

Village of Gold River PO Box 610 499 Muchalat Drive Gold River BC V0P 1G0 villageofgoldriver@cablerocket.com

February 4, 2005

Via email

Mr. Robert J. Pellatt, Secretary British Columbia Utilities Commission 6th Floor, 900 Howe Street Vancouver B.C. V6Z 2N3

Dear Mr. Pellatt:

Re: BC Hydro Call for Tenders for Capacity on Vancouver Island Project No. 3698354 – Review of Electricity Purchase Agreement Village of Gold River – Final Argument by Mayor David Lewis

Please find attached Mayor David Lewis' final argument regarding the above matter.

Sincerely,

Sue Rich Deputy Clerk Village of Gold River

cc: Registered Intervenors

VILLAGE OF GOLD RIVER

VICFT – FINAL ARGUMENT

Prepared by: Mayor David Lewis

February 4, 2005

"Using the QEM, the 122 Mw tier 2 portfolio is 48% of the cost of the 252 tier I DPP portfolio contained in the EPA. However, the 122 Mw portfolio only returns 48% of the capacity of the tier I option.* The use of the tier

II option allows BC Hydro to utilize the NorskeCanada demand side management option, which provides monumental value to the ratepayer when it is used to "bridge" the capacity needs on Vancouver Island until the AC cable is in-service. There is no capacity shortfall after the AC cable is in-service until approximately 2020, regardless of which tier is selected. When environmental costs, fuel price risks and other non-price factors are taken into account, it is abundantly clear that the public's interest is not served by approving any tier I outcome."

Mayor David Lewis

* Undisputed evidence from exhibit C-9-10, page 8, Tier 2B.

Introduction

I know that any record with as much testimony and evidence as this one can provide ample opportunity for those involved to "make their case", one way or the other.

It is your responsibility to identify the problem that we are all trying to solve and then search through all of the arguments that are presented to find the definitive cornerstones of the foundation for *the best* solution to that problem.

It will be a daunting task.

There is much that I don't know. There are certain small truths that I do know.

- The Commission Panel is here to serve the public interest as it was in the VIGP proceedings.
- The world has changed since the VIGP proceedings. At that time, the AC cable addition was uncertain and determinations were based on that fact. BCTC is now distinct from BC Hydro and it has committed to solving much of the problem facing Vancouver Island's capacity needs by having the new AC cable in-service by 2008. (And they are confident that they will achieve that.)
- We should not let regulatory determinations based on previous and changed circumstances force us to accept an uneconomic outcome to our capacity problem.
- The Commission Panel's obligation in these proceedings is to ensure that we find the most cost-effective way to meet the remaining capacity shortfall that Vancouver Island faces period. Regardless of previous decisions, determinations or processes that BC Hydro has undertaken.
- BC Hydro was directed to conduct a CFT and they did that. It was their first attempt at such a complicated undertaking it's okay if they didn't get it right. I am hopeful that energy is expended to find the best outcome rather than trying to hide the problem or direct blame for its failure. Let's just get it right for the sake of the average ratepayer.
- The Commission Panel is unfettered in their review of any EPA.
- BC Hydro's wants quite often differ from the Public's needs.
- The public needs cost certainty from its utilities. Exposure to un-quantified monetary risk is not acceptable and generally not tolerated. Managing risk has a cost.
- There are many answers to every problem; there is usually only one optimal solution. The Public relies on the Commission Panel to seek that out.
- I did not allow my examination of this issue to simply be reduced to contesting the result that BC Hydro returned based on their criteria, processes, methodologies, assumptions and risk tolerance. And neither should the Panel.

One solution that exists, within the context of BC Hydro's pre-qualification criteria, is that which I will identify in my argument as a the tier II option that is a more cost-effective way to meet Vancouver Island's capacity needs than the tier I proposal in BC Hydro's EPA.

Green Island Energy's 75 Mw biomass project Epcor's 45 Mw peaking gas plant project Norske Canada's 210 Mw of demand side management (not considering the host of BCTC existing cable utilization and upgrading options)

This by no means ensures that this is the best answer. It is simply better than what is proposed in the EPA. I want to ensure that my argument is not merely perceived as an argument for a Gold River solution. I am more than happy to accept the merits of an alternative solution to the EPA if it can be shown to provide better value to the ratepayer.

The fact that BC Hydro used these projects in their Cost-Effectiveness Analysis indicates that they also accepted their validity. The fact that BC Hydro did not use 210 Mw of demand side management from Norske is a wonderful example of why we shouldn't be confined in our endevour to find the most cost-effective solution to simply the scope or information that BC Hydro used. Norske has confirmed that 210 Mw could be made available. I don't think that the Commission Panel should be forced to approve a sub-optimal outcome just because the information used by BC Hydro in its evaluation was not as comprehensive or accurate as it could have been.

Argument

We have a capacity problem on Vancouver Island as witnessed by the Panel's determination in Volume 2, page 308, lines 1-4. Whenever a problem arises it is always useful to identify:

Who is responsible for solving that problem?

