

**VANCOUVER ISLAND – CALL FOR TENDERS**  
**BIDDER REPLY TO BC HYDRO RESPONSES TO BIDDER COMMENTS**

Issue Date: 13 January 2004

**Notes:**

- 1. Addendum 5, issued 15 December 2003, to the BC Hydro Call for Tenders for Capacity and Associated Energy Supply on Vancouver Island, issued 31 October 2003, (as amended, the “CFT”) permitted registered bidders an extended opportunity to reply to BC Hydro’s Responses to Bidder Comments (“BC Hydro Response”) and to submit further comments on the evaluation methodology presented at the Bidders’ Evaluation Workshop held on 06 January 2004, by submitting written replies to BC Hydro by 4:00 p.m. PPT 09 January 2004. This document sets out the full text of all bidder replies and comments submitted by that deadline.**
- 2. By the submission deadline seven registered bidders submitted Bidder Reply/Comment Forms consisting of a Bidder Information Sheet identifying the bidder, and a Reply/Comment Sheet on which the bidder was invited not to identify itself. BC Hydro personnel reviewing and considering bidder replies and comments have had access to the Reply/Comment Sheets only, in order to protect the identity of the bidder submitting each reply or comment.**
- 3. This first column in this document, labelled “Bidder Reply ID #” identifies each reply by a Reply ID # - for example 22CFT01. Each bidder was randomly assigned a number for this purpose, starting at 21, which are the first two digits appearing in the Reply ID #. The Reply ID # also includes identification of the document to which the comment pertains by acronym. CFT means the Call for Tenders, EPA means the Preliminary Form Electricity Purchase Agreement, VTA means the Preliminary Form VIGP Transfer Agreement, VGP means the Vancouver Island Generation Project, and EVA means the CFT evaluation methodology. The final two digits in the Comment ID# are a sequential number assigned to the reply or comment.**
- 4. The second column in this document labelled “Comment ID #” identifies the BC Hydro Response to which the reply is referenced, as provided by the bidder, and the third (and final column) contains the reply or comment submitted by the bidder. The second and third columns have been transcribed verbatim from the Reply/Comment Sheets submitted.**

5. *The Reply/Comment Sheets contain a number of questions, as well as replies and comments. Questions are being processed for posting replies to the Q&A portion of the VI CFT website in the normal way, consistent with the terms of the CFT.*
6. *Bidders are also reminded that under the CFT, a further opportunity exists for the submission of comments on the revised Preliminary Form Agreements. The deadline for those comments is set out in the CFT Schedule and is currently 09 April 2004.*
7. *Words and phrases defined in the CFT (including the EPA) and used herein have the meanings given in the CFT, unless otherwise indicated. Refer to Appendix 1 of the CFT and Appendix 1 of the EPA. References to a Q&A mean the sequentially numbered questions and answers posted on the VI CFT website. However, the terms of the CFT, including Addenda, the EPA and the VTA are the only governing and legally binding documents.*
8. *This document is being posted to the VI CFT website and is concurrently being delivered to the BCUC, together with a complete copy of each Reply/Comment Form that was submitted, including the Bidder Information Sheet identifying the bidder. BC Hydro is requesting that the BCUC keep confidential the identity of bidders relative to particular comments.*

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Bidder Reply ID #	Comment ID #	Bidder Reply
21EVA01	New	<p>"The proposed hydroelectric project on XX can meet the Mandatory Requirement for dependable capacity of XXMW from October to March inclusive. However, from April to September there is not enough water to generate at full capacity. The proposed project can generate XXMW at full capacity from October to March, but can only generate with a 20% capacity factor from April to September. The current evaluation spreadsheet only allows us to curtail the output in the three months of April, May and June by scheduling planned outages in these months."</p> <p>a) Can the Evaluation Spreadsheet be modified to allow curtailed operation of the 6 month period, April through September to allow us to simulate a reduced capacity factor? We were informed at the recent VI CFT Evaluation Methodology Workshop that this operating scenario may result in penalties under the terms of the EPA.</p> <p>b) We have reviewed the EPA and we would be allowed to schedule less than the Demonstrated Capacity during the months April to September and that penalties would only be due if we failed to meet the scheduled capacity. If there is a clause that would prevent the project from operating in this manner or result in LD's please could you inform us.</p> <p>c) If there is a clause in the EPA that prevents this project from qualifying, could it be changed? The proposed project does meet the mandatory criteria of delivering dependable capacity (97% reliability) of XXMW from October to March inclusive. The project can also generate a maximum capacity during the other 6 months of the year, but only about 20% of the time. Natural and additional lake storage is proposed for the project, this guarantee's (sic) firm reliable power during the critical power months on Vancouver Island."</p>
22EVA01	New	<p>[Reference: TS-Cell P85]</p> <p>Under the section Tender Operations, Cell P85 requires an integer number of years to represent the interval between Major Maintenance Years. With respect to gas turbine based projects, the interval between major maintenance events is a function of operating hours and the number of starts. It is difficult to provide a single integer number, as requested, that would be valid for the range of expected dispatch profiles over the 5 different gas and power market forecasts provided in the tender spreadsheet.</p> <p>Rather, we suggest that the interval between major maintenance years be expressed as equivalent</p>

