

BRITISH COLUMBIA UTILITIES COMMISSION
GSX Concerned Citizens Coalition Information Request No. 1 to BC Hydro
December 8, 2004
BC Hydro Vancouver Island Call for Tenders/Electricity Purchase Agreement Review

1.0 Reference: CFT Report, p.1, lines 18-23

- 1.1 Please confirm that “the ageing transmission system through which 80% of the Island’s electricity requirements are delivered” is not *all* planned to be zero-rated in 2007.
- 1.2 Please specify how many MWs of reliable capacity will be eliminated when the HVDC line is zero-rated, and at what date.
- 1.3 Please confirm that BC Hydro intends to keep the HVDC line in service during and after it is zero-rated.

2.0 Reference: CFT Report, p.1, lines 25-27, and lines 11-12

- 2.1 Please reconcile the statement that the 1994 examination of Vancouver Island’s electricity supply and demand addressed “demand-side resources” (as well as supply-side resources) with the statement that “the economic consequences of load shedding, other than in exceptional circumstances, are not acceptable.”

3.0 Reference: CFT Report, p.1, lines 27-30

- 3.1 Please confirm that the electrical generation facility recommended by the 1994 process was a co-generation facility, whereas the proposed Duke Point Power plant is not a co-generation facility.

4.0 Reference: CFT Report, p.2, lines 1-9

- 4.1 Please specify for the proposed Duke Point Power plant each of the corresponding descriptions provided for the proposed VIGP.

5.0 Reference: CFT Report, p.2, lines 26-27

- 5.1 Please confirm that BC Hydro expects the Commission to approve or disallow the EPA (or part of it), in the course of reviewing the EPA.

6.0 Reference: CFT Report, p.2, line 28, “competitive and transparent CFT process”

- 6.1 Please confirm that BC Hydro’s description of the CFT process as being “transparent” (here and elsewhere in the CFT Report) is intended to mean that the CFT process was transparent to the participating bidders, as distinct from being transparent to the public.

7.0 Reference: CFT Report, p.25, lines 3-4.

Preamble: The Commission Panel stated the following on November 20, 2004:

The issue as to whether or not B.C. Hydro conducted the CFT in accordance with its terms is not an issue for this review. And the independent reviewer need not be called in this proceeding. [Transcript, Vol.2, p.314, lines 11-14]

- 7.1 To what extent, if any, has the Commission’s statement, quoted above, changed BC Hydro’s position that “the central issue now before the Commission is whether the [CFT] process was fair, transparent and appropriate to reach a solution in the best interests of ratepayers”?

8.0 Reference: CFT Report, p.7, “EPA amended to allow for a minimum 90-day period for a BCUC hearing”; Appendix N, s.3.1 “Regulatory Review Termination”

- 8.1 Please confirm that BC Hydro would not suffer any financial penalty pursuant to the EPA if the Commission were to disallow all or part of the EPA.
- 8.2 If the answer to the previous question is in the negative, please identify any provisions of the EPA pursuant to which BC Hydro might incur a financial penalty if the Commission were to disallow all or part of the EPA.

9.0 Reference: CFT Report, p.7, lines 5-8

- 9.1 Please list the factors causing the Quantitative Evaluation Methodology to “favour[...] projects aggregating at the minimum portfolio size (150 MW) relative to those aggregating at the maximum portfolio size (300 MW).”

10.0 Reference: CFT Report, p.8, lines 10-18

- 10.1 How many bidders accounted for the “6 VIGP projects” among the 22 projects that were pre-qualified?
- 10.2 Please confirm that 20 of the 22 projects proposed by pre-qualified bidders were natural gas based.

- 10.3 Please list the respective capacities in MWs of the 22 projects.
- 10.4 How many projects did Duke Point Power (or corporate affiliates) propose?
- 10.5 Please state the reason for disqualification of the bidder of the coal plant, the bidder of the wind farm, and the bidder of the biomass/coal plant, respectively.

11.0 Reference: CFT Report, p.8, lines 22-26

- 11.1 For how many proposed projects did the nine pre-qualified bidders provide detailed descriptions?
- 11.2 How many of the proposed projects at this point were natural gas based?
- 11.3 How many of the proposed projects at this point were VIGP projects?
- 11.4 How many bidders accounted for the VIGP projects at this point?
- 11.5 Please list the respective capacities in MWs of the proposed projects at this point.
- 11.6 What is BC Hydro's understanding of the reason(s) why two of the pre-qualified bidders did not provide detailed project descriptions?

