirements Application where possible. For example, would tables similar to Tables 5-22 through 5-24 and Table 5-26 that show capital expenditures that are greater than \$2 million be included?
- 216.2 The cover letter for REAP refers to pages 4-9 through 4-15 of the Revenue Requirements Application regarding Energy Purchase Agreements and Section 1.5.3 of Chapter 8 regarding demand side management expenditures. Please outline the level of detailed information in these areas that BC Hydro intends to include in future REAP filings.
- 216.3 On March 31, 2004, Commission Letter No. L-18-04 established Certificate of Public Convenience and Necessity (“CPCN”) Application Guidelines. Does BC Hydro intend that its REAP dated March 31, 2004 and future REAP filings will fulfill the requirement for an annual statement of planned extensions to its facilities that a public utility is to file pursuant to section 45(6) of the Utilities Commission Act, as discussed on pages 2 and 3 of the CPCN Application Guidelines?
- 216.4 If the response to the foregoing questions is yes, please confirm that future REAP filings will be submitted prior to the start of the period under consideration. For example, will BC Hydro file next year’s REAP for F2006 and F2007 by the end of March 2005?

**217.0 Reference: BC Hydro Response to BCUC IR 1.2.36
BC Hydro Response to BCUC IR 2.114.5**

For the period F2003 to F2006, please provide the table shown in the response in a monthly breakdown. Please also show the amount of non-simultaneous energy schedules flowing into and out of the account on a monthly basis. For greater clarity, the information requested is for the net amount of energy in those hours where inflowing schedules exceeded outflowing schedules separately from the net amount of energy in those hours where outflowing schedules exceeded inflowing schedules. Please also show the effect on the Displaced Hydro water rental fees associated with the net trade account balance.

**218.0 Reference: BC Hydro Response to BCUC IR No. 1.5.13, Table B (on CD ROM)
BC Hydro Response to BCUC IR No. 1.5.53**

Please explain how the costs of capital projects resulting from the Water Use Planning process are treated. See, for instance, the project identified as WGS Stream Re-contouring (WUP requirement) in the Columbia Facilities section of Table B from the reference above. Are there other projects in Table B that have a capital component being driven by WUP requirements, and if so, please identify the projects and component costs?

219.0 Reference: BC Hydro Response to BCUC IR No. 2.134.1

For the Electricity Distribution Sustaining Capital and Growth Capital expenditures shown in the table, please supply industry benchmarks for similar expenditures on an investment per connected customer, and per new connected customer basis. For the Growth Capital, please identify the costs associated with distribution facility capacity upgrades separately from distribution facility additions, and other categories of costs as may be appropriate.

220.0 Reference: Exhibit B1-11, BCOAPO IR No. 1, Q. 23.0 (b) and Exhibit B1-8 Commission IR No. 2, Q. 122.0, Exhibit B1-1, Chapter 2B

The response to BCOAPO Question 23.0 (b) provides illustrative examples of how actual Heritage Energy is calculated under two cases. The response to Commission IR No. 2, Question 122.0 provides a detailed description of the operation of the Heritage Payment Obligation Deferral Account. Exhibit B1-1, Chapter 2B deals with the BC Hydro Deferral Accounts.

- 220.1 Please expand the response to BCOAPO Question 23.0 for Tables 1 to 5 into sufficient categories to include all cost components of the Heritage Payment Obligation and the Non-Heritage Cost of Energy and to correspond with the treatment of controllable and non-controllable costs described in the response to Commission IR No. 2, Question 122.0. Please include an additional column in Table 1 to identify the amount of the variance for each component that is included in the deferral accounts. For each cost component where a portion of the cost variance is to be recorded in the HDA and the NDHA, if the calculation of the portion of the cost variance that is to be recorded in the deferral accounts is not set out explicitly in the Tables, please include a description of how the calculation was done.
- 220.2 Please confirm that the proposed deferral account treatment in Exhibit B1-1, Chapter 2B is in accordance with Special Direction No. HC2 and if not, please explain the changes required and confirm that a revision to that Special Direction is being requested. Please also provide a comprehensive list of all variables which would be and which would not be included in the HDA, NDHA and the trade income deferral accounts.
- 220.3 Further to the foregoing question, please clarify if it is BC Hydro's position that the Commission must allow the HDA to record variances with respect to all those cost components and only those cost components for which BC Hydro requests deferral account treatment.
- 220.4 Please explain why BC Hydro now considers that finance and amortization charges, Skagit Valley Treaty revenue or ancillary service revenue are sufficiently controllable and should not be subject to deferral account treatment.