I don't think that we need to look any further than Volume 10, page 2315, lines 18-26 and page 2316, lines 1-16 for the complete context of that answer. Mr. Mansour from BCTC states:

"BCTC is the entity responsible for the security of Vancouver Island from a capacity and transmission prospect. BC Hydro have the generation adequacy and they own the customers, but the reliability of the Vancouver Island and the transmission system is the responsibility of BCTC and BCTC alone. That is our role and our mandate as designated by Government."

Well put.

The next logical question that follows is:

What is the nature and severity of the capacity problem that Vancouver Island is facing?

By now we are all aware of the updated load forecast. It provides the information regarding our specific needs. The following key points give context to that load forecast information:

- 1. This EPA is being pursued to meet N-1 planning criteria which means this is a backup to the existing system.
- 2. The 280Mw shortfall is anticipated for a very short time (one year according to BCTC staff. winter 2007).
- 3. The duration of peak capacity requirements is less than ten days a year.
- 4. As capital is scarce and ratepayers are very cautious about how it is spent, it is prudent to allocate appropriate resources to find appropriate solutions. (ie. Don't buy a Cadillac if a Volkswagen will do.)

With those in mind:

How does BCTC plan on solving the capacity needs of Vancouver Island?

Although others may assert otherwise, I found no cause to distrust the information provided by BCTC regarding the timing and probability of the transmission line replacement. Delays are possible but not probable. Much like what BC Hydro contended for gas price risk - possible but not probable. In any event, it is irrelevant for my argument because a delay does not impact the economics of what I believe to be the most cost-effective solution to this problem.

The need will be met through both transmission and generation. I would direct the Panel to Volume 10, page 2289, for the entire context of Mr. Mansour's answer to the transmission component. He makes it very clear that the BCTC is going ahead with the 230 KV transmission line upgrades, regardless of the outcome of this CFT process or BC Hydro's generation plans.

There has been agreement from all parties, including BC Hydro, that the 230 KV line upgrade is the next logical resource addition on the transmission side. I reference exhibit C-5-6, the Select Standing Committee on Crown Corporations (SSCCC) transcripts, page 29, Bob Elton's response, second from the bottom.

"What I said was BCTC...We asked BCTC to speed up the cables."

Further on that page and onto page 30.

"I think that the 230 KV cable option would give us several years' worth of supply and also improve the flexibility of the system. We think it's the right thing to do, and we think that BCTC does as well"

What is clear to me is a tier I approval with DPP still needs and supports the HVDC replacement. It is also clear to me that the HVDC replacement does not specifically need DPP; rather it supports some form of generation. (I don't have Mr. Mansour's reference handy)

This panel is tasked with identifying what that generation is in the most cost-effective manner.

Given that BCTC is going ahead with the 230 KV transmission line upgrade (that will most likely be completed in the fall of 2008), and given that BC Hydro supports that, what is the remaining capacity need that must be met?

	F2007	F2008	F2009	F2010	F2011	F2012
Requirement(Mw)	-280	-307	-336	-393	- 418	-452
Tier II	122	122	122	122	122	122
NCDMP	210	210	0	0	0	0
AC cable			600	600	600	600
Net Total	(52)	(25)	(386)	(329)	(304)	(270)

*note: the tier II suggested portfolio used for 2007 **and** 2008. NCDMP still available after 2008. The projected capacity need does not exceed supply until approximately 2020.

With that in mind the Panel should then determine:

Is the EPA that the Panel has been asked to approve by BC Hydro the most costeffective way to meet that need?

All of BC Hydro's assertions leading up to these proceedings and included in these proceedings indicated that the Tier I result was the most cost-effective result – not the least-dollar cost but the most cost-effective. There are countless instances where this was stated as fact, but one needs not look any further than the last sentence of the third paragraph on the second page of the opening statement of the Sr. Vice-President of Distribution - Ms. Bev Van Ruyven. She states:

"At our request, the team performed some further analysis that responded to these questions, and we concluded that the outcome of the CFT process was the most cost-effective solution available to replace the HVDC cable."

At the end of the fourth paragraph she further states:

"...we believe that after ten years of agonizing over the best means to serve the capacity shortfall, the most cost-effective solution has now been identified and it is time to implement it."

It is my assertion that BC Hydro conducted two separate processes to determine what it considered to be the most cost-effective result. The CFT process was quite different from the method they used in the Cost-Effectiveness Analysis. I will deal with each independently.

The point that I think has to be made is that it is now the Commission Panel's obligation to identify how BC Hydro came to that result and then determine if the two processes that BC Hydro used were appropriate. I believe that to meet the general public's definition of "most cost-effective", BC Hydro would need to have taken all of the available options under consideration in a capacity sense before coming to a conclusion.

They did not do that.

BC Hydro was bound to uphold a process. That process returned a result. Although it may have been deemed to be the "most cost-effective" result within that process, it may not (and did not) prove to provide the ratepayer with that satisfaction. So at this point I think that it is quite relevant to establish:

How did BC Hydro determine what was the most cost-effective result in the CFT process?

