### **BRITISH COLUMBIA UTILITIES COMMISSION**

IN THE MATTER OF THE UTILITIES COMMISSION ACT S.B.C. 1996, CHAPTER 473

and

British Columbia Hydro and Power Authority
Call for Tenders for Capacity on Vancouver Island
Review of Electricity Purchase Agreement

Vancouver, B.C. January 18, 2005

## PROCEEDINGS AT HEARING

**BEFORE:** 

R. Hobbs, Chairperson

L. Boychuk, Commissioner

# **VOLUME 7**

#### **APPEARANCES**

G.A. FULTON Commission Counsel P. MILLER

C.W. SANDERSON, Q,C, H. CANE

J.C. KLEEFELD

L. KEOUGH Duke Point Power Limited

C.B. LUSZTIG British Columbia Transmission Corporation

A. CARPENTER

D, PERTTULA Terasen Gas (Vancouver Island) Inc.

G. STAPLE Westcoast Energy Inc.

R. B. WALLACE Joint Industry Electricity Steering Committee

C. BOIS Norske Canada

D. NEWLANDS Elk Valley Coal

F. J. WEISBERG Green Island Energy

D. LEWIS Village of Gold River

D. CRAIG Commercial Energy Consumers

J. QUAIL. BCOAPO

D. GATHERCOLE (B.C. Old Age Pensioners' Organization, Council Of

Senior Citizens Organizations Of B.C., End Legislated Poverty Society, Federated Anti-Poverty Groups Of B.C. Senior Citizens' Association Of B.C., And West End

Seniors' Network)

W. J. ANDREWS

GSX Concerned Citizens Coalition
T. HACKNEY

D. C. Systemable Energy Association

B.C. Sustainable Energy Association

Society Promoting Environmentnal Conservation

R. MCKECHNIE Himself

R. YOUNG Gabriola Ratepayers' Associations

K. STEEVES Himself

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1 acknowledges and has not put in issue in this proceeding, the adequacy of any of the -- or the 2 adequacy of Green Island's material on any of the 3 things covered, I suspect, in those three binders. 4 Oh dear. I'm making these submissions, I 5 see, in the absence of Mr. Weisberg. 6 7 THE CHAIRMAN: I was aware of that. Please proceed. MR. SANDERSON: Which diminishes their utility. I will 8 proceed. 9 So, our position is not that there's 10 anything wrong with that information, it's simply that 11 it doesn't deal with any matter that at least B.C. 12 Hydro is putting in issue. It's three volumes of 13 material, and I should also indicate that it's three 14 volumes of material that very few people in Hydro have 15 ever seen, which is another complication. 16 Proceeding Time 8:23 a.m. T02 17 18 That is the process in the bidding was that 19 only the technical evaluation committee was permitted 20 to see any of the information that came in from the bidders, and that's very few people. So no one else 21 knows what's in there. Now, we don't take issue with 22 what it's designed to prove. On the other hand, it 23

makes me, personally, as counsel, nervous that three

volumes are going in that I've certainly never seen.

1 a scope issue. There is not a point in issue to which this material relates so far as I can see. 2 If there's another party who is putting in 3 issue, and the Commission accepts that it's properly 4 in issue, whether or not Green Island qualified, then 5 I can see it might be relevant. But I haven't seen 6 7 any other party doing that, and I stand to be corrected by Mr. Keough or someone else, and I haven't 8 heard the Commission rule in a way which would suggest 9 that is an issue that you're concerned about within 10 11 the scope in this proceeding. And so in the absence of those two things, 12 I say there's no benefit to that evidence being filed. 13 THE CHAIRPERSON: Thank you. Mr. Keough. 14 Thank you, Mr. Chairman. Duke Point Power 15 MR. KEOUGH: 16 is certainly not taking issue with anything that my friend Mr. Sanderson has said. Our concern comes at 17 18 it from a slightly different direction, and that is as 19 I expressed yesterday. The concern is with the allowance of material to be disclosed on the record in 20 a piecemeal fashion, and obviously the party filing 21 must see some advantage to, at this point in time, 22 sequentially letting pieces of information be made 23 available on a confidential basis. 24 Proceeding Time 8:25 a.m. T3 25 And the concern goes more to what I'll call 26

an effort by parties to have the results of the CFT retried in this forum on a very different basis. As you heard yesterday, the rigours of the CFT process and the requirement that they be rigidly followed are to be contrasted with what's going on here, and we just think it is very unfair to allow that type of process to unfold before you for what were competitive bids in the CFT process. And we certainly don't think any remote equal footing is being preserved by the way this record is being developed. And that is what is troubling the fundamental unfairness. In the way that this is being handled is what is troubling to Duke Point Power.

