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BCH 2005 REAP – Exhibit C2-2

May 6, 2005

VIA E-MAIL

Robert J. Pellatt
Commission Secretary
BC Utilities Commission
Sixth Floor - 900 Howe Street
Vancouver, BC V6Z 2N3

Re: British Columbia Hydro and Power Authority Resource expenditure and acquisition Plan Application ("REAP")

Enclosed please find BCOAPO's Information Requests in the above noted matter.

Yours sincerely,

BC PUBLIC INTEREST ADVOCACY CENTRE

ORIGINAL IN FILE SIGNED

Jim Quail
Barrister & Solicitor

c: Intervenors

BC HYDRO 2005 REAP
INFORMATION REQUESTS
ON BEHALF OF BCOAPO ET AL.

Question #1 – Capital and DSM Expenditures Comparison

Reference: BCH's 2005 REAP – Chapter 3, page 3-2, Table 3-1
BCH's 2004 REAP, page 2, Table 1
BCUC IR 1.2.4.4

Question:

1.1 Please revise the F2005 values presented in 2004 REAP – Table 1 in order to exclude Transmission Lines and Substations but to include Substation Distribution Assets (i.e., use a presentation similar to that of Table 3-1 in the 2005 REAP).

1.2 Please also include in the Table requested in part (1.1), the actual F2005 Capital and DSM expenditures broken down in a similar format.

Question #2 – F2005 DSM Capital Expenditures

Reference: BCH's 2005 REAP – Chapter 4, page 4-18, Table 4-5 and Appendix A, page 12, Table 5 and Chapter 3, page 3-2, Table 3-1
BCUC IR 1.2.3.1
BCUC IR 1.2.4.4
2004 REAP, page 2, Table 1
2004 RRA, Appendix I, Table 4.5

Question:

2.1 Please explain what each of the following F2005 DSM expenditure values represents and why the various values are different:

- Those reported in response to BCUC IR 1.2.4.4 (2005 REAP value of $97.7 M and an Actual F2005 value of $71.1 M);
- The two values discussed in the response to BCUC IR 1.2.3.1 (Year-end forecast value of $55.9 M and a Planned expenditure of $74.7 M);
- The planned F2005 values of $106.1 M (including load displacement) and $77.3 M (excluding load displacement) as per the 2004 RRA – Appendix I
- The planned F2005 value as per the 2004 REAP of $105 M; and
- The forecast value of $77 M reported in Table 3-1 of the 2005 REAP.

Question #3 – Load Forecast Changes

Reference: BCH's 2005 REAP – Chapter 2, pages 2-8 & 2-9 and Appendix D, pages 9-12
BCUC IR 1.9.1

Question:

3.1 For the Residential sector please provide:

- The weather normalized historical use per account for last ten years
- A schedule comparing the use per account assumed in the December 2004 Forecast and the October 2003 Forecast for the period F2004 through F2024
- A schedule comparing the number of residential accounts assumed in the December 2004 Forecast and the October 2003 Forecast for the period F2004 through F2024.

3.2 For the Commercial and Industrial sectors please provide:

- The GDP forecast assumed in the December 2004 Forecast and the October 2003 Forecast for the period F2004 through F2024.
- The actual consumption levels for 2003/04 for each sector as compared to the consumption levels forecasted in the October 2003 Forecast.

3.3 Please provide a schedule comparing the GDP forecast used in the December 2004 Forecast with any other 3rd party forecasts of GDP available to BC Hydro.

Question #4 – Impact of DSM on Load Forecast

Reference: BCH's 2005 REAP – Chapter 4, page 4-5 and Appendix D, pages 16 & 18
BCUC IR 1.4.7
BCUC IR 1.7.1

Question:

4.1 Please confirm that, as per the response to BCUC 1.7.1, the Power Smart values referred to in BCUC 1.4.7 include both energy efficiency and load displacement.

4.2 Please reconcile the statement on page 4-5 regarding 2,501 GWh of DSM savings per year in F2007 with the Power Smart saving of 1,662 GWh projected shown for F2007 in both Appendix D and BCUC 1.4.7.