12.0 Reference: CFT Report, p.8, lines 28-34, p.9, lines 1-2

- 12.1 What is BC Hydro's understanding of the reason(s) why three of the pre-qualified bidders which had provided detailed project descriptions did not submit tenders on August 13, 2004?
- 12.2 Of the ten proposed projects for which BC Hydro received tenders on August 13, 2004, how many were natural gas based?
- 12.3 After two bidders proposing three projects were rejected due to non-compliance, how many of the proposed projects for which tenders were received were natural gas based?
- 12.4 Please confirm that at this point there were four tenders from four bidders proposing a total of seven projects.
- 12.5 Of these seven projects, how many were natural gas based?
- 12.6 Of these seven projects, how many were VIGP projects?
- 12.7 How many bidders accounted for the VIGP projects at this point?

13.0 Reference: CFT Report, p.9, lines 3-10

- 13.1 Please reconcile the reference to “all four tenders comprising 6 projects” with the previous paragraph which refers to ten projects of which the bidders of three were disqualified (apparently leaving seven projects).
- 13.2 If one project did not pass the Submission Evaluation Committee (SEC) assessment, please provide the reason why it did not pass.
- 13.3 Of the six projects which passed the SEC assessment, how many were natural gas based?
- 13.4 Of the six projects which passed the SEC assessment, how many were VIGP projects?
- 13.5 Of the six projects which passed the SEC assessment, how many were proposed by Duke Point Power (or corporate affiliates)?

14.0 Reference: CFT Report, p.9, lines 24-27

- 14.1 Does BC Hydro consider that the Quantitative Evaluation Methodology has met the Commission’s request that it “use assessment models which can be made public so that the various components and assumptions can be assessed and tested by intervenors”?

15.0 Reference: CFT Report, pp.9-10, Appendix H, QEM, CFT Report, p.13, lines 1-2

- 15.1 Please clarify BC Hydro’s use of the term “tender.” The CFT Main Report appears to use “tender” in the sense that one bidder submits one tender that may include more than one proposed project. The QEM Appendix appears to use “tender” in the sense that one tender corresponds to one proposed project.

16.0 Reference: CFT Report, p.11, lines 23-25; p.12, lines 1-8; and p.13, lines 1-9

- 16.1 How many separate Portfolios were assembled and assessed?
- 16.2 For each Portfolio for which a Portfolio Spreadsheet was run, please provide the number of included projects and the portfolio capacity.
- 16.3 How many of the Portfolios for which a Portfolio Spreadsheet was run contained VIGP projects?

17.0 Reference: CFT Appendix H QEM, p.8

17.1 In one of the two electricity price forecast methods, the Quantitative Evaluation Methodology sets out the defining characteristics of “the most economical resource addition, currently a natural-gas fired, F-series combined cycle gas turbine (CCGT).” Please provide a table showing the values for the Duke Point Power plant in comparison with those of the hypothetical plant described in Appendix H.

18.0 Reference: CFT Report, p.12, lines 18-29

18.1 Please confirm that BC Hydro’s active management of natural gas and electricity price exposure at best allows BC Hydro to mitigate risk due to price fluctuations but does not eliminate BC Hydro’s exposure to long-term rising natural gas prices.

19.0 Reference: CFT Report, p.13, lines 29-32, p.14, lines 1-2

19.1 What is BC Hydro’s explanation of how the Duke Point Power project could be approximately \$50-million less expensive than the VIGP Benchmark?

20.0 Reference: CFT Report, p.14, line 15

20.1 Please confirm that the “two smaller projects totaling 122 MW” were among the six proposed projects for which Net Tender Cost was determined using the Tender Spreadsheet. If not, please explain.

20.2 What are the fuel sources for each of the two smaller projects comprising Tier 2?

21.0 Reference: CFT Report, p.18; Appendix J, Cost Effectiveness Analysis

21.1 What are the specific components of the “No Award” portfolio?

22.0 Reference: CFT Report, p.18, Table 6; Appendix J, Cost Effectiveness Analysis

22.1 What values for capital and operating costs and energy production for each year of the NPV calculation were used under the base case scenario?