221.0 BC Hydro Deferral Accounts

- 221.1 Can BC Hydro provide a better definition of controllable versus non-controllable costs and why does BC Hydro not include weather related load variations as a non-controllable cost which should also be covered? Rather than “controllable” versus “non-controllable,” would another possible exclusion from the accounts be to exclude those costs which were symmetric and which could go either way from year to year? Is “controllable risk” a contradiction in terms given that if a risk is controllable then it is not really a risk?
- 221.2 What incentive does BC Hydro have to accurately forecast those costs covered by the deferral accounts?
- 221.3 What incentive does BC Hydro have to minimize those costs covered by the deferral accounts after approval of a rate request? If some incentive can be demonstrated, what evidence could be provided to the customer that would demonstrate that costs have been minimized?
- 221.4 Aquila presently has a related reconciliation of forecast versus actual power supply costs but the variances are shared with the customer. Can BC Hydro explain why there should be a basic difference between Aquila’s handling of variances and BC Hydro’s?
- 221.5 How does the customer know that variations from plan for reservoir operation has been to minimize power supply costs and not as a credit to return? Should not the Hydro Generation be broken down between Forecast and Actual Generation from Natural Flows and Forecast and Actual Generation from Reservoir Operations?
- 221.6 Please confirm that pursuant to Section 7(c) of the Special Direction HC2 that BC Hydro will apply to the BCUC for disposition of the deferral account accumulations. When and under what criteria would BC Hydro seek such disposition?
- 221.7 With respect to Chapter 2B:
- On page 2B-2, item 2, what specific variable costs related to thermal generation which are referenced as variances in gas purchase costs are not already captured by item 1? Please provide a comprehensive example that defines and shows all variable costs.
 - On page 2B-2, Items 3 and 4, does the \$1million related to a single weather event or all weather events accumulated through the year? How material is the \$1million in comparison to normal weather event costs accumulated through the year?
 - On page 2B-2, Item 5, can BC Hydro provide an example of a variance resulting from this item and does this Item apply to all costs or just those that are unplanned?
 - On page 2B-2, lines 27-29, the statement appears to imply that revenues from the sale of surplus hydro electricity sales would not go to the benefit of the customer if these revenues were forecast as part of the heritage account. Please explain why this would be the case?
 - On page 2B-3, Item 2 and 3, what maintenance, capital expenditures etc., does BC Hydro have responsibility for under the NHDA and can BC Hydro provide an example of variances resulting from these items? Is there some reason why the language in Items 2 and 3 under the NHDA does not parallel the language of Items 2 and 3 under the HDA?

- How would a variance under Item 1 of the NHDA be triggered by “changes in customer load” given that it would seem that the change in delivery is going to happen with or without a change in load?
- Given the deferral accounts requested by BCTC, what triggers a variance under Item 4 of the NHDA? The follow on paragraph to the Items listed indicates there could be a credit for Item 4. How might a credit arise?
- Can BC Hydro elaborate on Item 5 of the NHDA and provide an example which might trigger a variance?

221.8 In response 2.122.0 to the BCUC, on page 2, second paragraph, the statement is made “BC Hydro is no longer applying for deferral account treatment on the following components, except as otherwise stated.” Should the line read “... except as otherwise stated **above**?” If this is not correct, could BC Hydro elaborate on what is “otherwise stated?”

221.9 In response 1.23.0(b) to the BCOAPO, comparing the Total Domestic COE of \$808.3 to the \$808 indicated in Schedule A-9 of Volume 1, Chapter 2 of the application, that all inputs to power supply costs as used to forecast Total Domestic Cost of Energy are included in the HDA and NHDA. Please confirm or, if there are exclusions then please detail what those exclusions are.

221.10 In response 1.23.0(b) to the BCOAPO, Table 1, please provide the calculation for the Forecast Aggregate Unit Cost of Heritage Supply of \$7.98/MWh.

221.11 In response 1.23.0(b) to the BCOAPO, Table 3, please provide the calculation of each number in the table as they are determined according to the four Notes provided below. Does this table constitute the calculation of the deferral accounts and hence should be incorporated into the definition of those accounts?

222.0 Please provide an analysis of Total Transfer Capability and Available Transmission Capacity of the current transmission system within British Columbia (including the interior to lower mainland capability), the B.C.-Alberta transmission path and the B.C.-U.S. paths, considering the following:

- loads within the province
- generation within the province
- treaty obligations for energy delivery (e.g. Skagit River Treaty), but excluding return of the downstream benefit entitlement from the Columbia River Treaty
- imports only to the extent required for shortfalls in the capability of provincial generation dispatch to meet instantaneous load requirement
- exports only to the extent that instantaneous generation exceeds provincial load requirements
- generation dispatch in the analysis should be optimized for serving provincial load and “levelizing” import requirements
- choose several constraining seasonal cases including Winter Peak, Summer Peak, and Spring Freshet, or other constraining scenarios if appropriate.

223.0 Reference: BCUC IR No. 2, Question 2.181.0

Preamble: “Depending upon the actual performance on each objective relative to the stated target, the awarded payment can range from 0 to 2 times the Target Incentive.”

Please provide a further explanation with respect to the above statement.

224.0 Reference: Volume 1, Chapter 2B, p. 2B-6

Please provide illustrations (using hypothetical amounts) to show how the proposed BCTC Transition Deferral Account will operate in practice.

Please provide examples of the items that could contribute to variances between BC Hydro’s current forecast of net WTS costs in F2006 and BC Hydro’s adjusted forecast of its net WTS costs in F2006 based on the outcome of BCTC’s revenue requirement proceeding.