4.3 Please reconcile the statement on page 4-5 that there is an increase of 387 GWh per year savings for F2007 in the current 2005 REAP as compared to the 2004 RRA with the results shown in BCUC 1.4.7 where a decrease of 157 GWh (i.e., 1819 – 1662) is reported for F2007 from the October 2003 Forecast to the December 2004 Forecast.

Question #5 – Supply/Demand Balance

Reference: BCH's 2005 REAP – Chapter 2, pages 2-16 & 2-17, Charts 2-3 and 2-4 and Appendix F
2004 Integrated Electricity Plan, Part 2, pages 39 & 40, Tables 6.1 and 6.2
2004 REAP, page11, Table 3
BCUC IR 1.36.0

Question:

5.1 Please provide the replicate Appendix F but based on the 2004 REAP as approved by the BCUC.

5.2 Please provide a table contrasting the annual Heritage Resources (energy and capacity) resources reported in Appendix F with the values reported in the 2004 IEP – Tables 6.1 and 6.2 and reconcile the differences through to 2015.

5.3 Please provide a schedule contrasting the annual resources (energy and capacity) attributable to existing EPAs in Appendix F with the values reported in the 2004 IEP – Tables 6.1 and 6.2 and reconcile the differences through to 2015.

5.4 Please reconcile the value for existing Resource Smart reported in Appendix F (266 GWh for all years) with the Power Resource values reported in the 2004 IEP – Tables 6.1 and 6.2.

5.5 What specific projects account for the difference between the committed new Resource Smart supply reported in the 2005 REAP (i.e., 266 GWh) and the committed Resource Smart supply reported in the 2004 IEP (i.e., 185 GWh for F2005 and 208 GWh thereafter)?

5.6 Please confirm whether the energy supply values reported in Appendix F for hydro-related resources (excluding the Heritage Energy) are based on "average energy" or "firm energy" – per the definitions provide in BCUC 1.36.0.

5.7 The supply/demand balance set out in Appendix F shows a surplus through to F2010 even prior to the inclusion of the planned Resource Smart projects and the F2006/F2007 Calls. Please discuss the "value" of additional resources acquired prior to F2011 (i.e., Is there an opportunity to reduce purchases from existing EPAs and at what savings? Is there an opportunity to export the surplus and at what value to ratepayers?).

5.8

Question #6 – Resource Smart Projects

Reference: BCH's 2005 REAP – Chapter 2, page 2-15 & 2-24 and Appendix F
2004 Integrated Electricity Plan, Part 2, page 39 & 40, Tables 6.1 and 6.2
BCUC IR 1.6.0

Question:

6.1 Please provide a schedule setting out the Resource Smart projects that were included in the 2004 IEP that contributed to the additional planned supply through to F2015. For each project, please identify the timing and increased supply capability (energy and capacity).

6.2 Please provide a schedule of all Resource Smart Projects included in the 2004 REAP and the annual capital expenditures on each for F2004 through F2006.

6.3 Apart from those listed in response to BCUC 1.6.0, are there any other Resource Smart projects that were included in the 2004 REAP and potentially added to supply capability over the next 10 years but have been deferred/dropped in the 2005 REAP? If so, please identify the projects, discuss why they were deferred/dropped and the increase in supply capability associated with each.

6.4 Please provide schedule listing all Power Smart projects identified in the 2004 IEP, Part 3 for which the current levelized unit price of energy is estimated or expected to be less than $55/MWh ($2006). For each project not included in Table 2-5 of the 2005 REAP, please provide an explanation as to why it is not being pursued at this time.

Question #7 – Load Displacement Projects

Reference: BCH's 2005 REAP – Chapter 2, page 2-21 & 2-22
BCUC IR 1.12.1

Question:

7.1 Please confirm that it is self-generation projects that do <u>not</u> meet the criteria set out in response to BCIC 1.12.1 that are considered to be LD projects and explain why.