22.2 Please confirm that the Tier I and Tier II portfolios for Table 6 include the 230 kV Cable costs.

22.3 Please provide an expanded version of Table 6, showing the NPV of the DPP, Tier 2 and No Award options under the following scenarios:

22.3.1 Mainland generation cost is equal to the average (not marginal) cost of power on the Mainland for each year.

22.3.2 VI Supply Shortfall = 116 MW, as per the BCUC's September 8, 2003, decision, and

22.3.3 Base Case plus DPP COD delayed 1 year.

23.0 Reference: CFT Appendix J, Cost Effectiveness Analysis, p.1

Preamble: The Appendix states:

The Tier 1 winning portfolio also showed a significant saving relative to the VIGP benchmark (\$55 to \$115 million NPV, depending on assumptions made about GHG liability for the benchmark).

23.1 What greenhouse gas liability assumptions were made in calculating the VIGP Benchmark?

23.2 What GHG liability assumptions were reflected in the NPV of the Tier 1 winning portfolio (Duke Point Power plant)?

23.3 Please itemize the financial consequences of the various possible GHG liability assumptions regarding Duke Point Power plant and VIGP.

23.4 Please confirm that choices regarding GHG liability assumptions make a difference of \$60-million in the comparison of the NPV of Duke Power Point Power plant and VIGP.

24.0 Reference: CFT Appendix J, Cost Effectiveness Analysis, p.2

Preamble: The Appendix states:

In addition to the EIA electricity price forecast described earlier, a high gas price forecast scenario (without a corresponding high electricity price) was also developed and analyzed.

24.1 Please confirm that the high gas price without corresponding high electricity price scenario was not applied to the responses to the CFT. If it was not applied, why not?

25.0 Reference: CFT Appendix J, Cost Effectiveness Analysis, pp.4-6

25.1 Please provide the same tables with the addition of a line for '2008 Cable In-Service.'

25.2 Please confirm that the table at the bottom of page 4 indicates that if the 230 kV Cable In-Service date is 2008 and the 2007-08 VI capacity shortfall is 261 MW, then the Tier 2 option (two smaller projects totaling 122 MW) requires no temporary generators.

- 25.3 Please confirm that the third table on page 4 indicates that where the 230 kV Cable In-Service date is 2009, the 2007-08 VI capacity shortfall is 261 MW, and the high gas price/low electricity price scenario is applied, then the Tier 2 option has an NPV \$32-million lower than the Duke Point Power plant and the “No Award” option has an NPV that is \$70-million lower than the NPV of the DPP plant.
- 25.4 Please confirm that the second table on page 4 indicates that where the 230 kV Cable In-Service date is 2009, the 2007-08 VI capacity shortfall is 261 MW, and the cost of generation on the Mainland is assumed to be 10% lower than the cost of generation on Vancouver Island, then the “No Award” option has an NPV that is \$84-million lower than the NPV of the DPP plant.

26.0 Reference: VIEC Application for a CPCN re VIGP

- 26.1 Please file in this proceeding the evidence regarding load forecast filed in the Commission’s VIGP hearing.

27.0 Reference: BCUC Decision September 8, 2003, re VIGP, Table 2.2, p.19, “SUMMARY OF ADJUSTMENTS TO BC HYDRO’S PEAK DEMAND FORECAST”; CFT Report, Appendix I, “Electric Load Forecast, October 2004 Forecast”, Table 11.4 and Table 11.5

- 27.1 Please explain the variances in anticipated VI Power Smart savings between these sources.

28.0 Reference: BC Hydro’s Response to GSXCCC IR 1.1.2 Dated 7 May 2003, VIGP Hearing

- 28.1 Please update table 1.1.2 (b) showing Vancouver Island actual and forecast peaks, transmission losses and temperature adjustments. The revised table should include 2002/03 and 2003/04 actuals, and forecast figures from the October 2004 Forecast, showing associated transmission losses.
- 28.2 If revised historical temperature adjusted figures are not available, please indicate which figures are based on the -4.4 degree design day and which are based on the -3.6 degree design day.

