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VIA E-MAIL
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May 9, 2005

BCH 2005 REAP Exhibit A-3

Mr. Richard Stout
Chief Regulatory Officer
British Columbia Hydro and Power Authority
17th Floor, 333 Dunsmuir Street
Vancouver, B.C. V6B 5R3

Dear Mr. Stout:

Re: British Columbia Hydro and Power Authority ("BC Hydro")
Resource Expenditure and Acquisition Plan ("REAP")

Attached please find Commission Information Request No. 2 to BC Hydro. Please provide a hard copy and an e-mail file in response. Please include a fully functional Excel spreadsheet wherever there is a request for a numerical calculation. Pursuant to Commission Letter No. L-28-05, BC Hydro is requested to respond by Friday, May 27, 2005, along with its proposal of issues for the Oral Hearing process.

Yours truly,

Original signed by:

Robert J. Pellatt

JWF/rt
Enclosure
cc: Registered Intervenors

75.0 Reference: Exhibit B-2, Response to BCUC IR 1.2.3.1; 1.71.0
DSM Expenditures for F2005

The responses explain that the discrepancy in DSM Expenditures is because one figure is a year-end forecast whereas the other is a planned expenditure.

Please provide the actual F2005 DSM expenditures as well as the actual net incremental electricity savings for energy efficiency and LD programs.

76.0 Reference: Exhibit B-2, Response to BCUC IR. 1. 2.4.3

BC Hydro's response states that $3.4 million of the increase in DSM expenditures between the 2004 REAP and the 2005 REAP is due to increases in the residential sector and non-load displacement elements of the industrial sector that are partially offset by decreases in the commercial sector and portfolio level costs.

Please describe material changes in the programs and costs in these various sectors and cost categories that result in the $3.4 million increase.

77.0 Reference: Exhibit B-2, Response to BCUC IR 1.2.4.4, pp.1, 2

The table in the response shows that the net incremental electricity savings for F2005 and F2006 are 147 GWh and 371 GWh respectively, and the expenditures for the same period are $18.2 m and $47.6 m respectively.

77.1 Whereas the electricity savings can be cross-referenced to Table 4-8 in the 2005 REAP, the expenditures cannot be found in that table. Please provide the x-reference for the expenditures.

77.2 Given that the actual DSM capital expenditures in F2005 were only 73 percent of planned expenditures, please comment if this variance would have any bearing on the forecasts for F2006 and F2007. If so, by how much? If not, why not.

77.3 Please provide a breakdown for the expenditures that constitute "sector enabling activities", and describe the over or under expenditures against the F2005 budget for elements in that breakdown.

78.0 Reference: Exhibit B-2, Response to BCUC IR 1.69.0; IR 1.2.5; IR 1.74.2

The response states that BC Hydro decided that the concern addressed by the IRR test was being adequately addressed by a by a broader competitive process and a RIM test as a price cap. Therefore the two-year simple payback criterion has been maintained.

78.1 If the IRR had remained in place and the simple payback criterion had not been revived, how many load displacement programs and how much of their associated GWh for F2006 and F2007 in the 2005 REAP would not have passed the screening tests?

78.2 The response to IR 1.2.5 states that there is an increase of $10.8 million in the LD program between the 2004 RRA and the 2005 REAP.

Please confirm that in both instances, the simple payback criterion rather than the IRR cap was used as the screening test.

78.3 BC Hydro's response to BCUC Information Request No. 1, question 2.5 states that an increase of 19.1 million in planned DSM capital expenditures in F2007 between the 2004 RRA and the 2005 REAP is the result of an increase of $27.1 million in the industrial sector and offsetting decreases of $5.5 million, $0.3 million, and $2.1 million in the commercial and residential sectors and portfolio-level costs, respectively. It further states that changes in sector totals are due to new information on program performance and electricity savings potential.

Please summarize the new information on program performance and electricity savings potential, the resulting changes on the PowerSmart Partners, Load Displacement and commercial sector programs, and the impact of those changes on planned sector costs.

79.0 Reference: Exhibit B-2, Response to BCUC IR 1.6.0

79.1 Please supply the levelized cost of energy for the Strathcona Turbine Upgrade Project, the Ash Turbine Upgrade Project, and the Seven Mile Turbine Upgrade Project to whatever accuracy currently exists in the identification phase.

79.2 BC Hydro has stated that the Strathcona and Ash Turbine Upgrades were deferred because of higher priority work.

Please describe the work that was done instead of these projects and how the priorities were reassigned.