I would like to reference Volume 8, page 1802, lines 4 to 23. From the context of that testimony, BC Hydro had to ensure that the process was competitive and was without collusion. It also retained the right to reject the tier I result if they determined that it was not cost-effective for ratepayers as Mr. Cender states:

"...senior management in its discretion had the right to reject the tier I result if it determined that it was not cost-effective for ratepayers, and that was however they saw fit to make that determination."

(Reference Volume 6, page 1148, lines 10 - 20. The fact that Senior Management did not agree with the Commission Panel's thoughts on the DPPLP project with duct firing is interesting to note. They had the ability to recommend that project in an EPA but chose not to. They have effectively admitted that they were slaves to a process that restricted them from identifying the most cost-effective solution. The Panel is not.)

What BC Hydro didn't have was the ability to compare the results of a tier I result with that of a tier II result. This can be referenced at pages 1803 and 1804, lines 19-26 and lines 1-10. Given that the CFT process only evaluated portfolios that contained at least one gas fired generator located at Duke Point, the tier I evaluation was in my opinion far from comprehensive. What it evaluated was a very small subset of projects that met specific criteria identified by BC Hydro. I

don't think that I can put it any more eloquently than Mr. Oliver did in Volume 8, pages 1789 and 1790, lines 19 -26 and 1-4.

"...because criteria are difficult to compete in a certain process doesn't mean that they're unfair. You know, there's a number of different situations where, you know, if I'm looking for a Cadillac and one of the potential bidders is Volkswagen, well I'm going to get a different product. They probably can't compete to provide that product. So it's –you know, it doesn't mean its an unfair process, or unfair criteria, it just means that it may be more difficult for that bidder to compete, or that bidder's going to have to structure that bid differently to compete."

The Commission Panel should not and is not bound in its investigation of the most cost-effective solution by these criteria. Although it cannot provide a different answer to the EPA, it can identify where BC Hydro failed in its evaluations of all of the possible and practical alternatives. In general, the definitive conclusion that can be drawn from the entire context of the in-camera session is the simple fact that:

The CFT did not return the most cost-effective result to meet Vancouver Island's capacity needs.

BC Hydro finally admitted, that even under its narrowly defined and exclusive criteria, the CFT process did not identify the most cost-effective means to meeting Vancouver Island's capacity shortfall. That is witnessed specifically in volume 8, page 1741 lines 10-12, and page 1751 lines 16-19.

As troubling as that is and the procedural issues that it causes, it is merely an indication of a greater flaw within the process that BC Hydro ran and that is that they did not adequately address all of the opportunities that were available to them.

The Panel Chair's comments on page 1744, lines 15-20 should give the general public hope that the Commission Panel will not settle for a second rate solution.

"But then you'd be asking the panel to approve a sub-optimal portfolio because of regulatory parameters that were established in the earlier decision. And that seems somewhat abhorrent to me. I hate to think that regulatory decisions lead to uneconomic outcomes."

The Commission Panel need not look any further than that to refuse this EPA.

However, if the Panel feels compelled to go further than that, it should surely not be convinced by Mr. Sanderson's argument in Volume 8, page 1745, lines 2-17 that the Panel's consideration should be limited to the only project with an agreement/EPA before it. If the Panel is to proceed, it must continue to examine the issue of cost-effectiveness with a much broader view than simply the tier I results of the CFT. I contend that all of the tier I results are sub-optimal when compared to my suggested tier II option.

As there is no finite value that can be identified as being the most cost-effective solution, all evaluations to that end must therefore be comparative in nature. As such, the next task facing this panel will be to identify if there were any viable and realistic alternatives to the tier I result that better serve the public interest. That begs the next question:

Even though the EPA before the Panel is not the most cost-effective way to meet Vancouver Island's capacity shortfall, what are the available alternatives that can accomplish that in a more cost-effective manner?

BC Hydro would like the Commission Panel to take the similar narrow view that it took in its CFT. Mr. Sanderson's view that the Panel should be somehow limited in its ability to compare the tier I result with any other option that existed outside of what the CFT returned, is contrary to the stated purpose of the BCUC. If the Commission Panel's desire or ability to determine the cost-effectiveness of this EPA is limited to examining nothing beyond that which BC Hydro has put before it, I can't help but wonder where the value is in such a regulatory process? The Panel's comments contained on page 2, paragraph 5 of their January 23, 2004 correspondence to BC Hydro support the importance of their independence in this matter.

"...it can provide some comments that are not intended to and will not be determinative of any issue or matter raised so as not to inappropriately bind BC Hydro or fetter the Commission Panel in respect of its authority when ultimately called upon to consider any CPCN applications and/or EPAs following the CFT process."

The Commission Panel has the authority and I contend the responsibility to not subscribe to Mr. Sanderson's narrow view.

I contend that the Panel has a much broader responsibility in order to say that they have protected the public interest. That goes directly to the principle issue and the comments in the January 23, 2004 letter relating to a tier II option.

"The Commission Panel encourages BC Hydro to seek approval for projects with an aggregate capacity of at least 150 Mw **as long as each project is cost-effective**,..."