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		operating hours (EOH) rather than number of years. A number of EOH could be assigned for each type of start (cold, warm and hot) and added to the expected operating hours to derive the total EOH in each year. A major maintenance year would occur whenever the cumulative EOH exceeds the user-defined interval.
22EVA02	New	<p data-bbox="527 423 1438 459">[TS-Capacity Charge [CC] &amp; Operation &amp; Maintenance Charge [OMC]]</p> <p data-bbox="527 492 1927 625">The proposed evaluation methodology considers that fixed payments associated with the Capacity and the O&amp;M Charges (CC and OMC) are included in the NPV calculation for the duration of the Term. While it can be argued that the longer the Term the lower the CC payments thanks to the longer amortization of capital costs, the same cannot be said for OMC.</p> <p data-bbox="527 657 1927 790">Indeed, as O&amp;M charges are short term fix costs by nature (such as salaries, insurance and the like) that are typically incurred on an annual basis and are implicitly included in the market electricity price. Therefore, they are included in the energy margin and should not be accounted twice by further including the OMC NPV in the longer-term evaluation</p> <p data-bbox="527 823 1927 924">We suggest that either the Energy Margin NPV be reduced by an amount equivalent to an extended OMC NPV, for bids of less than 25 years, or that OMC NPV beyond 10 years not be included in the tender evaluation.</p>
22EVA03	New	<p data-bbox="527 963 919 998">[TS-Assumed Discount Rates]</p> <p data-bbox="527 1031 1927 1263">The proposed evaluation spreadsheet does not reflect that the discount factor for a long-term commitment needs to be higher than for short-term debt. Indeed, when one borrows long-term money (say 25-year) one generally pays a higher interest rate than for short-term debt. Therefore, the discount rate for the longer term should be higher than the short-term rate. We suggest that the 8% discount rate for a 10-year contract be increased to by (sic) 1% for a 25-year contract. This would better reflect the benefit to B.C. Hydro of having a long-term contract with fixed capacity charges instead of being subject to renegotiation and market conditions after a shorter initial term.</p>
22EVA04	New	<p data-bbox="527 1263 703 1299">[TS-Cell F95]</p> <p data-bbox="527 1331 1927 1364">Please explain how B.C Hydro will determine if a proposed plant will qualify as a Peaking facility for the</p>

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		purpose of cell F95 of the Tender model?
22VGP01	New	<p>[Section Executive Summary ~ Para. #4]</p> <p>Quote: "The Interconnection facilities can be constructed and ready to receive power in 30 months after approval and funding to proceed is received". Have or will the Interconnection Facilities (Direct Assignment <u>plus</u> Network Upgrades) regulatory, environmental and other project permitting requirements be included in the VIGP permitting process.</p>
22VGP02	New	<p>[Section 3.1.2 &amp; Sub-Sections]</p> <p>Will the VGIP Developer/Owner have to pay for the Short Circuit level upgrades at surrounding customer owned sub-stations? Normally upgrades driven by system fault level increases are at the System Owner's cost.</p> <p>From our review of the IFS, B.C. Hydro does not seem to know at this time how much of the system has to be upgraded. The indications from the IFS are that costs could increase once these details are finalized; is this the correct interpretation?</p>
22VGP03	New	<p>[Section 3.1.6]</p> <p>Will the VIGP Developer/Owner receive a credit for the added value of new structures, conductors, insulators and hardware in the 6 Km where the existing 1L112 is replaced?</p> <p>In the line rebuild section, will an expanded or adjacent [permanent or temporary] right-of-way [ROW] be required and is it included in the "Property Services" account of the "Transmission Facilities" estimate in the IFS Page 14?</p> <p>Are the temporary and/or permanent ROWs needed, included it (sic) in the VIGP permitting?</p>
23CFT01	07CFT01	<p>The answer to question 07CFT01 of the BC Hydro Response to Bidders' Comments Sheets, issued Dec 15 states "However, if the current CFT process concludes and it is not successful in acquiring Dependable Capacity to meet the capacity shortfall on Vancouver Island in 2007 at an NPV below that of the VIGP benchmark set by the BCUC, then BC Hydro will need to consider all remaining resource options." Does this</p>

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		mean BC Hydro be comparing the cost of portfolios from the CFT process to BC Hydro's cost to build VIGP when making it (sic) decision whether to accept tenders for a portfolio or build VIGP itself? Are bidders expected to compete favourably against the cost structure of BC Hydro, being a tax-exempt and regulated entity? Bidders need to understand this risk before the commitment of significant development expenditures.
23CFT02	07CFT01	If BC Hydro believes it can build generation on Vancouver Island cheaper than any of the portfolios from the CFT process, will it build VIGP itself?
23CFT03	07CFT01	What cost assumptions will BC Hydro use to calculate it's (sic) cost to build VIGP?
23CFT04	10CFT04	BC Hydro committed in the answer to question 10CFT04 to "develop a "VIGP Benchmark" (sic) using the BCUC's VIGP benchmark assumptions. The "VIGP Benchmark" (sic) will be input to the Tender spreadsheet and the resultant Net Tender Cost will be published on the VI CFT website." When will this happen? Will this scenario be included in the next version of the evaluation models?
23CFT05	New	<p>We recently asked a few questions regarding the heat rates on page 4 and 5 of Appendix 8 of the CFT. On page 5 of this document there is a formula written as <math>GHR \text{ adjusted to reflect actual weather conditions} = 7500 \text{ GJ/MWh}/(1+-5\%) = 7,894 \text{ GJ/MWh}</math>. It can be rewritten as</p> <p><math>GHR \text{ adjusted to reflect actual weather conditions} = GHR @ AAC \text{ for the hour}/(1+-5\%) = 7,894 \text{ GJ/MWh}</math>.</p> <p>This can be rearranged to give,</p> <p><math>GHR @ AAC \text{ for the hour} = GHR \text{ adjusted to reflect actual weather conditions} \times (1+-5\%) = 7,894 \text{ GJ/MWh}</math>.</p> <p>Is this the same formula on page 4 written as</p> <p><math>ACC \text{ equivalent} = \text{Heat Rate on Actual Weather} \times (1 + \text{Heat Rate Conversion Factor})?</math></p> <p>If it is, please use consistent terminology.</p>
23CFT06	New	6) In the Portfolio model provided recently, there is a 150 MW short position evaluated. Is BC Hydro, going to include the pricing for a 150 MW short position on the island in it's evaluation process? If so, physically how would this short position be physically covered? Why is the short position identified as a tolling project?
23CFT07	New	7) The following question relates to Appendix 8 of the CFT, page 7 and 8. Your recent question indicated