**225.0 Reference: Exhibit B1-8 Commission IR No. 2, Q. 195.3 to 195.5
Cost of Providing Service and Cost Recoveries**

The response to Question 195.3 describes that the funding for new projects, programs or other initiatives that are requested after the start of the fiscal year or off-cycle to the annual planning process may be approved as ex-plan funding.

For F2003 and F2004, please identify the ex-plan funding that was approved for each line of business and subsidiary. Please describe the project or projects that represent this ex-plan funding.

226.0 Reference: Exhibit 1-8, Commission IR 200.1 and 200.3, Exhibit B1-9, Testimony of Jay Grewal, pp. 4 and 5, Exhibit B1-1, Chapter 2A-4 and Pre-hearing Conference No. 2, T. 108

The referenced exhibits, except T. 108, appear to indicate that BC Hydro is proposing that the allowed rate of return on a pre-income tax basis be fixed at 13.91% for F2005 and F2006. At T. 108, lines 1-13, BC Hydro assumed that the 2006 allowed rate of return on equity for Terasen Gas Inc. will be reflected in the allowed rate of return for BC Hydro in F2006.

Please confirm that BC Hydro is proposing that for F2006 the allowed rate of return on a pre-income tax basis include both the 2006 allowed rate of return on equity for Terasen Gas Inc. under the automatic adjustment mechanism and the 2006 forecast effective income tax rate for Terasen Gas Inc.

227.0 Reference: REAP, p. 4, Section 3.1, Private Sector Power Acquisitions

BC Hydro states that it will improve the process for IPPs to interconnect to BC Hydro’s distribution system.

- Please itemize the current deficiencies that BC Hydro perceives exist in the process currently being utilized.
- Please identify the improvement schemes being considered by the utility.

228.0 Reference: REAP, p. 9, Section 3.2, Energy Calls

BC Hydro states that the IPP community has indicated that the rigour associated with contracts and commercial terms in BC Hydro's recent calls for energy and capacity can be onerous for smaller IPP projects. Consequently, BC Hydro has promised to develop a separate contracting process for smaller IPP projects.

228.1 How do the terms and requirements in BC Hydro's calls for energy and capacity compare with similar calls for energy and capacity made by other utilities in Canada and the United States?

228.2 What changes are contemplated by BC Hydro in order to accommodate the smaller IPP's?

229.0 Reference: REAP, p. 5, Section 3.1, Heritage Contract Resources

BC Hydro states that it will implement the Heritage Contract Accountability Framework between BC Hydro Distribution and BC Hydro Generation.

Please provide an explanation of the Heritage Contract Accountability Framework.

230.0 Reference: BCOAPO IR No. 1.23.0b

In the foregoing response, please clarify if BC Hydro assumed a change in load from the forecast and if so the extent to which the load was assumed to change.

In a similar format to the reply to the above IR, please show an illustrative example for F2006 for a higher and lower than forecast load scenario. Please provide an additional column which adjusts the forecast domestic cost of energy and domestic energy volumes for the load variations (hold other variables such as forecast prices constant and water inflows constant but not necessarily reservoir levels or supply resource mix constant). Please explain all assumptions regarding changes in the volumes of energy from various sources (i.e., Hydro Generation or Market purchases etc.).

231.0 Reference: REAP filing

231.1 Does BC Hydro anticipate that approval of REAP will imply that the Capital expenditures listed in the Revenue Requirements Application for F2005 and F2006 are similarly approved?

231.2 Does BC Hydro intend to bring any of those expenditures before the Commission as CPCN filings. If so, please identify what projects these would be and explain the rationale why CPCN applications will be filed for these projects. Please also explain the criteria for projects which would not require a filing.

231.3 For non Revenue Requirements years what is BC Hydro's intention for CPCN filings (i.e., what projects would BC Hydro anticipate would require a CPCN filing)?

231.4 With respect to forecast contracted energy purchases please confirm that these Energy Supply Contracts will be filed pursuant to section 71. In BC Hydro's view, does approval of the REAP filing mean that the amount, cost, and criteria for these purchases are similarly approved to 2008?

232.0 Reference: BCUC IR No. 1 Q. 97.1

232.1 Please provide guidelines as to what constitutes “in-scope” versus “out-of-scope” services.

- a) What factors determine whether guaranteed savings will apply to services provided by ABS for “in-scope” versus “out-of-scope?”
- b) Provide a list of out-of scope services for volume and non-volume based as per the table below:

Out of Scope Services

	F2004		F2005		F2006	
	Costs	Guaranteed Savings	Costs	Guaranteed Savings	Costs	Guaranteed Savings
Volume Based						
Non-Volume Based						

232.2 Per BC Hydro response “For non-volume based services, Additional Services and New Services each will be negotiated at the time, and if expected savings are not offered, BC Hydro has the right to obtain these services elsewhere, provided the Minimum Aggregate Spend is maintained.”

- a) Please explain the conditions and terms of maintaining the Minimum Aggregate Spend before BC Hydro can obtain alternative service provider.
- b) Please explain the terms and termination rights if BC Hydro obtain alternative service provider for services in part or whole that are currently provided by ABS.