The CFT did not establish the cost-effectiveness of the Tier I result. The fact that Sr. Management rquested its own cost-effectiveness analysis indicates such. The failure of BC Hydro to establish the cost-effectiveness of the tier I portfolio should not bind the Commission panel in its own investigation of that matter. The fact that BC Hydro failed in its attempt to fairly identify the value of a tier II solution in its Cost-Effectiveness Analysis (CEA) impeded the public's ability to obtain the most cost-effective solution. That should not impede the Panel.

I contend that the Commission Panel therefore needs to re-examine the Tier II alternatives and the methods employed by BC Hydro to evaluate those alternatives in trying to establish the cost-effectiveness of the EPA.

In doing that:

"Can the Commission Panel rely on the Cost-Effectiveness Analysis performed by BC Hydro as a reasonable means to evaluate a tier II option?"

No it cannot and should not.

BC Hydro has consistently argued that the CEA was not intended to be an independent capacity evaluation methodology. (As Ms. Hemmingsen states in Volume 9, pages 2004 and 2005, lines 20 - 26 and 1 - 20.)

"...it (the CEA) was a high-level check on the CFT results that covered some key uncertainties that BC Hydro was concerned about with the various options and also related back to the Commission's criteria around reliability, timing and location."

And Ms. Van Ruyven also does in Volume 6, page 1148, lines 21 - 24

"So the cost-effectiveness test that we asked for was a high-level analysis, just to see if there were any compelling reasons that we shouldn't accept a cost-effective outcome of tier I"

The CEA was not designed by BC Hydro to determine the value of the Tier II and no award options **based on capacity** as the entire CFT was. The end result is that a tier II alternative has never been fairly evaluated based on our need which is capacity.

The CEA was BC Hydro's attempt to prove that the tier I result was justified based on generation or energy. Generation is a benefit that can be derived from a capacity source; however, generation is not what we seek on Vancouver Island. We need capacity - as referenced volume 7, page 1475, lines 5-8 – Ms. Hemmingsen.

"I think another factor is that this was a call for capacity, and that heavily flavoured the product that we were looking for and the reliability that we were looking for."

The QEM was able to equalize different sized projects and value them appropriately. It did not seek to "backfill" any. It credited energy production through the energy margin. If you were bigger you should have produced a higher energy margin. It allowed the process to evaluate capacity with credit given to excess generation. I will deal with this further later on in my argument.

The Commission Panel's responsibility should be to compare the options on a capacity basis. I have specifically limited my commentary to alternatives to the tier I that either met all of the VICFT mandatory criteria (GIE and Epcor) or in Norske Canada's case they were pre-qualified and have been cited as being acceptable contingency measures that BC Hydro is interested in pursuing.

The impact that this paradigm shift, from valuing capacity to equalizing generation, has on the value of a tier II portfolio is immense and the fatal flaws in this methodology are very simple to expose.

Please refer to Gold River IR 1.1.6 and note the statement:

"To conduct a simplified cost effectiveness analysis, *it was necessary that all portfolios have the same annual energy capability and dependable capacity capability* as of the year that new resources were needed for the system as a whole."

Mr. Sanderson also makes this assumption in point 9 of his argument.

"To properly assess the alternatives, all projects were required to come forward on a level playing field."

It is faulty logic to assume that the energy that DPP provides is what is required. This is further exacerbated by insisting that a comparison of alternatives must equalize this generation.

It is not required. I refer you to volume 7, page 1510 and 1511, lines 24-26 and 1-3.

Mr. Lewis: "Were there any flaws in the QEM that allowed it to fairly determine the costeffectiveness of a 150 Mw portfolio but not a 122 Mw portfolio?"

Mr. Soulsby: "No"

BC Hydro had the means to evaluate the cost-effectiveness of alternatives, they just chose not to use them. The QEM valued energy in its energy margin. The simple fact that the biomass project or the NCDSM were not evaluated in the CFT does not mean that BC Hydro did not have the means to evaluate them on a capacity basis. They could have, but chose not to. As stated earlier, I believe that the Panel has a much broader obligation than what BC Hydro felt that it needed to exercise.

BC Hydro senior management might have been satisfied with a high level stress test planned, designed, implemented and presented in four days in to prove its desired outcome - the Commission Panel shouldn't be.

The Panel should have all of the information it requires to make a more informed decision. If the Panel feels that they are willing to accept less capacity than the DPPLP bid that is the right that they have reserved. While BC Hydro insists that DPPLP is the benchmark that all others must meet, that is simply not the case. The solution to our capacity needs can be found without having to buy a Cadillac that will mostly just sit in our driveway.

I was very appreciative of Commissioner Boychuk's comments in Volume 10, page 2979, lines 1-14.

The whole CEA conducted by BC Hydro revolves around the notion that we have to have 1800GWh of energy from this call until 2032. That is a fallacy.

The distorting effect that this "equalization" based on a continuous energy requirement has on the entire CEA can easily be seen by referencing the BC Hydro undertaking from the BCUC chair, January 21, Volume 10, page 2203-2205 – specifically the spreadsheets for BCUC IR 2.46.6.