79.3 Please provide the analysis that led to the deferral of the Seven Mile Turbine Upgrades project. Please include all costs and benefits identified as well as monthly outage costs for units 1 to 3. How long does a major overhaul take to complete in comparison to a turbine replacement?

80.0 Reference: Exhibit B-2, Response to BCUC IR 1.8.0

Please file a copy of the report when it is complete.

81.0 Reference: Exhibit B-2, Response to BCUC IR 1.9.1; IR 1.9.4

The frequency distribution table in the response shows that the number of accounts with annual consumption of over 24,000 kWh/year is 183,043 or over 12 per cent of total accounts.

81.1 Given that the average consumption per account for 2004/05 for all residential accounts is 10,610 kWh per year, what is the frequency distribution for annual consumption that is over five times the average?

81.2 The response states that high consumption households are not surveyed or researched. What is the cutoff point in residential annual consumption when BC Hydro decides not to survey or research these households?

81.3 In the RRA hearing, BC Hydro provided evidence that it has conducted a business case on an "Aerial Patrol and Surveillance Enforcement (APSE) Program" dated September 10, 2003 whose purpose is to bring substantial financial and strategic values in support of the utility's triple bottom-line objectives. Please comment on the status of this initiative.

81.4 What level of effort is required to provide a distribution curve of the annual energy consumption of residential accounts on a per-feeder basis?

82.0 Reference: Exhibit B-2. Response to BCUC IR 1.68.1; IR 1.68.2

The responses show that costs are discounted at a nominal rate of 8 per cent.

82.1 Please confirm if there has been any recent change in corporate policy with respect to the discount rate used. Is the nominal rate of 8 per cent used in the calculation of TRC and UC for 2005 REAP the same as the rates used in the RRA hearing or the 2004 IEP (X-ref: 2004 IEP, Part 3, Appendix B, p.B-18)?

82.2 If the discount rate used in this 2005 REAP is different from that used in the RRA hearing, what is the impact of this change on total resource costs?

82.3 If the discount rate used in this 2005 REAP is different from that used in the RRA hearing, what is the impact of this change on benefit-cost ratios?

83.0 Reference: Exhibit B-2, Response to BCUC IR 1.65.2

For the record, please provide a copy of the milestone evaluation summaries for the six energy efficiency DSM programs that BC Hydro filed with the Commission on April 7, 2005.

84.0 Reference: Exhibit B-2, Response to BCUC IR 1.11.1; IR 1.11.2; IR 1.11.3

84.1 Is it possible to upgrade one of the existing units at Revelstoke to have similar efficiency as Revelstoke 5?

84.2 If so, how much of the 120 GW.h of firm energy associated with Revelstoke 5 can be captured by upgrading one of the existing units?

84.3 Please provide a schedule with key milestone dates for the Revelstoke 5 project.

85.0 Reference: Exhibit B-2, Response to BCUC IR 1.13.0

Using the method outlined in the response to BCUC Information Request 1.13.0, please provide an estimate of the unit cost of energy and capacity for Revelstoke 5. Please show the calculation and assumptions used in the developing the estimates.

86.0 Reference: Exhibit B-2, Response to BCUC IR 1.14.0

Please provide a copy of all materials distributed by BC Hydro at the March 31, 2005 meeting and a list of the participants at that meeting.

87.0 Reference: Exhibit B-2, Response to BCUC IR 1.15.2 (attachments) and IR 1.32.1

87.1 Please describe the category of accuracy as identified in the response to BCUC IR 1.32.1 (Identification, Definition, and Implementation) associated with the "Feasibility" study costs provided in the attachments to the response to BCUC IR 1.15.2.

87.2 Please describe the level of accuracy Feasibility Studies are expected to provide relative to the classifications identified in the response to BCUC IR 1.32.1.

88.0 Reference: Exhibit B-2, Response to BCUC IR 1.4.3 page 2, and 1.17.1

The table provided in the response to BCUC Information Request No. 17.1 indicates that the total change in peak demand forecasts between 2004 and 2003 is 282 MW.

Please confirm that the response to question 17.1 includes the impact of the Weyerhaeuser LD project. If that is not the case, please reconcile this with the response to Information Request No. 4.3. If so, please amend footnote (6) accordingly.

89.0 Reference: Exhibit B-2, Response to BCUC IR 1.30.0

89.1 Please provide the vehicle capital expenditures for F2002, F2003 and F2004 as well as the number of vehicles in the fleet from F2002 to F2007.