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		<p>that J is related to hours when the plant is not on. Based on your recent answer, hour j is for hours when the plant does not run.</p> <p>Consider the following example:</p> <p>DC = 100MWs</p> <p>The plant is forced off for 100 hours in a month of 700 hours. Therefore:</p> <p><math>(H-N-H_{fm}) = 700 - 600 - 0 = 100</math></p> <p><math>DE = (700-100) \times 100 = 60,000 \text{ MWh}</math></p> <p>Sum of C = <math>600 \times 100 = 60,000 \text{ MWh}</math> (When plant is ON)</p> <p>EAF = 1</p> <p>Sum AC = <math>600 \times 100 = 60,000 \text{ MWh}</math> (When plant is not ON)</p> <p><math>A_{mon} = 60,000 + (1 \times 60,000) / (60,000 + 100 \times 100) = 1.714</math></p> <p>Therefore <math>A_{mon} = \min(1, \text{Max}(0, 2 \times (.03 + 1.714) - 1)) = 1</math></p> <p>This does not seem right. Could you please provide a written example for a 100 MW DC, with 100 hours of forced outage, in a month of 700 hours? Is this result similar to the graph on page 8?</p>
23CFT08	New	8) How does the Gas Fuel Compression Cost get applied to the tenders?
23CFT09	New	9) Your price forecasts are based on average prices for high and low load hours by month. Duct firing capacity would only operate during short periods of time when the heat rate implied in the market exceeds about 15 GJ/MWh. Given that the price forecasts supplied don't exceed this value, can BC Hydro provide other forecasts to allow us to calculate the economics of duct firing for these shorter periods of time?
24CFT01	01CFT01	BC Hydro has received the VIGP Environmental Assessment Certificate, and presumably has applied for the

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		<p>air and water permits. There should be more than sufficient time for BC Hydro to defend and receive non-appealable material permits between now and signing of an EPA. In the absence of non-appealable material permits, a C\$50 million price, given the permit risk allocated to the Bidder, is excessive for the value received and risk taken.</p> <p>BC Hydro should commit to deliver non-appealable material permits by signing of an EPA, or to defend until received. The C\$50 million payment as well as the application of the Development Milestones should be tolled until non-appealable material permits are received.</p>
24CFT02	01CFT03	When will BC Hydro post a revised schedule to the VTA showing the allocation of purchase price to the list of assets?
24CFT03	01CFT08	The levels of Securities and LD's are in excess of the industry standard. The result of setting the levels so high is to deter bids and/or increase the risk premium in each Bidder's price. The Bidders are committing significant equity which is the real security in which BC Hydro should take the most comfort. Accordingly, we believe that BC Hydro's levels are out of line and should be reduced by 50 percent.
24CFT04	01CFT09	As an example, if a portfolio delivers 250 MW for a C\$100 million PV and a 300 MW portfolio has a PV of C\$101 million, then under the BC Hydro methodology, the 250MW portfolio would be chosen for EPA's. This <b>does not</b> deliver the lowest capacity (or energy) to BC Hydro and its rate payers. How can BC Hydro justify its methodology for such an example?
24CFT05	05CFT01	See comment above for 01CFT01.
24CFT06	05CFT02	See comment above for 01CFT03.
24CFT07	06CFT02	We believe that it is not in BC Hydro's best interest to select a project and impose an EPA without allowing subsequent changes required by the project lender. BC Hydro should want the capacity and energy more than the Tender Security. Why is BC Hydro opposed to subsequent changes required by the project lender?
24CFT08	07CFT05	See comments above for 01CFT02.
24CFT09	07CFT07	We disagree with the BC Hydro position. BC Hydro appears unwilling to accept any liability for its actions but has no problem imposing such liability on the Bidder. This is an unbalanced and unfair position, and inconsistent with a typical EPA.
24CFT10	08CFT04	<p>The Environmental Assessment Certificate has imposed a condition which requires VIGPower to offset fifty percent of the greenhouse gas emissions through 2010. This is consistent with the BC Hydro commitment.</p> <p>At the November 21, 2003 workshop, BC Hydro stated that it had already purchased all of its greenhouse</p>

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		gas offset requirements. We believe that BC Hydro should include the offsets required for VIGP to meet the Environmental Assessment Certificate as a VIGP asset to be transferred within the C\$50 million purchase price. Further, in the interest of fairness, these offsets should be made available to other non-VIGP Bidders at a price to be set by BC Hydro.
24CFT11	09CFT04	See comment above for 01CFT09.
24CFT12	10CFT05	See comment above for 01CFT09.
24CFT13	10CFT13	See comment above for 01CFT08.
24CFT14	12CFT02	See comment above for 07CFT07. CC payment and OMC Payment <b>do not</b> cover a Bidder's incremental costs resulting from delays in completing gas delivery infrastructure or in supplying gas for a tolling plant. BC Hydro has imposed Milestone LD's on the Bidders and COD Delay payment precisely to cover its incremental costs associated with delays caused by Bidder. BC Hydro should have a reciprocal liability.
24CFT15	13CFT04	Delays associated with transmission connection and/or network upgrades are <i>force majeure</i> . All Milestone Schedules (and associated LD's) as well as COD Delay penalties should be tolled.
24EPA01	01EPA01	For IPP projects, the standard is "IPP Practice". It is sufficiently well-defined for use in a contractual context.
24EPA02	01EPA02	We do not agree with BC Hydro. BC Hydro has protected itself via Milestone Schedule LD's, COD Delay payments, etc. The Bidder is more than incented to complete on time, and to deliver the Capacity tendered. BC Hydro's demands are excessive.
24EPA03	01EPA04	See comment above for 01EPA01.
24EPA04	01EPA06	If BC Hydro is not prepared to pay for Pre-COD energy, the Bidder should be free to sell Pre-COD energy produced to a third party.
24EPA05	01EPA08	We believe that the combination of Milestone Schedule LD's and COD Delay LD's results in a double payment to BC Hydro. Please provide a detailed explanation of the mitigation costs covered by the Milestone LD's and the other damages resulting from a delay in COD.
24EPA06	01EPA09	If BC Hydro expects the Bidder to accept its corporate guarantee as security for BC Hydro's obligations, then BC Hydro should be prepared to accept the corporate guarantee of the Bidder, assuming it is satisfactory. Both parties could be subject to a conditions (sic) subsequent obligation to post LD's if there is a material change in the condition of the parties.
24EPA07	01EPA13	See comment above for 01EPA01.
24EPA08	01EPA20	See comment above for 06CFT02.
24EPA09	01EPA21	See comment above for 12CFT02.
24EPA10	05EPA21	See comment above for 01CFT08 and 01EPA08.