We don't take issue with the content of the

We don't take issue with the content of the bid or whether it qualifies or not or anything like that. It is the manner in which this is being approached, and we think that is fundamentally unfair.

But Mr. Chairman, it's obviously in the Commission's hands and you will do what you will do, but that is the fundamental unfairness that we see. Thank you.

- 22 THE CHAIRPERSON: Thank you. Mr. Weisberg.
  - MR. WEISBERG: Good morning, Mr. Chairman. To put my submissions in context, I want to make sure that you and everyone else is aware of what took place yesterday following this, this proceeding.

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I returned to my office and completed preparation of the IR responses that were due yesterday. As I indicated yesterday in my submissions to you at the end of the day, I indicated then that it was Green Island's position that many of the Duke Point IRs to Green Island are out of scope. I also advised you that not withstanding that, we had undertaken to respond to them as far as possible, and that we did.

And yesterday I filed a letter, and given the timing of the proceeding this morning and the filing yesterday, I'm not sure that everyone has seen that. But there was a letter that went in dated yesterday to the Commission attaching the response of Green Island to the Duke Point IRs and also setting out in some detail the basis for including as part of our response the filing of Green Island's bid submission, that being on a confidential basis to the Commission.

#### Proceeding Time 8:28 a.m. T04

Mr. Sanderson has indicated this morning in his brief submissions that he is not aware that another party has put in issue matters related to Green Island's bid, and that is the very essence of my submission to you. That's exactly what Duke Point has done, through its Information Requests.

whether Green Island's bid qualified. But if you look at the Information Request from Duke Point, you will quickly see that a great many of them relate to criteria that Green Island satisfied completely, or its bid would not have gotten as far as it did in the CFT process. And it's worth noting that if Mr. Keough is suggesting that there is some flaw in the process that allowed Green Island's bid to get as far as it did by satisfying the criteria, and that those criteria are in some way defective or fall short of what they should have, then he needs to point out what the problem with those criteria are, or everything that flows from it in terms of his IRs should be out of scope.

As far as Mr. Sanderson's other submissions, I would say that B.C. Hydro is in the unique position of being the only party in this proceeding, other than Green Island, that has so far had access to the entire Green Island bid submission. And I note that, notwithstanding what Mr. Sanderson said.

#### Proceeding Time 8:30 a.m. T05

And I note that, notwithstanding what Mr. Sanderson said, and I know that there are many individuals that work at B.C. Hydro, but as a company

they have had that information for months, since
August last year. And the testimony of B.C. Hydro's
witnesses suggests that all sorts of checks and
balances ensured that every aspect of Green Island's
bid was considered or, in some cases, even reconsidered. And the Commission's panel's acceptance
of the filing that we propose can't possibly result,
we say, in any prejudice to B.C. Hydro. And nor does
it create the need for any review that hasn't already
been, or should have been, completed months ago.

The testimony of B.C. Hydro's witnesses also suggests that there's a -- what I'll call a corporate zeal for minimizing regulatory risk. And accordingly, I would think that B.C. Hydro would welcome the filing of Green Island's bid submission, as it puts the Commission panel in a better position to determine the most cost-effective alternative to address the capacity shortfall on Vancouver Island. Perhaps that's Duke Point, perhaps that's Green Island. But more information will assist you in that determination.

The irony of the position taken by Mr.

Keough is that the only reasonable basis for objecting to the filing of Green Island's entire bid submission is that the majority of his own client's Information Requests are out of scope. Consider that if the

Information Requests from Duke Point are in scope, then Green Island is required by the rules of this proceeding to respond. And practice may well be that some parties typically provide as little information as possible in response to IRs. That doesn't mean that parties are limited to that generally-unhelpful style of response. Indeed, the evidentiary record is far better served when parties fully and directly address the matters addressed in IRs. Beyond the procedural obligation to respond, it's Green Island's right to complete -- to provide complete responses to the IRs.

Duke Point has asked a series of questions so broad that they purport to put virtually every aspect of Green Island's bid submission in scope and at issue. Duke Point's Information Requests are so extensive that they are entirely disproportionate to Green Island's role in this proceeding. Duke Point should not be heard to object or complain about Green Island's response being too complete or too responsive, if that's possible, to questions that Duke Point apparently contends are in scope.