If we accept that after the new AC line is in service we don't require the additional capacity or generation from the "backfill" mainland CCGT the line items in the table must be amended. When the CCGT cost is removed, the corresponding line item "value of energy" must also be adjusted.

Mainland generation adds disproportionate costs to the tier II portfolio that need not be there considering capacity is the product we want. This exact concern was stated quite well I think on page 2130 and 2131, lines 2-10 and 5-7. The chair, I believe quite astutely identified this issue of "equalization" at that time.

The energy margin contributed by the 122MW "CFT" projects from the QEM was \$ 316 million.

If the associated costs and benefits of the backfill are removed – one will see that the tier II option NPV is improved by \$125 million dollars (if my math is right). When compared to the tier I result, the tier II option winds up being \$71 million cheaper.

The question that should be answered by the Commission Panel is:

"Is it worth buying 130 Mw of extra capacity now that won't be required until after 2020 at a cost of \$71 million?"

I contend that there is little value to the ratepayer to purchase capacity now if it is not required until long into the future.

The Panel, I contend, has maintained the right to say "We are willing to accept less capacity than the tier I result if it is more cost-effective and meets our needs."

If the Commission Panel has the willingness and support of BC Hydro to pursue extra capacity as they feel it is cost-effective, (as eluded to in the In-Camera proceedings regarding the DPPLP with duct firing option) should they not also be willing to accept less if it is proven to not be required. Clearly in this instance I contend that it is in the ratepayer's interest to accept less.

*note: There are other factors on top of simply capacity that must be weighed. BC Hydro may state that the value of the energy that is provided by the tier I is important. I agree that it is and that is why it has appropriately been valued into the comparison already. Some of the other issues that should also be considered in this decision are of fuel price risk, environmental impacts and non-price factors.

Fuel price risk

I thought that Mr. O'Riley was intelligent, well spoken and willing to give a fairly straightforward answer. That bodes well for the future BC Hydro management I think. I did however, have some serious reservations about the manner in which BC Hydro has chosen to accept risk on behalf of the public.

As a Professional Forester, I am used to making decisions that affect the environment. Before making any such decisions it is always prudent to conduct a risk assessment.

The manner is which I do that can be simplistic.

Risk	=	Hazard	X	Consequence
------	---	--------	---	-------------

Hazard	=	the chance of a negative event occurring
Consequence	=	the cost or damage incurred by the negative event

If there is no consequence, there is no risk. Likewise for a hazard.

Unfortunately for the ratepayer, the assumption of fuel price risk by BC Hydro has both a hazard and a consequence.

Reference Volume 7, Page 1499, lines 4-8, where Ms. Hemmingsen acknowledges the existence of the risks.

On page 1502, lines 13 – 18, where Mr. O'Riley states:

"...there are markets for gas, spot and forward markets in B.C. which make it possible to acquire gas from multiple sellers and make it possible to manage or mitigate the risks on those – on that commodity."

On the next page, 1503, lines 1-4 are telling:

Mr. Lewis: You used the word "mitigate". You didn't use the word "eliminate".

Mr. O'Riley: I have not used the word "eliminate". I think we made it clear in a number of IR requests."

The implication from BC Hydro is that by being better able to manage the fuel price risk it allowed bidders to provide a cheaper price. I completely agree with that in the following context. When evaluating the overall cost of a project against another, those risks must be accounted for in one form or another.

BC Hydro has agreed that there is a risk.

I don't disagree that assuming that risk provided the bidders with a benefit – but what hasn't been identified or incorporated into any evaluation is the cost of assuming and managing that risk.

It is especially important when a comparison is being conducted between two different options – one with fuel price risk and one without. Due to their nature, peakers have a very limited exposure to fuel price risk or reward – as was witnessed by their zero energy margin in the CEA. Considering that the DPP option showed an opportunistic dispatch rate of 83%, that indicates a small upside potential for an increased energy margin, but a significant downside potential for a decreased energy margin. As well, the second component of the energy margin, that being the amount of potential deviation from the forecasted gas price at any one time, is much more limited on the favourable side while the potential exposure to losses on the increased gas price side are unlimited.

Although we don't know the nominal value of the benefit that has been accrued to the ratepayer by BC Hydro accepting the fuel price risk, it has been factored into the bid price already. None of the comparisons that BC Hydro conducted, factored in any cost for assuming that risk.

Reference page Volume 7, page 1504, lines 9 - 17. Mr. O'Riley does not deny the fact that there is a cost associated with managing that risk, he just simply states that they couldn't figure out what it was for this analysis. What we do know is that it is a negative aspect of any tier I outcome.

I wonder though if there weren't at least some costs associated with managing that risk that could have been included in an evaluation, that were simplistic in nature?

Reference Volume 10, pages 1494 – 1496, beginning on line 22 and ending on line 6.