89.2 Please provide the average age of vehicle in the fleet on an annual basis for F2002 to F2007.

90.0 Reference: Exhibit B-2, Response to BCUC IR No. 1.32.3

In its response to question 32.3 BC Hydro states that it would make a CPCN application if total project cost is expected to exceed $50 million as the rate impact of any individual project smaller than that would not normally be sufficiently material to require an application.

90.1 What would be the percentage increase in BC Hydro's revenue requirement that would result from a $50 million capital expenditure?

90.2 How is total project cost defined? If a project had a total capital cost of less than $50 million, but an NPV cost greater than $50 million because of fuel or operating costs, would that project exceed BC Hydro's threshold for a CPCN?

91.0 Reference: Exhibit B-2, Response to BCUC IR 1.32.4.2

BC Hydro states in its response to IR 1.32.4.2 that:

> "BC Hydro is also requesting the BCUC to remove the following conditioning that the BCUC placed on BC Hydro's capital expenditures in the 2004 RRA Decision:
>
> > "Capital expenditures contemplated in the REAP beyond the first quarter of F2006 are also subject to a Commission decision on the February 2005 REAP." [RRA Decision page 124]
>
> In this latter case, BC Hydro is requesting that the capital expenditures for F2006 that were included in the 2004 RRA be updated with the capital expenditures presented in this REAP."

To clarify, if the Commission approves the capital expenditures presented in BC Hydro's March 2005 REAP, is it not, by so doing, updating the capital expenditures included in the 2004 RRA and removing the conditioning from the RRA quoted above? If not, what else is required and why?

92.0 Reference: Exhibit B-2, Response to BCUC IR 1.34.2

92.1 Please provide a detailed description of the site logistical constraints and opportunities associated with keeping an assembled or semi-assembled stator on-hand following the replacement of Mica G3 and G4 stators, and delaying the replacement of the G1 and G2 stators.

92.2 Please provide the forecasted monthly outage costs for an outage of Mica G1 or G2 in F2009 and F2010.

92.3 Please provide a detailed description of the site logistical constraints and opportunities associated with keeping an assembled or semi-assembled stator on-hand following the replacement of GM Shrum G3 and G4 stators, and delaying the replacement of the G1 and G2 stators.

92.4 Attachment A to BC Hydro's response to BCUC Information Request 34.2 provides an updated Risk Evaluation related to the Mica G1 to G4 stators.

Please provide a further description and clarification of the assumptions and timing of events that underlie the risk assessment.

93.0 Reference: Exhibit B-1, page 3-56 and Exhibit B-2, Responses to BCUC IR 1.38.0; IR 1.51.0

Please provide the levelized cost of energy for the Unit 1 upgrade at Cheakamus, and the projected levelized cost of energy for the Cheakamus Unit 2 upgrade.

94.0 Reference: Exhibit B-2, Response to BCUC IR 1.40.2

Please provide a summary of the 43 transformer failures experienced by BC Hydro, the age at which they failed, and indicate which transformers, if any, were repaired.

95.0 Reference: Exhibit B-2, Response to BCUC IR 1.40.3

BC Hydro's response states that an oil containment system for the transformers at GM Shrum was completed in 1998.

Are oil containment systems currently in place for the transformers at all other generating stations? If not, what is the timeline planned, if any, to have such oil containment systems in place at all other generators?

96.0 Reference: Exhibit B-2, Response to BCUC IR 1.51.0

96.1 Please provide a detailed schedule, including key milestones, for the Aberfeldie Redevelopment.

96.2 Please identify the final opportunity to choose between the 24 MW redevelopment option and the 28MW redevelopment option.

97.0 Reference: Exhibit B-2, Response to BCUC IR 1.54.2

97.1 Please provide a description of the costs that make up "Capitalized Overhead", and how these costs are allocated.

97.2 Please provide the total amount of "Capitalized Overhead" in F2004, F2005, F2006 and F2007.

98.0 Reference: Exhibit B-2, Response to BCUC IR 1.59.0

The change in expenditures for Beautification and UEA is much greater than 5% for both F2005 and F2006.

98.1 Please provide Beautification and UEA expenditures for the last five years.

98.2 What is the reason for the significant increase in Beautification and UEA expenditures between the 2004 RRA and the 2005 REAP?

99.0 Reference: Exhibit B-2, Response to BCUC IR 1.62.1; IR 1.62.2

99.1 Please provide the age distribution for BC Hydro population of distribution transformers.

99.2 What is the median age of distribution poles for condition-related replacements?