I acknowledge that there's one basis, one reasonable basis, for Duke Point to object to the filing of Green Island's submission as part of the response to Duke Point's Information Request, and that

is, if Duke Point concedes that all or most of its Information Requests are out of scope. And in that case, Duke Point should identify such Information Requests, immediately withdraw them, and take an extremely conservative approach to cross-examination of Green Island's witness panel.

In the unlikely event that Duke Point makes that concession, we submit that the Commission panel should consider whether Duke Point's disregard of the Commission panel's rulings on scope amounts to an abuse of process. Duke Point's Information Requests have required a very significant effort on Green Island's part to respond.

Regarding Mr. Keough's concern about piecemeal filings, I'm not really sure what that means, or what the -- what significance you should attribute to it. But I do note that the Duke Point IRs were filed after the deadline for filing intervenor evidence, and so of course Green Island's responses would necessarily have to be filed after that same deadline.

Mr. Chairman, I'd ask that you also consider the letter from myself dated yesterday as part of my submissions before you make your ruling on this. If you like, I will address it now. Otherwise, I would ask that you reserve your decision until after

THE CHAIRPERSON:

1 you have reviewed that letter, as it sets out --2 THE CHAIRMAN: You don't need to proceed. Mr. Keough, do you want to respond after 3 you've read Mr. Weisberg's letter, or do you want to 4 respond now? 5 6 MR. KEOUGH: Mr. Chairman, I have not seen the letter, 7 but I'm actually not even sure what I'm responding to. My friend makes a great deal of the Information 8 Requests that Duke Point Power asked his client. 9 Proceeding Time 8:35 a.m. T6 10 11 If he were to scroll up the page in the IR, for each question there is a reference in the evidence and it 12 is a question posed based on the evidence that's 13 filed. And so my contention is that every single one 14 of the IRs are in response to positions that my 15 friend's client has advanced. So I do not think they 16 are out of scope or irrelevant. So he correctly has 17 18 predicted that I'm not going to withdraw any of the 19 information requests. I will take a look at his letter, Mr. 20 Chairman, but I really am not sure I have much further 21 22 to comment on. My position is pretty clear as to why I'm taking the view I am on the filing of the three 23 binders of confidential material, and I don't think 24 that's going to change by reading his letter. 25

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Does that suggest that after we review

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So I've identified areas that I believe are

already well-canvassed. They are the Calpine letter, the electricity and gas price forecast -- and for those of you who have not filed evidence in that area, I expect that you will be particularly careful about the rigour of your cross-examination in that area. Changes in technology, they were canvassed thoroughly in the VIGP proceeding and nothing new came from that review and Mr. Wallace did have the opportunity, if he wished, to rely on that evidence, to identify it in the VIGP proceeding. And the QEM model itself. A lot of Mr. Wallace's questions about the mechanics of the QEM model were in the evidence already, particularly the questions that he raised prior to the break.

If you have questions regarding the QEM model I want to know at the commencement of your cross-examination if you have requested a copy of it. If you have not and still have questions about the QEM model, then the panel is instructed not to answer the question until I have approved the question.

### Proceeding Time 8:40 a.m. T07

And I'm expecting that you will be about 30 minutes in cross-examination. Otherwise, we will not get through our schedule today. I will provide some flexibility with respect to that allocation of time, but I would like you to endeavour to keep your cross-examination to about that length of time.

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Everyone here has an interest that may or may not be

conveyed through the evidence that they've filed, and

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there are a number of stakeholders here who are very interested in the outcome of this hearing, who have a number of questions that should be explored, and on the basis that they haven't filed evidence to deny that right, seems to me to be inappropriate. And I just would caution the panel to -- with all due respect, tread lightly in that respect. I have not done what your comments just THE CHAIRMAN: suggest, Mr. Bois. But, if you haven't filed evidence with respect to the gas and electricity price forecasts, then I encourage you to be looking to the evidence that Mr. Wallace has already obtained in his cross-examination. And, if you haven't requested a copy of the QEM model, I want to -- and you intend to ask questions in that area, I want to know whether or not you've requested a copy of the QEM model, and then this panel is not to answer the question that you might have in that area if you have not requested a copy of it until I've said that the question is okay. MR. BOIS: No, I appreciate that, Mr. Chairman. It was just a general concern that I had. Now, as far as relying on other intervenor evidence and questions and cross-examination, I went through my cross last night to eliminate what I