29.0 Reference: BC Hydro Response to BCUC Staff IR 2.26.6 Dated 2 May 2003, VIGP Hearing; and CFT Report Appendix I, October 2004 Forecast, section 11.2.1

- 29.1 Please confirm that the response to IR 2.26.6 accurately portrays the Distribution Peak Guideline Model referenced in the load forecast at 11.2.1 for fifteen planning regions.

- 29.2 Please describe the methodology, including data sources and extent of historical data used, for obtaining the intensity coefficients.
- 29.3 Are the intensity coefficients fixed or variable over the forecast period?
- 29.4 If the intensity coefficients are variable, what is the basis of the coefficient forecast?
- 29.5 If the intensity coefficients are fixed, why are the coefficients expected not to change over the forecast period?
- 29.6 Please describe the methodology, including data sources and extent of historical data used, for obtaining the weather sensitivity coefficients.
- 29.7 Have the weather sensitivity coefficients been updated since May 2003?
- 29.8 What are the forecasted values of SFDHTG, SFDNON, MULTHTG, MULTNON, U35E, and O35E for the first eleven years?
- 29.9 Please describe the methodology for linking population forecasts to the housing stock variables; and the methodology for linking employment and GDP forecasts to the energy variables.
- 29.10 Please describe the methods used by Malatest and Associates to obtain the employment forecast.
- 29.11 Has this forecast been compared with other forecasts of VI employment? If yes, what were the results of the comparison?

30.0 Reference: Load Forecast October 2004, section 11.2.2

- 30.1 Please confirm that title should read “Regional Transmission Peak Forecast.”

31.0 Reference: Load Forecast October 2004, section 11.3; BC Hydro Response to BCUC Staff IR 5.3 in the VIGP hearing

- 31.1 Please confirm that the regressions linking substation peak and temperature for each of 220 substations are rerun annually.
- 31.2 Please confirm that the coefficients for the most recent year by substation are used to obtain the weather normalized peak for each respective substation.
- 31.3 Please confirm that that these peaks in sum are averaged with “top down” peak figures for four regions, to obtain an “anchor” actual figure from which the regional forecast proceeds.

- 31.4 If the regressions are not re-run annually, why not?
- 31.5 What was the effect of this year's "recalibration of load sensitivities" on the VI weather adjusted anchor point?
- 31.6 Does the use of an "anchor point" imply that the equation given in BC Hydro's Response to BCUC Staff IR 5.3 in the VIGP hearing for PK_{it} is used to produce year over year changes to apply to the "anchor" as opposed to absolute values?

32.0 Reference: Load Forecast October 2004, Section 11.1 (3) Substation Peak Forecast (p.71)

Preamble: The report states on p.71, "A discrete substation peak forecast is prepared for each of BC Hydro's 220 substations that reflects trends in historic weather adjusted substation growth rate...". At p.69, the report states "Historical information needs to be re-calibrated to the new design temperatures, so historical rates using the new design temperature are not yet available".

- 32.1 1 Please reconcile these two statements.

33.0 Reference: Load Forecast October 2004, Section 11.1

- 33.1 Which specific years are considered the "most recent 30 years"?
- 33.2 Which specific years were included in the former averaging procedure?
- 33.3 Please provide the actual coldest mean daily temperature for all years and demonstrate the derivation of the -4.4 and -3.6 degree C figures for VI.
- 33.4 Please confirm that, contrary to the statement in paragraph four of section 11.1 (p.69), a change from -4.4 to -3.6 is an increase and not a reduction in design temperature.

34.0 Reference: general

- 34.1 Please describe BC Hydro's contingency plans for meeting a VI capacity shortfall in Winter 2007-08 in the event that DPP is not operational, for whatever reason.

35.0 Reference: general

- 35.1 What is BC Hydro's position as to whether the Environmental Assessment Certificate for VIGP is transferable to DPP?
- 35.2 Please list the First Nations with which VIEC or BC Hydro has agreements regarding VIGP.
- 35.3 Please list any such agreements that have been transferred to DPP.

- 35.4 What is BC Hydro's position regarding the need, if any, for consultation with First Nations regarding the proposed DPP project?
- 35.5 Please discuss the regulatory risk associated with the DPP project.

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