Of importance are the following excerpts: (page 1495, lines 16 - 20)

- Mr. Lewis: Q. "Is there any cost to the ratepayer of having these deferral accounts or using them?"
- Mr. O'Riley: A: "There is a financing cost to the ratepayer."

Page 1496, lines 2 – 5

Mr. Lewis: Q. "How are these financing charges or costs associated with deferral accounts factored into the QEM?"

Mr. O'Riley: A. "They are not factored into the QEM."

All risks don't have a cost – but seeking to manage or mitigate risks does. Although BC Hydro stated that it could not identify them for the CFT process, it does appear that there were some definite costs that were readily attributable to the fuel price risk that were not factored in.

(Further to that, it is somewhat disconcerting that if what Mr. Wallace stated in Volume 15, page 3113, lines 19 - 25, is true – BC Hydro has based a disproportionate amount of the energy margin benefits from the tier I result (91% in fact) on forecasted information. Not market information.)

Reference volume 14, page 3018, lines 10 - 16. I think what we see here is an example of the fluctuations that can occur. Currently the cost of operating gas fired generating plants is increasing at a faster rate than the cost of electricity. A situation that would definitely not benefit the ratepayer if tier I was selected and it continued going forward.

In the Cost-Effectiveness Analysis background information page 1, paragraph 2 (from the CFT report – sorry no reference), it states that it was conducted on a risk adjusted basis relating to the in-service date of the AC cables. It is interesting how BC Hydro chooses to accept some risks such as fuel price blindly to the benefit of tier I outcomes, while others detrimental to tier I options are not.

Point 49 and 50 of Mr. Sanderson's argument, pages 22 and 23, contain some interesting language. I would like to compare the scenario of the AC cable in-service date with the fuel transportation agreement. Both have some degree of uncertainty about them. I can accept some of that. What is curious is that it appears as though BC Hydro feels that it should be acceptable for them to be "confident that they will be able to reach an agreement" that it will be "near the values used in the QEM", that "it is likely that" an agreement will be in place by November 2005.

Why is it acceptable for BC Hydro to be confident in an accomplishing a project that has some uncertainty attached to it without risk premiums or contingency measures but BCTC is not?

Environmental Costs

Although BC Hydro has stated numerous times that the cost of GHG emissions would remain the responsibility of DPPLP I would briefly like to deal with the entire issue of total environmental impacts.

Reference volume 6, page 1149 to 1151, commencing on line 22 – finishing on line 14. The fact is that the GIE project is a clean energy source that does supply firm power. The DPP tier I

option is not. There is no future risk or requirement for a clean project as GIE; however, the same cannot be said for the tier I option as the CFT did not address that issue. Reference volume 6, pages 1137 to 1140, specifically page 1139, lines 17 – 22 and page 1140, lines 11 - 22.

The next issue that I would like to raise is that of the cost of purchasing clean power. Please reference volume 6, pages 1141 to 1144, lines 20 - 19. From the context of that discussion it can be ascertained that the President of BC Hydro acknowledged that clean power is more expensive than dirty power. He further says that BC Hydro believes that the money that they save on buying dirty power should be used to offset the environmental impacts of producing it. Given that is the case, at best dirty power can only be equal to clean power in cost, never cheaper.

The tier I proposal is a long term project that does not produce clean power. GHG offsets are not the only cost associated with environmental costs. BC Hydro itself is committed to no new net increases in environmental impacts. A large hydro electric project has no GHG emissions yet it does have an environmental impact. How we evaluate that as a cost is once again very difficult.

At the very least we can say that the Tier II portfolio does not have any risk of incremental environmental impact cost on it; where as the same cannot be said for any tier I option.

Non-Price Factors

Finally, I would like to draw your attention to one non-price factor that is quite telling. Generally, in any process like this there are those in favour of one result and those opposed to it. Quite often those against the proposal are more vocal and involved than those in support. That is the nature of our society and I accept that. In this instance, given the withdrawal of Nanaimo Mayor Gary Korpan's council's support, I am not sure that I have seen one letter or intervention that is supportive of this proposal from the public.

To go one step further, the largest industrial users (that have the most to lose by a lack of service or reliability) are some of the most vocal opponents to this proposal.

If BC Hydro is not seen to be serving the interest of the reasonable and informed, average citizen and they are not serving the needs of their largest industrial user – Who exactly is BC Hydro serving with this EPA?

Rebuttal to BC Hydro Argument

Unfortunately I did not have enough time to prepare adequate rebuttal answers. Most of what I wanted to say has been included in Argument. There is nothing in this argument that discourages me in the slightest that the option I have suggested is a much better solution to our needs on Vancouver Island than the EPA BC Hydro is proposing.

2. I guess that Mr. Sanderson disagrees with the CEO and President of BC Hydro Mr. Bob Elton when he states "...if the Commission chooses to employ its statutory powers **to interfere** with the contract they freely entered into with each other." In the evidence submitted by Gold River, exhibit C-5-6, Select Standing Committee on Crown Corporations (SSCCC), page 12, paragraph 5, Mr. Elton states:

"So we welcome that. In other words, I think it's very important. This thing has been going on for years. It's very important that there be a BCUC process that gives everybody the satisfaction of one more chance to say what happened, how did it happen, was this fair, was this open, was this done properly. We believe it was, and we're very comfortable with whatever process the BCUC proposes to examine now."