thought were duplicate areas of questioning, in much

the same vein that you have with the concern, that we

1 would be in time today. I also would have intended to rely on other intervenor evidence in argument. So I 2 don't think it's -- I think we're on the same page, I 3 just think we need to be a little bit cautious how far 4 we go down this slippery slope, that's all. That's my 5 6 only comment. 7 THE CHAIRMAN: Please proceed. I'll try to do it within the 30 minutes. MR. BOIS: 8 though I pared it down last night, I -- if I don't 9 finish, I will, just for the sake of the record, note 10 my objection to the time limit. 11 Well, Mr. Bois, there is no time limit. 12 THE CHAIRMAN: 13 I'm simply encouraging you to try to stick to the 30 minutes. 14 Then I misunderstood. 15 MR. BOIS: Oh, okay. I apologize. 16 Thank you, Mr. Chairman. CROSS-EXAMINATION BY MR. BOIS: 17 18 MR. BOIS: Q: Good morning, panel. I'm not sure that 19 I'm going to have any questions on the QEM model, but 20 I think it depends somewhat on your responses. So I will -- as we go along, if I have a question, Mr. 21 22 Chairman, I'll bring it to your attention before I ask it. 23 THE CHAIRMAN: That's because you have not asked for a 24

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copy of the QEM model.

Yes.

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MR. BOIS:

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1 THE CHAIRMAN: Thank you. Now, yesterday, Ms. Van Ruyven mentioned 2 MR. BOIS: Q: rate 1852 provides some form of load shedding, and I 3 think, Ms. Hemmingsen, you were in the room when that 4 was made -- when that comment was made. Do you recall 5 6 that? 7 MS. HEMMINGSEN: **A:** I do recall that. MR. BOIS: Now, does B.C. Hydro consider the Norske 8 Q: proposal, the demand management proposal, to be a 9 program of curtailment similar to the 1852 program? 10 11 MS. HEMMINGSEN: **A**: I'm not entirely familiar with the 12 1852 program as rate, and the way that we have 13 interpreted Norske's proposal based on their application to the B.C. Transmission Company's Capital 14 Plan was as a load shifting proposal. 15 16 MR. BOIS: Q: Okay. Would you also say that there's also a demand, a load curtailment element, to that 17 18 proposal? That there is a --MS. HEMMINGSEN: **A:** That's my understanding of the 19 20 proposal, in that we can pay Norske to shut down. Okay. Now, does anyone else on the panel 21 MR. BOIS: Q: aware of the rate -- 1852 and the comment 22 Proceeding Time 8:45 a.m. T08 23 24 MR. BOIS: Okay. Now, is anyone else on the panel Q:

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that I just asked? No? Mr. Soulsby, you sort of

aware of the rate 1852 and the comments or questions

1 raised your finger. I just wondered -- okay. want to make sure you have the opportunity to speak. 2 So then let's answer the next question. 3 does anyone have any knowledge of the rate 1852 and 4 how it was started? Nobody at this panel has. 5 Would it surprise you to know that it was 6 7 initiated by Norske? So you have no information to add to that. Okay, thank you. 8 MR. FULTON: Mr. Chairman, we do need an audible answer 9 on the record. 10 11 MS. HEMMINGSEN: **A:** No. MR. BOIS: 12 Q: Thank you. 13 Now on page 1 of the CFT background, and I'll let you look at that but if you want to -- I'm 14 just going to refer to line 13 and 14. B.C. Hydro 15 16 makes the comment that every plausible solution to Vancouver Island's problems has been extensively 17 studied. Do you have that reference? 18 MS. HEMMINGSEN: **A**: T do. 19 MR. BOIS: Q: Could you tell me what extensive studies 20 21 you've done? 22 MS. HEMMINGSEN: **A:** Well, over the past ten years we've looked at our supply/demand requirements and the 23 24 capacity balance on Vancouver Island, and proceeded on the basis of N minus 1 reliability criteria, 25

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identified a range of new generation opportunities