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24EPA11	06EPA01	See comment above for 01CFT01.
24EPA12	06EPA03	See comment above for 01EPA02.
24EPA13	06EPA05	See comment above for 12CFT02.
24EPA14	06EPA16	If the Buyer defaults, than BC Hydro should be required to post an LC covering the future CC and OMC payments.
24EPA15	07EPA01	See comment above for 01EPA09.
24EPA16	07EPA02	See comment above for 08CFT04.
24EPA17	07EPA09	See comment above for 01EPA02.
24EPA18	07EPA10	See comment above for 01EPA02.
24EPA19	07EPA19	See comment above for 01EPA02.
24EPA20	07EPA24	If BC Hydro steps in, an indemnity from BC Hydro to Seller should be required.
24EPA21	10EPA01	See comment above for 01EPA02.
24EPA22	13EPA03	See comment above for 01EPA08.
24EPA23	14EPA15	A change in law provision is standard in EPA contracts. If BC Hydro owned VIGP it would pass on the cost of a change in law to its ratepayers. The Seller has no control over changes in law, BC Hydro can pass these costs to the ratepayers as is typical, so BC Hydro should accept this liability.
24EPA24	15EPA03	See comment above for 01CFT08.
24EPA25	15EPA04	See comment above for 01EPA02.
24EPA26	15EPA09	See comment above for 01EPA09.
24EPA27	New	<p>[Section 22.8]</p> <p>U.S. entities are required to include the following provision to our confidentiality sections of any contract:</p> <p style="padding-left: 40px;">Notwithstanding anything to the contrary set forth herein or in any other agreement to which the parties hereto are parties or by which they are bound, the obligations of confidentiality contained herein and therein, as they relate to the Express Purpose, shall not apply to the U.S. federal or state tax structure of U.S federal or state tax treatment of the Express Purpose and all materials of any kind (including opinions or other tax analyses) that have been provided by the Recipient relating to such U.S. federal and state tax treatment and U.S. federal and state tax structure. The preceding sentence is intended to cause the financing not to be treated as having been offered by the Recipient</p>

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		under conditions of confidentiality for purposes of Section 1.6011-4(b)(3) (or any successor provision) of the Treasury Regulations promulgated under Section 6011 of the Internal Revenue Code of 1986, as amended, or similar state law, and shall be construed in a manner consistent with such purpose. In addition, each party hereto acknowledges that it has no proprietary or exclusive rights to the U.S. federal or state tax structure of the Express Purpose; or any U.S. federal or state tax matter or U.S. federal or state tax idea related to the Express Purpose.
24VTA01	01VTA01	See comment above for 01CFT01.
24VTA02	01VTA03	See comment above for 01CFT01.
24VTA03	01VTA04	Any additional assets created by Bidder, i.e., non-appealable material permits, etc., along with the Bidder's tender costs, should be paid for by BC Hydro in a re-transfer.
24VTA04	05VTA01	See comment above for 01CFT03 and 01CFT01.
24VTA05	06VTA01	See comment above for 01CFT01. BC Hydro may have been willing to purchase the site without an environmental indemnity from Pope & Talbot, but that does not mean that the Bidder or Bidder's lender is prepared to do the same. BC Hydro has accepted the Pope & Talbot risk and now holds that risk. BC Hydro should give a complete indemnity up to its transfer to the Bidder.
24VTA06	07VTA02	See comment above for 06VTA01.
24EVA01	New	See comment above for 01CFT09.
25EPA01	09EPA03	<p>GHG Offset Credit</p> <p>In the answer to a previous question BC Hydro indicated that one of the reasons for not considering GHG offset credits as suggested by BCUC was that they wanted to keep the NPV evaluation process as simple as possible. Considering BC Hydro's tender and evaluation portfolios it would seem relatively easy to add a NPV GHG offset credit for non-GHG emission projects. It is suggested that a fair value would be \$3.00 per MWh.</p>
25EPA02	09EPA04	<p>Network Upgrade Costs</p> <p>This is a major concern for all of the potential projects that are located north of cut-plane D on BCTC's map. This map indicates a zero transfer capability. It is suggested that BCTC be encouraged to conduct a workshop on this issue, preferably in the first part of February. The following questions could be addressed</p>

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		<p>at such a workshop:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> What levels are the alternatives for increasing the transfer capability across this cut plane for different levels of transfer such as: 50 MW, 100MW, 150MW, 200MW?</li> <li><input type="checkbox"/> Even if VIGP was (sic) constructed when would this transfer capability need to be increased.</li> <li><input type="checkbox"/> Considering the large potential for wind, small hydro, biomass and coal projects on the North Part of the Island, would BCTC consider increasing this transfer capability from point of view of economic development?</li> <li><input type="checkbox"/> From an operating perspective, is the VI grid more stable with increased transfer capability across cut plan D and a stronger North-South grid versus leaving transmission system as is and adding generation in the south.</li> </ul>
25EVA01	New	<p>1. Question on the Value of Firmness</p> <p>In all types of fuel purchase contracts, firmness is considered of value. It is recognized that BC Hydro will be able to dispatch gas fired tolling projects so that they can purchase from the market when market prices are lower. However high gas prices will also most likely affect market electricity prices so that BC Hydro and the ratepayer will still be exposed to high gas prices. Firm or fixed price contracts will avoid this exposure. BC Hydro due to the nature of their large hydroelectric system is somewhat isolated from gas price volatility but they are not completely isolated and this exposure will increase over time. Accordingly, firm electricity contracts are of some value to BC Hydro. The recent presentation by Dr. Mark Jaccard at the IPPBC conference emphasized the difficulty in comparing firm price projects with non-firm prices. The attached slide from that presentation illustrates the problem on a probability basis.</p> <p>BCH's spreadsheet models average five gas price forecasts in determining the NPV value of energy for any particular project. It is suggested that to this average value a value for firmness should be added. This value for firmness, for example, would be added by a gas marketer or gas producer in determining the value of a long term contract. They would forecast the price as BC Hydro has done and then add a value for price risk or a value for firmness. This value of firmness is actually so significant that producers and marketers are</p>