7.2 Please provide the levelized unit cost ($2006) of the 524 GWh of Load Displacement achieved/committed to date.

Question #8 – Supply Side Energy Calls

Reference: BCH's 2005 REAP – Chapter 2, pages 2-21 to 2-24 and Appendix F

Question:

8.1 Is the 200 GWh of energy to be acquired through the F2006 Call from small distribution-connected IPPs considered firm or non-firm energy for purposes of supply planning?

Question #9 – Contingency Plan

Reference: BCH's 2005 REAP – Chapter 2, page 2-41; Appendix D, pages 27-28 and Appendix F

Question:

9.1 Please provide schedule setting out the projected supply/demand balance (similar to Appendix F) but with Demand based on the High Scenario as described in Appendix D. For purposes of preparing the schedule, please assume the same DSM reductions as in the 2005 REAP.

9.2 Please indicate what actions could be taken to address any supply/demand deficiencies through to F2014 and when such actions would have to be initiated?

Question #10 – Acquisition Plan

Reference: BCH's 2005 REAP – Chapter 2, pages 2-45 to 2-49

Question:

10.1 In the BCUC's RRA Decision (page 118) it was noted that the expected timing of the proposed call for 400 GWh was Q4 2004. Why has the approved call not proceeded before now?

Question #11 – Capital Spending Approvals

Reference: BCH's 2005 REAP – Chapter, page 3-4
BCUC IR 1.32.4.2

Question:

11.1 BC Hydro states that it is seeking the Commission's approval that capital expenditures on these projects are in the public interest rather than approval of a precise expenditure. Does this mean that BCH can not proceed with a project that

is not specified in the 2005 REAP without first requesting the Commission's approval that the project was in the public interest?

11.2 Does BCH agree that for the BCUC to determine that a project is in the "public interest" there may have to be some consideration given to the project's cost? If not, why not? If yes, would it be appropriate for the BCUC to assign ranges of acceptable spending to individual or groups of projects?

Question #12 – Capital Expenditures – Generation LOB

Reference: BCH's 2005 REAP – Chapters 3.3 to 3.9
BCUC IR 1.51.0 & 1.52.0
BCH RRA – Sierra Club Supplemental IR 2.24.0
BCH Stepped Rate Application, page 1-9

Question:

12.1 Please explain the relationship between the projects and capital expenditures reported for Generation-Hydro Growth (page 3-8) and the planned Resource Smart capital expenditures (pages 2-19). Are they equivalent? If not, please explain the difference between the two both in terms of the projects included in each and the associated spending.

12.2 Please provide the reference to the 2004 REAP where the Cheakamus – Turbine Upgrade project is described (pages 3-24 and 3-56).

12.3 Please explain the difference between the Cheakamus Generator Replacement project (page 3-26) which could yield a 11%-15% gain in capacity and the Cheakamus Turbine Upgrade project (page 3-56) which could yield a 5% efficiency improvement. Why is one considered a sustaining investment and the other a growth investment?

12.4 Please reconcile the F2007 value for the cost of new energy supply ($55.01/MWh) reported in BCUC 1.52.0 with the F2007 value used in the Stepped Rate Application ($53.87 / MWh) – as both are reportedly based on the 2002/03 GPG Call.

12.5 What is BCH's estimate as to the unit cost (i.e., $/kW) of new capacity supply, what is it based on and how does it compare with the estimated unit costs for the GM Shrum Capacity increase ($16/kW/year – page 3-57) and the Revelstoke – Unit 5 project ($21/kW/year – page 3-62)?

12.6 BCH states that the Mica Turbine upgrade is economically attractive (page 3-61). What is the estimated unit costs ($/kW/year) for this project?

Question #13 – Capital Expenditures – Distribution LOB

Reference: BCH's 2005 REAP – Chapter 3.11
BCH 2004 REAP – page 2, Table 1
BCH RRA – page 11-2 (Revision 2)
BCUC IR 1.57.0 & 1.58.3

Question:

13.1 Please provide a schedule that reconciles the Distribution capital expenditure totals as submitted in the 2004 RRA ($207 M and $216 M for F2005 and F2006 respectively) with the Distribution capital expenditures reported for the 2004 RRA on page 3-67 of the current Application($181.4 M and $191.9 M).