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- that would meet that N minus 1 planning criteria as
- 2 | well as transmission opportunities, been through
- 3 various regulatory hearings and processes starting in
- 4 1994.
- 5 MR. BOIS: Q: So is it fair to say that for the past
- 6 ten years B.C. Hydro has been focused on basically two
- 7 options, generation or transmission?
- 8 MS. HEMMINGSEN: A: I haven't been involved in this
- 9 | file for ten years, so I can't speak to what we may
- 10 have considered earlier.
- 11 MR. BOIS: Q: Can anybody else add to that?
- 12 MR. SOULSBY: A: No.
- 13 MR. BOIS: Q: No, you can't add to that?
- 14 MR. SOULSBY: No, I cannot add to that.
- 15 MR. BOIS: Q: Okay. So, but the only studies that you
- mentioned were generation and transmission, so I'm
- going to assume that those are the only studies that
- 18 you undertook? Unless you want to check and get back
- 19 to me.
- 20 MS. HEMMINGSEN: A: But the only studies that I'm aware
- of under my tenure are looking at meeting the N minus
- 22 1 planning criteria, which is based on either new
- generation or transmission options.
- 24 MR. BOIS: Q: Okay. Would you be willing to endeavour
- 25 to find out if there were any other studies that
- looked at anything other than generation or

- Page: 1358 transmission? If it's an extensive task I don't want 1 to put you through an extra effort, but I just would 2 like to know generally speaking. 3 Mr. Bois, by that -- the only thing I can 4 MR. SANDERSON: think of besides generation and transmission is 5 6 demand-side management. Is that related to your 7 question or is it something else? Well, just demand-side management or were MR. BOIS: Q: 8 there other options, including potentially different 9 kinds of ways of serving the load. 10 11 MS. HEMMINGSEN: **A**: Yeah, and sorry, I was characterizing demand-side management as being a net 12 13 reduction off our load requirements on a permanent, ongoing basis, so. 14 What I'm trying to get at is I'm not sure 15 MR. SANDERSON: 16 what it is Mr. Bois thinks isn't covered by what Ms. Hemmingsen has talked about. 17 18 MR. BOIS: Well, as I understand the answer, the only 19 studies that have been involved are generation and 20 transmission. I want to know if there's any other studies that have looked at other options, which may 21 include demand-side management. 22 All right. Well, we can undertake to 23 MR. SANDERSON:
- 24 check on that topic.
- MR. BOIS: It shouldn't be a hard question, I don't think. If it is, just let me know and we'll let it

MS. HEMMINGSEN:

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My knowledge of the timing of the

**A:** 

1 cable is based on my information from the past 18 months, and we had requested BCTC maintain the 2 earliest in-service date, and Mr. Soulsby in fact had 3 filed a letter, a formal letter to BCTC requesting 4 that and received a response from them. 5 Proceeding Time 8:50 a.m. T09 6 7 MR. BOIS: Q: So prior to BCTC's involvement as a corporation and a separate entity from B.C. Hydro, 8 what did B.C. Hydro do with respect to expediting the 9 230 kV line? 10 11 MS. HEMMINGSEN: A: I'm not aware of what we did prior 12 to 18 months ago. I would have thought that that would have 13 MR. BOIS: Q: been one your plausible solutions that would have been 14 answerable. 15 16 MR. SANDERSON: Mr. Chairman, I'm having trouble with Whether or not Hydro should have proceeded with 17 18 the generation on the Island or transmission prior to 19 18 months ago was the subject matter of a very long 20 hearing 18 months ago. And I guess I just cannot understand where these questions could be going except 21 22 to rehash the issues that were put to bed in the VIGP 23 proceeding. MR. BOIS: Sorry. Mr. Chairman, B.C. Hydro has 24 supported it's application by the comment that it saw 25

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-- it's looked at every plausible solution. In VIGP,

although we were allowed to canvas transmission capacity, as I recall it was a very narrow ability to canvas that scope, it was almost -- similar to the derating and scheduling of the HVDC in this hearing. It was ruled out of scope.

So I'm a little bit concerned that we use the VIGP as the benchmark and we're getting caught with issues that were out of scope in VIGP, we're raising issues that were now out of scope in this hearing, and how do we get these issues into scope so that they are even considered? I just don't understand the logic here.

And if B.C. Hydro can make the comment that every solution has been canvassed and studied extensively in this application, then they should be subject to check on that.