Obviously after having the process exposed for what it was, Mr. Sanderson is not so comfortable with the BCUC examining it – at least as legal counsel he is not as comfortable as the head of BC Hydro.

Mr. Elton goes on to further state in the SSCCC transcripts page 22, paragraph 3:

"We recognize that we are a monopoly. We're a large company. We have to be scrutinized, and that's what the BCUC and these kinds of groups are for."

I think that credibility is a very important characteristic, in both business and life. With the utmost respect, I offer the following commentary. Putting forward arguments as Mr. Sanderson has done that are so self-serving and contradictory to previously stated positions of the President of BC Hydro, greatly reduce his credibility. I find that it erodes my ability to weigh his arguments appropriately because I can't tell what may be accurate and what is simply self-serving legal posturing.

Further in Argument point #2 BC Hydro says:

"However, this challenge does not go so far as requiring BC Hydro to prove "beyond a reasonable doubt" or to any other specific evidentiary standard that its proposed solution is "best"."

I find it amusing to see how quickly BC Hydro has retreated from its sanctimonious position that the CFT result of DPPLP was as Sr. Vice-President of Distribution - Ms. Bev Van Ruyven stated in the last sentence of the third paragraph on the second page of her opening statement the "best":

"At our request, the team performed some further analysis that responded to these questions, and we concluded that the outcome of the CFT process was **the most cost-effective solution** available to replace the HVDC cable."

At the end of the fourth paragraph she further states:

"...we believe that after ten years of agonizing over the best means to serve the capacity shortfall, **the most cost-effective solution** has now been identified and it is time to implement it."

Mr. Sanderson may not believe that BC Hydro must achieve that goal of being **the most cost-effective** but the public of BC expect that the Commission Panel should.

3. The panel has the discretion to exercise its judgment in the pursuit of protecting the public interest. Period. What BC Hydro thinks is irrelevant. The integrity of the institution relies on the character and integrity of its Commission Panel members.

4. Paraphrased: VIGP was not the best. As long as DPPLP was better, that is good enough. As long as DPPLP returned the lowest result of the other natural gas projects proposed at Duke Point – the public should accept that. That is all that was evaluated in the CFT. I wonder how much cheaper DPPLP is than the benchmark if the \$50 million credit is not given to them. Those assets were obtained by BC Hydro at reasonable prices. DPPLP needed to acquire them to proceed. Credit or not, they are a necessary cost of that project. The fact that they are not included in the assessed cost of DPPLP is ridiculous.

Refer to my comments in my argument regarding the complete irrelevance of the CEA conducted by BC Hydro.

5. I am certain that Mr. Sanderson's mistaken representation of the principle issue is just an oversight rather than a misrepresentation to support his argument. Just for clarification he states:

"In the result, it decided to hear evidence on a number of issues, all intended to inform the principle one, that being whether the Tier I option is cost-effective relative to the Tier II or No Award options to meet Vancouver Island's capacity deficiency starting in the winter of 2007/2008."

That is not the principle issue as identified by the Panel in Volume 2, page 313, lines 24-26. It clearly identifies the principle issue as:

"Is tier 2, tier 1, or the no award option **the most cost-effective option** to meet the capacity deficiency on Vancouver Island commencing in the winter of 2007/2008?"

Obviously BC Hydro does not feel that it needs to support the notion that the EPA before the Commission is the most cost-effective option anymore.

6. I concur absolutely that I was not willing to accept the expedited process that prevented a full and comprehensive investigation into all of the matters pertinent to this issue. Although I

was granted much assistance by BC Hydro counsel and latitude by the Chair, both are akin to throwing a drowning man a towel.

7. I concur that BC Hydro had a lot to deal with. I do not sympathize with them. I did not have access to the staff or resources that they did. I left my regular paying job to be involved in this process and may not be adequately compensated. I lived away from home for two weeks. This was their expedited process – how absolutely insolent to whine about the hardship they imposed upon themselves.

8. At times I found that BC Hydro was not forthcoming with all of the specific IR responses or undertakings that I desired. It was often very difficult to get specific responses from their panel members. Given the volume of material though, I feel that they should be commended for the efforts that they made and the willingness of Mr. Sanderson to help clarify some of my issues that arose. In general, I cannot fault BC Hydro for its attempt to mange this incredibly challenging administrative and procedural task.

9. Lowest cost as we now know, does not mean the best value to the ratepayer. That is witnessed in the comments of the In-Camera transcripts, volume 8, page 1741. I challenge Mr. Sanderson's suggestion that the DPPLP proposal is more cost-effective than the tier II suggestion I made in my argument. I guess if you accept the assumptions and "equalization" (based on generation) that BC Hydro used in its CEA that could be true. I hope that I have adequately dismissed that notion with the simple question.