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		<p>generally unwilling to provide 25 year firm price contracts. However, one method for determining a proxy value for firmness is to look at the value of forward contracts on a three year basis (there is a reasonable volume of transactions for this length of time) with the forecast values. This is (sic) this was done, for example, by comparing the NYMEX forwards for three years with the EIA forecasts for three years. The average difference would be 15% Assuming that BC Hydro is somewhat isolated from market volatility 50% of this value which is 7.5% could be added to each of BCH's forecasts in their model to recognize the value for firmness.</p>
25EVA02	New	<p>2. Question on Nominal Discount</p> <p>When comparing high priced fuel projects to high capital cost but fixed and low priced fuel projects the discount rate used is important. Considering that in their latest Revenue Application, BC Hydro indicated that their long-term cost of money is 6.8%, shouldn't the nominal discount rate used in the evaluation be 6.8%. It would seem that this is an issue of fairness that should be directly approached by the Independent Reviewer and BCUC.</p>
25EVA03	New	<p>3. Question on Deferred Transmission Credit</p> <p>This credit appears to be a bias towards a 300 MW portfolio.</p> <p>There is considerable uncertainty as to when an additional 230 kV transmission line will be needed or constructed. BC Hydro indicated some of this uncertainty at the VIGP hearing when they made it clear that the major uncertainty involves regulatory matters due to the necessity of going through U.S. waters. It is suggested that this regulatory concern will be the main factor in determining when the additional transmission line will be scheduled.</p> <p>It also appears that Power Smart projects, time of use rates, and small green projects may be able to provide additional VI capacity at competitive prices in the 2007 to 2010 period. Accordingly, it is suggested that this deferral credit should not be included in the evaluation process.</p>
25EVA04	New	<p>4. Question on NIA Forecast</p> <p>What CPI was used to convert the EIA forecast from Real to Nominal? The EIA forecast was developed</p>

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		using a 2.9% CPI assumption. It is suggested that to be consistent a 2.9% CPI should be used to convert from Real to Nominal.
25EVA05	New	<p>5. Socio-Economic Considerations</p> <p>In previous Resource Acquisition Policies, BC Hydro has used a Multiple Attribute Evaluation approach in deciding between resource alternatives. For example, in BC Hydro's June 1994 Resource Acquisition Policy, a 250 MW CCGT plant was compared with a 50 MW Woodwaste Self Generation project and a 30 MW Run-of-River Hydro. In this analysis Community/social impacts and economic development impacts were considered. Considering the importance of economic development in the North part of Vancouver Island, would BC Hydro considering (sic) adding this consideration in the evaluation of projects.</p>
26CFT01	10CFT01 to 10CFT021	Unless otherwise indicated the absence of a reply to BC Hydro's Response to any comment is not an indication of acceptance of BC Hydro's position but rather an indication that we have nothing to add to our original remarks at this time.
26CFT02	10CFT01	<p>Reference: CFT, General</p> <p>In comment 10CFT01 we indicated disappointment with the CFT process and particularly that it appeared to be a limited call in terms of options available and that substantial critical information was being withheld until after the Commission would have approved the evaluation criteria.</p> <p>We commend BC Hydro in providing the tender and portfolio spreadsheets in time for comments to be provided with respect to them. However, our main point remains that:</p> <p style="padding-left: 40px;">"The bid quantity of up to 300 megawatts, the terms and conditions e.g. the gas tolling arrangements, and the contractual duration all appear designed to accommodate a natural gas fired plant at Duke Point and the GSX Pipeline and effectively, because of BC Hydro's unwillingness to consider peak demand reduction and other options, to exclude more cost-effective projects"</p> <p>BC Hydro's Response that the "process also includes the involvement of Independent Reviewer for the purpose of enhancing fairness and the perception of fairness" misses the point and does nothing to alleviate our concern. The role of the Independent Reviewer, as raised elsewhere, appears to be to assure identical treatment of all Bidders, and will likely be effective to that extent, but has little or nothing to do with ensuring</p>

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		that the CFT process selects the most effective solution to Vancouver Island's capacity problems.
26CFT03	10CFT02	<p>Reference: CFT, Appendix 2; Section 9.5</p> <p>In comment 10CFT02 we raised concerns that BC Hydro is seeking the effective final approval of the CFT based on too little information and without an adequate opportunity for direct input by parties to the Commission on the very important decision the Commission will be making in approving the CFT.</p> <p>In its response BC Hydro refers to Addendum #5 apparently as a full answer. As far as we can see, the only relevance of Addendum #5 is that the tender and portfolio spreadsheets were announced to be available to bidders on December 22, 2003 and that there would be a workshop held to review the spreadsheets. While the addition of this information and workshop were welcome, they do not address the fundamental issue we raised which is that the models and the assumptions must be public and equally importantly (sic) must be tested before the Commission, as suggested by the Commission in its VIGP Decision at page 71, before approval is given.</p>
26CFT04	10CFT03	<p>In comment 10CFT03 we raised questions regarding a substantial amount of missing information. BC Hydro's response, while point to some of the new information that has been provided, still leaves significant gaps. Specifically information still missing includes the following:</p> <ul style="list-style-type: none"> <li>• <u>Appendix 3 of the EPA - "The Tariff"</u>. In its response BC Hydro states that Appendix 3 will "reflect the principles set out at length in Appendix 8 of the CFT". If that is the case then it should be a simple matter to provide Appendix 3 of the EPA.</li> <li>• <u>Details on treatment of dual-fuelled tolling plants</u> (CFTS.6.5). BC Hydro refers to Comment 04CFT03 which states "if gas-fired tolling projects which include dual fuel capability are pre-qualified, then BC Hydro will issue a revised Appendix 8 to the EPA, together with any other revisions required, to reflect the tolling of secondary fuel. These revisions will be available in sufficient time for bidders to comment on them on or before the deadline set out in the CFT Schedule, currently April 9, 2004." This is clearly an inadequate response, providing important information very late to potential bidders and too late for review by the Commission in determining the appropriateness of BC Hydro's quantitative evaluation methodology.</li> <li>• <u>Electricity and gas price schedule for 25 years</u> (CFTS.11.3, Addendum #1, S.3.4.4). BC Hydro's response to our concerns is to refer to Addendum #5. Addendum #5 appears silent on this issue unless</li> </ul>