13.2 Please confirm that SDA spending for F2005 ($23 M) and F2006 ($62.5 M) is unchanged from the 2004 RRA (see page 1-3) to the 2005 REAP (see page 3-64).

13.3 Please provide a schedule comparing the annual new customer additions for F2005 through F2007 assumed in the 2005 REAP (page 3-73) with the new customer additions assumed in the 2004 RRA/2004 REAP.

13.4 Please describe how "available funding" is established for purposes of funding uneconomic extensions (e.g., is there a set budget established for UEA each year or does the amount depend on other demand for capital?).

13.5 Please confirm whether the $2 M cut off used to determine the projects that were included in Table 3-21 (and similar tables elsewhere in the Application) is based on total project costs or total spending to F2007. If the cut-off is based on total project costs, why isn't the CRM project specifically listed in Table 3-21?

Question #14 – Demand Side Management

Reference: BCH's 2005 REAP – Chapter 4 and Appendix D
BCH 2004 REAP – page 2 – Table 1
BCH RRA – page 11-2 (Revision 2) and Appendix I – Tables 4.1 & 4.5

Question:

14.1 Please reconcile the difference between the 2004 RRA capital expenditures for DSM reported on page 4-2 of the current Application ($95 M for F2006M) with the DSM capital spending reported in Table 11.2 of the 2004 RRA Application ($94 M for F2006). Is the difference just attributable to rounding?

14.2 Please provide a schedule setting out the Power Smart Savings included in the 2004 Load Forecast for Gross Energy for the years F2006 to F2009, F2011 and F2014 and provide the relevant cross references to Appendix D of the Current

Application. Please also include in the same schedule the projected DSM savings per the 2005 REAP (i.e., Energy Efficiency plus Load Displacement) and explain any differences between the two set of values.

14.3 Please provide a schedule setting out BCH's annual Costs for DSM (with Energy Efficiency and Load Displacement shown separately) for F2003 through F2012 based on the 2005 REAP (i.e., incorporate the annual expenditures on Load Displacement in Chapter 4, Appendix A, Table 5).

14.4 With regard to the criteria for those programs with a RIM benefit cost ratio below 0.8, is it BCH's view that the program only has to meet one of the listed criteria (page 4-21) in order to justify its continuation?

14.5 Please confirm that the BC Hydro costs set out in Chapter 4, Appendix A, Table 5 and Appendix C, Table 1 represent only capital expenditures for DSM and do not include OMA costs.

14.6 Do the results of the energy efficiency cost tests presented in Table 4-6 (page 4-19) include both BCH's capital and OMA expenditures on DSM programs?

Question #15 – Energy Efficiency Plan

Reference: BCH 2005 REAP – Chapter 4 – Appendix A
BCH 2005 REAP – Appendix F

Question:

15.1 Please provide the BC Hydro September 2004 electricity price forecast which was used to value energy savings (Appendix A - page 1).

15.2 Please provide a schedule contrasting BCH's electricity price forecast for F2005 through F2012 with the average weighted price for BC Hydro's 2002/03 call of r green energy supply (Appendix A - pages 1 and 4).

15.3 Please explain why it is reasonable to assume that the electricity price forecast reflect "the electricity supply cost that is avoided due to DSM" (Appendix A - page 1).

15.4 BCH states that the change in practice where by electricity savings are now valued using BC Hydro's electricity price forecast was made "to align with BC Hydro resource planning practice" (Appendix A - page 4). Please provide the reports or references that outline "BC Hydro's resource planning practices" and explain why the use of electricity price forecast to value electricity savings is better aligned with this practice.

16.1 Similarly, please explain why use of “zero” as the avoided greenhouse gas regulatory costs is better aligned with BC Hydro’s resource planning practice (Appendix A - page 4).