THE CHAIRPERSON: Your recollection of the VIGP scope, subject to check, I think is incorrect. There was extensive evidence with respect to the 230 kV line versus the option of on-Island generation and the VIGP decision concluded that on-Island generation should be the next logical step. You have considerable room, I think, with respect to this in the context of the principle issue for this proceeding. But that is different than pursuing this in the context of whether or not the next logical step is on-Island generation

1 of the 230 kV line. Well, with all due respect, Mr. Chairman, I 2 think the VIGP decision of the Commission was 3 referenced and I think the comment made by the 4 Commission was, "In light of the evidence filed in 5 this hearing". And I think that given that the 6 7 evidence was a fairly narrow issue, if other evidence had been filed it's quite likely that the Commission 8 might have made a different comment. 9 So with respect, I'm wondering how the 10 Commission can get that other evidence in front of it 11 to make a reasonable decision. 12 THE CHAIRPERSON: You see that's the characteristic that 13 you're giving to the VIGP scope of review that, as I 14 say subject to check, it concerns me, because it's not 15 16 my recollection of the VIGP scope. Okay, I'll move on, but I'll take your point. 17 MR. BOIS: Thank you, Mr. Chairman. 18 THE CHAIRPERSON: In fact, the decision expressly speaks 19 to the issue of alternatives for supply to Vancouver 20 Island. You are suggesting that they were not all 21 well canvassed in that proceeding, and that's what I'm 22 concerned about. I don't think that the record will 23 show that. 24 Okay, thank you, Mr. Chairman. If that's the 25 MR. BOIS:

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case, I apologize in advance.

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- 1 MR. BOIS: Q: Now, I'd asked the panel to draw it's
- 2 attention to the BCTC response to the Duke Point IR
- guestion 1.2 and 1.4. Essentially that response
- 4 suggests that the new transmission line would only
- 5 have a lead time of about 18 months, which is similar
- 6 to what we are talking about for this plant, is that
- 7 correct?
- 8 MS. HEMMINGSEN: A: I'd like to get that reference and
- 9 look at what it specifically says.
- 10 MR. BOIS: Q: Thank you, please do.
- 11 MS. HEMMINGSEN: A: Could you restate the reference,
- 12 please?
- 13 MR. BOIS: Q: It's the responses to the Duke Point
- questions 1.2 to 1.4. And they are BCTC's answers.
- 15 MS. HEMMINGSEN: A: Sorry, it's 1.2 and?
- Proceeding Time 8:55 a.m. T10
- 17 MR. BOIS: Q: 1.2 through 1.4. Basically it talks
- about the lead time of the supply of the cables and
- the installation barges and things like that. And I
- 20 think BCTC characterizes it as being an 18-month lead
- 21 time.
- 22 | MS. HEMMINGSEN: A: My reading of this says "the
- 23 estimated time required from placing an order to
- completion of installation for a turnkey contract of
- 25 the 230 kV submarine cable is 18 months." So my
- reading of that would be that there is pre-development

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which I understand can take anywhere from 12 to 24

1 months. Now, wouldn't it be conceivable that BCTC 2 MR. BOIS: Q: could enter into those contracts on much the same 3 basis that you're entering into the Duke Point 4 contract? And that is, subject to regulatory 5 approval? 6 7 MS. HEMMINGSEN: **A**: I'm not sure on what basis they could enter into those contracts, or at what point 8 they envision entering into those contracts. 9 understand that they filed a project schedule report 10 with their Capital Plan, and that there's a number of 11 stages that need to be completed, basically in 12 13 sequence. Okay. Well, I won't belabour the point. 14 MR. BOIS: 0: I think it's safe to say, though, that if an 15 16 application was filed today, based on those answers, we'd be looking at an 18-month timeline. 17 18 MS. HEMMINGSEN: Α: I think the difference between BCTC's status and DPP's status is, DPP is a binding 19 20 contract to deliver at a date certain time, whereas BCTC is best-efforts, with a process that requires 21 22 significant approvals, and development milestones to be met, whereas Duke Point has already achieved fully 23 permitted status. So I would characterize the two 24 projects quite differently. 25

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Okay, thank you. Now, I'd just like to

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MR. BOIS:

Q:

- 1 know, moving on to the Norske proposal, what
  2 assumptions, if anything, has B.C. Hydro made about
  3 the Norske proposal or other demand-side management
  4 options generally?
- 5 MS. HEMMINGSEN: **A:** Well, the issue for B.C. Hydro with 6 the Norske proposal is, Norske was a bidder in the CFT 7 process. And there was some anti-contact, or antilobbying rules that were outlined and applied to all 8 bidders in the process. So we could not be in contact 9 with Norske until after the CFT process was conducted. 10 We were aware that they had filed an application or 11 some information with the BCTC Capital Plan, and we 12 accessed that information to represent the Norske 13 option as part of the Tier 2 and no award analysis 14 that we conducted. 15
- 16 MR. BOIS: Q: So you actually evaluated the Norske proposal?
- MS. HEMMINGSEN: A: We extracted the information that
  was provided in that proposal and represented it in
  the cost-effectiveness analysis.
- 21 MR. BOIS: Q: You did. Okay. Well, that --
- MS. HEMMINGSEN: A: And furthermore, in terms of the
  gap that we're facing on Vancouver Island, the Duke
  Point project does not fully close the gap. So we
  anticipate needing to access contingency measures like
  Norske's proposal regardless of what option we pursue.