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		<p>one takes the response to refer to the issuance of the Tender and Portfolio spreadsheets. A review of the gas and electricity price schedules included therein indicates that an update will be required, and BC Hydro's best advice on this, as we understand it, is that information will be forthcoming not less than 30 days prior to the deadline for submitting bids. This is an inadequate time for the bidders to review it, and more importantly, is long after the Commission would have made its decision on the appropriateness of the electricity and gas price schedules to be used for 25 years.</p> <p>Similarly details with respect to the following are still required and will not be available until late in the bid process and well after the Commission approval process.</p> <ul style="list-style-type: none"> <li>• <u>Table with expected # of starts per year</u> (Add #1 S.3.4.6). While the Tender Spread Sheet does include a number of starts, it is our understanding that this number is illustrative only. The "illustrative" 75 starts per year and an allowance of 130% could result in up to 100 starts per year and an allowance of 130% could result in up to 100 starts per year and these could be clustered in certain months. The number of starts will effect maintenance requirements and reliability. The high availability required (97%) coupled with this frequent stopping and starting could discourage all but "must run" plants. This information must be provided immediately so that Bidders can properly develop their bids.</li> <li>• <u>Schedule of CDN dollar values</u> (Add #1 S.3.4.7). Again it is our understanding that the number in the spreadsheet are only illustrative.</li> <li>• <u>Detailed guidelines for development risk assessment</u> (CFT S.9.4). Addendum #4, referred to in BC Hydro's response only discusses what factors BC Hydro will consider but gives little guidance as to how the factors will be weighed or issued.</li> <li>• <u>Detailed guidelines for fuel supply certainty assessment</u> (CFT S.9.8).</li> </ul> <p>In addition to the information sought in 10CFT03 it has become apparent from a review of the spreadsheets that the following information is required:</p> <ul style="list-style-type: none"> <li>• <u>The gas transportation charges to be included in the Portfolio Evaluation Spreadsheet.</u></li> </ul>
26CFT05	10CFT05	<p>Reference: Section CFT, Addendum #1</p> <p>In comment 10CFT05 we set out in some detail our concerns that the CFT process does not ensure the</p>

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		<p>most cost-effective capacity for Vancouver Island is obtained. We urge BC Hydro and the Commission to review this response in its complete form. In particular we are concerned that while Vancouver Island's need is for capacity BC Hydro is mixing firm contract capacity commitments with energy or commodity benefits which are largely speculative. The methodology proposed by Hydro (sic) has not previously been endorsed by this Commission or any other regulatory body of which we are aware. BC Hydro's response was to refer to comment 09EPA04 which was related to fairly different issues and in our submission totally irrelevant to the issues raised in this comment.</p>
26CFT06	10CFT06	<p>In comment 10CFT06 we raised our concerns that BC Hydro is not permitting peak load reduction solutions to bid into the process and our belief that a load reduction solution could be the most cost-effective capacity solution, having a number of benefits which were listed in detail in our original comment.</p> <p>BC Hydro's response was principally that "the BCUC Decision on VIEC CPCN application for VIGP confirmed that there will be a capacity shortfall on Vancouver Island and that the next appropriate resource addition should be on-island generation, furthermore the BCUC stated that 'no contracted demands reduction should be added to dependable supply'." It then commented that it was responding to the BCUC direction that "BC Hydro should explore load management with its customers to reduce the peaks and defer or negate the need for new facilities" in a number of ways, including revitalized Power Smart program and a joint fuel switching program in place with Terasen.</p> <p>In our submission BC Hydro has taken the Commission's perceived endorsement of generation over transmission too literally and responded to the Commission's direction to explore load management with its customers to reduce the peaks and defer or negate the need for new facilities, too lightly. We believe that load reduction solutions could be the most cost effective capacity solution to problems on Vancouver Island and must, in accordance with the previously quoted Commission direction, cited by BC Hydro itself, be allowed to bid into the CFT process."</p>
26CFT07	10CFT07	<p>Reference: CFT, Appendix 9</p> <p>In comment 10CFG07 we raised the need to expand the role of the Independent Reviewer in order to ensure the Independent Reviewer's independence and acceptability. In our submission we raised comments by BC Hydro from the VIGP Hearing transcript that were replied upon by us, and we expect by others in endorsing the idea of an Independent Reviewer. In particular in VIEC Reply Argument Section 7.3 Bidder</p>

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		<p>Consultation, BC Hydro committed that</p> <p style="padding-left: 40px;">"Bidders will have the opportunity in workshop sessions, in the absence of BC Hydro representatives, to offer to the Independent Reviewer comment on the CFT process, and particularly its fairness and impartiality. Bidder comment, without attribution, may form the basis of the Independent Reviewer's recommendations to BC Hydro on adjustments required to the CFT process in the interest of maintaining fairness and impartiality."</p> <p>Unfortunately to this point, and under the current process, bidder comments are permitted only to BC Hydro, with attribution and bidders are expressly prohibited from speaking directly to the Independent Reviewer. BC Hydro's only response to their own commitment set out above was that "The role of the Independent Reviewer recommended by the Bidder is not consistent with best tendering practices applied in other comparable public or private processes." In our submission this is not consistent with, nor an adequate reason for deviating from, BC Hydro's own promise that the Independent Reviewer would hear directly from parties other than BC Hydro on the CFT criteria.</p>
26CFT08	10CFT08	<p>In comment 10CFT08 we raised the necessity for the Independent Reviewer's terms of reference to be expanded to include rendering an opinion on whether the CFT will achieve the most cost effective solution. Unfortunately, it appears BC Hydro is emphasising equal treatment over obtaining the most cost-effective solution to the capacity problems on Vancouver Island. Both are important. We continue to believe that it is essential that the terms of reference of the Independent Reviewer be broad enough for him to comment on whether the parties are fairly and reasonably able to bid into the process their natural economic advantages, for example peak load reduction capability, dual-firing capability, existing fuel transportation capacity, hydro capacity and wind capacity.</p> <p>BC Hydro's only response was to say that "The determination of the most cost-effective solution will be made by applying the quantitative evaluation methodology outlined in Addendum No. 1. The Independent Review (sic) will monitor and report on BC Hydro's compliance with the methodology. It is not the role of the Independent Reviewer to substitute its business judgement for the outcome determined by the proper application of the evaluation methodology mandated by the CFT."</p> <p>This response does not deal with the issue that the Independent Reviewer has not commented on the</p>