"Is the ratepayer willing to pay \$71 million for an extra 130 Mw of capacity that will not be required until after 2020, and assume all of the risks and associated costs of managing DPP's environmental impacts and fuel price risks?"

11a) Irrelevant because I contend that neither is cost-effective when compared to a portfolio of projects with less capacity

11b) It is interesting that even though BCTC states that they are confident that the AC cables will be in place to meet F2009 requirements, BC Hydro adds a risk premium by assuming F2010. (November 18, 2004 letter from M. Hemmingsen to Y. Mansour)

I reference Volume 10, page 2342, lines 9-13, and page 2357, lines 21-26. BCTC is very confident that they can meet that in-service date.

BC Hydro has no gas transportation contract in place but they are confident that they will. They did not add any premium to reflect that uncertainty.

13. If the QEM was such a simplified evaluation methodology – why did it take so long to develop and so much money to produce. Why did BC Hydro hold it up as a shining example of why the tier I result should be accepted, if it was so simplistic?

Once again – the principle issue states the most cost-effective option. Until this issue arose (In-camera) and was challenged by intervenors, BC Hydro still maintained that DPPLP was the most cost-effective option.

16 & 18. Irrelevant argument given that the tier I proposal is so disproportionately more expensive than a tier II option that seeks to meet our capacity needs. (Basically, lets pay more for more capacity we don't need for 20 years.)

17. That would mean that BC Hydro does not have the right to dispatch this – correct?

19. Both BC Hydro and BCTC have indicated that the generation component of this CFT are not adequate or able to be considered as a competing alternative. See Argument for references and justification.

20. Point 49 and 50 of Mr. Sanderson's argument, pages 22 and 23, contain some interesting language. I would like to compare the scenario of the AC cable in-service date with the fuel transportation agreement. Both have some degree of uncertainty about them. I can accept some of that. What is curious is that it appears as though BC Hydro feels that it should be acceptable for them to be "confident that they will be able to reach an agreement" that it will be "near the values used in the QEM", that "it is likely that" an agreement will be in place by November 2005.

Why is it acceptable for BC Hydro to be confident in an accomplishing a project that has some uncertainty attached to it without risk premiums or contingency measures but BCTC is not?

22. At a cost - \$71 million for 130 Mw not including other factors and risks.

25. Let's remember that the world has changed since VIGP. Reference Volume 10, page 2406 and 2407. Mr. Mansour feels that generation is important and whichever can come to market and is the most cost-effective is the best decision. The fact is that the DPP project is the only one to my knowledge that has stated that it can't still make the 2007 deadline if it is delayed. The NCDMP is no issue at all really. I'm not sure Mr.

Sanderson wants to make that his argument because the tier I is the project that poses the highest development risk.

27. So is the fuel transportation. BCTC is confident, why should we value BC Hydro's distrust more than we value BCTC's confidence. It appears that Mr. Mansour is a very honest and straightforward guy. I trust his assertions far more than those I have received from those doubting his abilities.

29. Please see argument.

30. I can't reference it but one of the IR's identified that the longest current gas supply contract that BC Hydro had was one year. The implication in the hearing was that they would have to extend that practice to cover multiple years in order to hedge successfully. That is not something that they have historically done.

31. But it would be discriminatory if the guy in Ottawa

32. But it has accepted the costs of managing that risk. Dealt with in argument.

33. I don't know why this is even mentioned. There is no risk to the ratepayer of alternative fuel costs as they are supplying them themselves. This just underscores the security of the alternative fuels with regard to price risk.

34 – 36. Dealt with extensively in Argument

51-54. Forecast have changed since the VIGP decision. Circumstances have changed. I certainly hope that the Commission Panel does not allow previous regulatory decisions from preventing them from seeking the most cost-effective solution.

55 – 64. CFT criteria. BC Hydro was allowed to run their own process. I believe that I have demonstrated a much more acceptable result than DPP. What BC Hydro did or did not do or the criteria that they operated under are irrelevant if the Commission Panel is interested in protecting the public interest.

76. The fact that BC Hydro did not utilize what is available is irrelevant. Norske has stated they can provide up to 210 Mw. One again, that is old information that should be updated, as long as we are updating everything else.

77. It can meet N-1 planning criteria in the short term and that is all that it is proposed for in the solution I have suggested.

82. BC Hydro can make that assumption – the Panel shouldn't. It is a monumentally cheap way to bridge our needs until the AC cable is in place. As a ratepayer, I couldn't care less what BC Hydro's criteria were, I want the cheapest available alternative. That is it. It all goes back to accepting a sub-optimal outcome due to self imposed regulatory criteria by BC Hydro.

84. Adequately proven that any tier I outcome is not cost-effective when compared to the tier II option I discussed in Argument.

85. It is also unfortunate that the Commission Panel can't; however, the Panel make determinations to ensure that we get it right the next time. I'm sure that BC Hydro would supportive of an expedited process to accomplish those significant cost savings for the rate payer.

86. "the DPP solution is an attractive one". I guess it could be considered attractive if we had \$71 million to throw away.

Unfortunately I have run out of time and cannot respond to any further comments.