MR. BOIS: 1 Q: Well, actually, I wanted to get into that a little bit, actually, because I think Ms. Hemmings, 2 you were quoted in The Sun yesterday --3 MS. HEMMINGSEN: Hemmingsen. 4 **A**: 5 MR. BOIS: Q: Oh, I'm sorry, Hemmingsen. I apologize. 6 You were quoted in The Sun yesterday as in fact 7 relying on the Norske proposal. Was that a fair quote? Have you seen that article? 8 MS. HEMMINGSEN: **A:** I have not seen the article, and --9 I have it with me, but I didn't bring it MR. BOIS: Q: 10 11 up. Just one moment. It turns out that I didn't bring it, so 12 I'll bring it later, and put it to you then. 13 MR. SANDERSON: Don't feel obliged, just ask her --14 MR. BOIS: Well, it's --15 Q: Whether it's in The Vancouver Sun, I 16 MR. SANDERSON: submit, has got no relevance to anything. 17 Just put 18 the proposition to the panel and see what they have to 19 say about it. MR. BOIS: Q: Right. Well, thanks. 20 The proposition, I guess, was that in the 21 article yesterday, you were credited with saying, and 22 23 it wasn't in quotation marks, so I won't say you were 24 quoted, and if I did that earlier I'll restate it; that you were credited with saying that B.C. Hydro is 25

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relying on the Norske proposal.

1 MS. HEMMINGSEN: **A:** I don't recall making that statement. 2 So that's not a correct statement? MR. BOIS: 3 0: Proceeding Time 9:00 a.m. T11 4 5 MS. HEMMINGSEN: Well, (a), you've said it's not in **A**: 6 quotes, and I don't recall making that statement. MR. BOIS: 7 Q: Okay, so given that and given subject to check, would you be looking to clarify that for the 8 public and your stakeholders? Or would you just let 9 the record stand the way it is? 10 MS. HEMMINGSEN: **A**: I would like to see the article and 11 12 review exactly what I said to the reporter on Friday, actually, it was. 13 THE CHAIRPERSON: How is that relevant to this 14 15 proceeding? 16 MR. BOIS: Well, it's relevant because Norske has -- or B.C. Hydro has said that the Norske proposal wasn't 17 18 considered. And it's relevant because --THE CHAIRPERSON: That might be --19 20 MR. BOIS: It's also relevant because in this application they've said later on and I'm going to get to that, 21 22 that they're going to rely on the Norske proposal. How can they do that if they haven't talked to Norske? 23 24 THE CHAIRPERSON: How is it relevant whether or not Ms. Hemmingsen corrects the public record, or at least the 25 26 record in the newspaper?

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- 1 MR. BOIS: Well, I would think from a corporate public
- 2 perspective they wouldn't want it to be let out there
- 3 that if they're not going to rely on this proposal,
- 4 that the record should be straight.
- 5 | THE CHAIRPERSON: Why should I care?
- 6 MR. BOIS: Well, okay, fair enough. Your point is taken.
- 7 I think Norske cares and I think B.C. Hydro should
- 8 care.
- 9 THE CHAIRPERSON: But it's not relevant to the record in
- this proceeding, Mr. -- well.
- 11 MR. BOIS: Well, the record, this record forms part of
- the public record just as much as these papers.
- 13 MR. BOIS: Q: Now, would it be possible for B.C. Hydro
- to design a load curtailment or design-side [sic]
- management project that would allow it to meet an N1
- 16 criteria?
- 17 MS. HEMMINGSEN: A: Could you repeat your question
- 18 please?
- 19 MR. BOIS: Q: Would it be possible for B.C. Hydro to
- develop a demand-side or load -- demand-side
- 21 management or load curtailment program or contract
- 22 with a customer such as Norske, that would allow B.C.
- 23 Hydro to reduce its loads to Norske and still meet the
- 24 N1 criteria?
- 25 MS. HEMMINGSEN: A: Well, I think we're active on that
- 26 front with our significant demand-side management