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		evaluation methodology and whether it will, or is even capable of, properly producing the most cost-effective solution to Vancouver Island capacity shortfall. That decision has been made by BC Hydro alone.
26CFT09	10CFT09	In comment 10CFT09 we supported the Commission's suggestion in the VIGP Decision Section 9.3, page 80 that an Independent Commissioner be appointed to oversee the CFT process. BC Hydro's only response was that "The role of the BCUC in the CFT process is described in Section 9.5 of the CFT." In our submission this is inadequate and fails to address the desire of the intervenors in the VIGP Hearing and the Commission that such an appointment be made.
26CFT10	10CFT10	<p>Reference: CFT, Appendix 1, definition of "Proven Technology"</p> <p>In comment 10CFT10 we took objection to BC Hydro's requirement that "'Proven Technology" be limited to technology that has been in place for three years at three plants as excessive. BC Hydro responded that the threshold was determined "to reflect BC Hydro's assessment of an appropriate balance between dependability and access to innovation".</p> <p>We remained concerned that these criteria will result in plants that are less efficient and will lead to higher costs because available and tested innovation will be ruled out. BC Hydro's test, which requires that equipment have been in place at three location for three years, means that the equipment which meets this threshold would have been at best "current" in 1998 (allowing for delivery and installation) and will result in 1998 technology being considered the best available for a project commencing in 2007. We believe that flexibility must be shown and seek clarity as to whether BC Hydro would be prepared to accommodate specific upgrades to proven and tested technology. For example, we are particularly interested in using a GE LMS100 which is an upgrade of GE's LM6000 aero derivate unit combined with some of GE's frame components. This would combine well proven technology with recent upgrades to produce a significant heat rate benefit resulting in lower costs for BC Hydro's customers and a more competitive generation going forward.</p> <p>It is essential to Bidders that they understand BC Hydro's views on these types of upgrades as soon as possible as a determination of eligibility is essential prior to carrying out the necessary detailed engineering required for a formal tender.</p>
26CFT11	10CFT12	Reference: CFT, Appendix 1, definition of "Dependable Capacity"

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		<p>In comment 10CFT12 we indicated that while it is possible for a well-run project to achieve 97% availability over an entire 6 month "winter" for a number of years we are not aware of any plant anywhere that has achieved 97% availability each month for 6 straight winter months during successive years. What is demanded is higher than VIGP can deliver and unreasonable to require of any bidder. BC Hydro's response, delivered in response to comment 09CFT05, was "the availability threshold of 97% was developed based on BC Hydro's requirements, not a particular generating technology".</p> <p>In our submission this is inadequate. This insistence on 97% availability over an entire 6 months 'winter' for each year will lead to parties building in unnecessary margins at higher costs or BC Hydro proceeding with VIGP with a commitment to availability that it will not be able to meet.</p>
26CFT12	10CFT17	<p>Reference: CFT, Section 6.2; VI CFT Q&amp;A 25</p> <p>In comment 10CFT17 we urged BC Hydro to allow a customer adopting the tolling option to elect to obtain its own transportation while BC Hydro retained the gas price risk. BC Hydro's response was:</p> <p style="padding-left: 40px;">"Gas transportation is a regulated service and regulated pricing is non-discriminatory and is designed to optimize the delivery system based on service demand. Optimization is best achieved by consolidating demand arising from the CFT and contracting the consolidated demand on a portfolio basis. There is no reason to assume that the cost will be less if borne by the bidder, and the cost may be higher."</p> <p>We disagree with this approach and believe that a shipper may be able to make better transportation arrangements, particularly where reaching those arrangements requires negotiating a one of a kind arrangement with Terasen. BC Hydro suggests there is no reason to assume "the cost will be less if borne by the Bidder". We disagree and submit that there are good reasons to believe transportation costs may be lower if born by a Bidders. At least one Bidder already has a contract to move significant gas volumes on Terasen at lower rates than BC Hydro, a part of which capacity could be used to move gas for a generation project. Furthermore, customers purchasing gas for their own industrial purposes, not just electricity generation, may have significant opportunities to optimize both transportation arrangements and fuel use in a manner that would result in a lower bid price. Forcing a customer, who wants to avoid gas price risk, to take the full tolling option is not in the best interests of BC Hydro's customers.</p>

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		<p>Finally, it appears unreasonable for BC Hydro to be attempting to negotiate an interruptible rate for a dual-fired plant, when it is in BC Hydro's GSX project self-interest to move the Terasen rate higher, not lower.</p>
26CFT13	10CFT18	<p>In comment 10CFT18 we objected to the strict limits and all communications between bidders and BC Hydro's employees, the Independent Reviewer and any member of the British Columbia Government under the "no lobbying" section of the CFT. We accept that it is appropriate to limit lobbying BC Hydro employees for one's project but believe it is not appropriate to limit comments on the CFT process itself to BC Hydro employees, the Independent Reviewer or the government of British Columbia. BC Hydro responded, suggesting such provisions are normal, but BC Hydro again, focused clearly on the concept that parties would be lobbying for their specific project. In our submission this ignores the natural and appropriate desire of parties to raise generic concerns with the process itself to individuals at BC Hydro and most importantly to the Independent Reviewer or to the Government of British Columbia.</p>
26CFT14	10CFT21	<p>In comment 10CFT21 we objected to the proposed transmission deferral credit for incremental dependable capacity above the 150 MW portfolio size based on the deferral of construction of the 230 kV cables to Vancouver Island, currently anticipated to commence service in 2009. The objection was made on the grounds that there is no evidence before the Commission to suggest that it would be in the public interest to delay construction of new transmission by as much as 10 years and provide credits to a project on Vancouver Island for that deferral. Rather the evidence is to the contrary effect. During the VIGP hearings Mr. Mansour strongly argued in favour of improved generation and transmission for Vancouver Island in order to provide Vancouver Island security equivalent to that enjoyed by the Lower Mainland.</p> <p>BC Hydro responded to our comment stating that "In the BCUC decision on VIEC's CPCN application, the BCUC encouraged BC Hydro to seek approval for project with an aggregate capacity of at least 150 MW, and also stated that the CFT Benchmark should be VIGP with GSX. The CFT invites Tenders for at least 150 MW of capacity but not more than 300 MW of capacity, which is entirely consistent with the decision. Ignoring the value of capacity in excess of 150 MW would not deliver the most cost effective solution from the perspective of BC Hydro's ratepayers."</p> <p>It is not our suggestion that BC Hydro should ignore the benefits from capacity in excess of 150 MW. Rather it is our submission that BC Hydro should not give the proposed transmission credit because there is</p>

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		<p>inadequate evidence to support the granting of such a credit. The subsequent justifying of granting of such a credit may in fact delay the construction of needed transmission to Vancouver Island to provide Vancouver island with reasonable reliability.</p> <p>It is hard to imagine that even with a 300 MW plant at Duke Point that BCTC, or this Commission, will find that it is in the medium to long-term interest of BC Hydro customers on Vancouver Island that the full supply from the mainland be delivered through the Cheekeye Dunsmuir connection after the existing southern lines are fully de-rated, in or around 2007.</p> <p>In addition, any value in excess of 150 MW should be evaluated in comparison to other generation capacity that may be available after 2007. It is very likely that there are cost attractive generation options that cannot be ready for 2007, under the stringent terms of BC Hydro's CFT, but could be available after 2007 and would be a preferred alternative to the 150 MW of additional capacity BC Hydro is willing to accept under this tender.</p>
26EVA01	New	<p>Reference: Network Upgrade Cost - Portfolio Spreadsheet</p> <p>BC Hydro is planning to add the NPV of the Network Upgrade Cost associated with each portfolio to that portfolio as a part of the portfolio evaluation spreadsheet. Very little is known about how the Network Upgrade Costs will be calculated and assigned and accordingly more information and probably Commission direction is needed.</p> <p>Transmission investment is by its very nature lumpy and can often include system betterment along with improvements required for the particular customer. To put it another way the last light bulb should not pay for the upgrade it necessitates. There has not been a review of how the cost of core transmission upgrades should be allocated since the announcement of the government's Energy Plan in November of 2002. Accordingly, it is essential BC Hydro provide more information with respect to these costs and their allocation and that the Commission provide an opportunity for comment on the appropriateness of the intended allocations.</p>
26EVA02	New	<p>Reference: Network Upgrade Cost - Portfolio Spreadsheet</p> <p>BC Hydro does not anticipate that the Network upgrade costs will be available to Bidders until May 21, 2004</p>

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		(Revised Schedule). This puts Bidders in a very difficult position, as the best location for a project cannot be determined without this information. The result may be increased costs to Bidders and BC Hydro as some Bidders will be forced to submit a number of mutually exclusive bids at different locations.
26EVA03	New	<p>Reference: Forecast Natural Gas Prices - Portfolio Spreadsheet</p> <p>We continue to believe that the combination of natural gas price forecasts utilized by BC Hydro results in a gas price which is clearly below observed forward market levels. The continued use of forecasts with prices below forward market values will leave Bidders with gas projects little choice other than to select the full tolling option and may result in Bidders with alternate fuel projects being inappropriately viewed as uncompetitive.</p> <p>Correcting this situation requires replacing those forecasts most out of touch with the market pricing, particularly the Confer forecast, and updating the other gas price forecasts.</p>
26EVA04	New	<p>Reference: Gas Transmission Costs - Portfolio Spreadsheet</p> <p>The Transportation Costs used in the Portfolio Spreadsheet are illustrative only. We understand why it may not be possible to include Terasen costs at this time. However, there is no reason that GSX gas costs could not be provided immediately along with a description of the methodology used to calculate the rates to be applied to different levels of contract demand and duration.</p>
26EVA05	New	<p>Reference: Lack of Environmental Impact Consideration - Portfolio Spreadsheet</p> <p>An examination of the Evaluation Methodology does not show any value being given to projects with reduced environmental impacts, as evidenced by lower Green House Gas Emissions or a "BC Green" qualification. This omission is not consistent with the provincial Energy Plan and should be rectified.</p>
27CFT01	03CFT02	<p>"Project Location" - To the best of our knowledge the BCUC was never presented with the interconnection option we are proposing. See attached Figure 1. The proposal for the BC Inlet projects does not include the replacement of the HVDC system at a cost of \$400 million, nor does it include a long submarine cable crossing of the Georgia Straight where there is a high seismic risk.</p> <p>It makes no sense to limit the call to on Island generation when there is a Proponent XX with a viable proposal that includes on Island point of interconnection. Delivery of reliable power on Island should be the</p>

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		<p>mandatory criteria, not the project location.</p> <p>It would be preferable to have the mandatory criteria for location to be "on-Island point of interconnection" and not "on-Island generation". It is unfair that the call allows the transport of gas from the Mainland to the Island, for the purpose of energy generation, but not electricity. If the Proponents are prepared to take on the responsibilities of on time delivery, they should be allowed to bid off-Island generation with transmission to and interconnection on Vancouver Island. The Projects proposed by XXX have overland transmission with two short submarine cable crossings of about 2km each. The delivery schedule constraints and permitting issues associated with long submarine cables is not an issue for the proposed BC Inlets Projects, which make use of the narrow channel crossings and Islands between XX and XX.</p>