activity. 1 In fact, there's almost 100 megawatts of demand management activity assumed in determining what 2 the gap on Vancouver Island is, and Norske as one of 3 the largest customers would contribute to that, 4 realizing that volume. 5 6 MR. BOIS: 0: Well, but as I understood the answers 7 yesterday and the answers from Mr. Van Ruyven, those are permanent load losses or load shedding. 8 talking about a permanent load loss. I'm talking 9 about a load curtailment or demand management where 10 you would enter into a different kind of structure or 11 agreement whereby Norske, for example, as the largest 12 consumer on the Island, would shift its load. 13 MS. HEMMINGSEN: Right. And I quess why we're here 14 **A**: and what we predicated the resource option that we're 15 16 putting forward is the Commission's direction from the VIGP decision that we were to look for on-Island 17 18 generation. And that's what the CFT does, and as long 19 as it's cost-effective we did not have to consider other options such as load shedding or various 20 contingency bridging measures. 21 22 MR. BOIS: Okay. In light of that, then, would you Q: -- on page 22 of the VIGP decision, the Commission 23 24 also made the comment that "Arrangements with Norske Canada to short-25 26 term load curtailments are an attractive

1 option in the event that B.C. Hydro needs to bridge a period until a resource like the 2 230 kV line or other Island generation or 3 even VIGP, are completed." 4 Do you have that? It's on page 22. 5 6 MR. SOULSBY: **A**: Okay, could you point to where on 7 page 22 it is? MR. BOIS: Q: Sure. It's the third paragraph on page 8 22. 9 And the manner in which B.C. Hydro MS. HEMMINGSEN: **A:** 10 11 has represented that is in the cost-effectiveness analysis, which is actually Panel 4, where we looked 12 13 at that type of option and compared it to the merits and economics of the on-Island solution that the CFT 14 pursued. 15 16 MR. BOIS: Q: So my questions regarding that whole area would be better directed to Panel 4? 17 MS. HEMMINGSEN: **A**: I think so. 18 MR. BOIS: Q: Okay, thank you. 19 Now, would also comments on page 17 and 18 20 of the CFT, would they be directed -- if I want to 21 22 talk about your contingency measures to meet the shortfalls of insufficient capacity, would they be 23 24 better directed to you or to Panel 4? Proceeding Time 9:05 a.m. T12 25 26 MS. HEMMINGSEN: **A:** I think so, but can I find the

- 1 reference first?
- 2 MR. BOIS: Q: Sure. Well, I'm going to deal with the

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- 3 lines -- page 17 and 18. So it will be starting
- 4 around lines 10 on page 17 through page 18. So they
- 5 would be better directed to Panel 4.
- 6 MS. HEMMINGSEN: A: Yes.
- 7 | MR. BOIS: Q: Okay, thank you. Now, isn't it true that
- 8 Norske withdrew from the CFT process?
- 9 MS. HEMMINGSEN: A: My understanding is Norske did not
- 10 submit a bid.
- 11 MR. BOIS: Q: Okay. Now, given that Norske didn't
- submit a bid, do you feel that B.C. Hydro was still
- bound by the anti-lobbying requirements of the CFT?
- 14 MS. HEMMINGSEN: A: Well, until August 13<sup>th</sup>, which I
- 15 believe the date of the bids being received, we didn't
- 16 know what Norke's status was.
- 17 MR. BOIS: O: So after Norske decided not to submit a
- 18 bit, in your words, would you have been bound by that
- 19 requirement?
- 20 | MS. HEMMINGSEN: A: I'd have to seek the advice of our
- 21 lawyer to answer that.
- 22 MR. BOIS: Q: Okay, well, subject to check with your
- 23 lawyer.
- 24 MR. SANDERSON: Well, no. No.
- 25 MS. HEMMINGSEN: A: It's not this lawyer.
- 26 | MR. BOIS: Q: Not this lawyer?

1 MR. SANDERSON: A) Not this lawyer. B) I'm not going to ask any other lawyer to offer hypothetical legal 2 If you want to ask whether they felt bound or 3 whether they felt free to talk to Norske, I think that 4 questions already been answered, but I have no 5 objection to it. But in terms of what legal advice 6 7 they got, I do have every objection to it. Okay, did you feel bound not to talk to MR. BOIS: Q: 8 Norske at that point? 9 **A:** Certainly until August 13th and then MS. HEMMINGSEN: 10 by September Norske had filed their information with 11 BCTC's capital plan which gave us a sufficient basis 12 to evaluate the option, and that's represented in the 13 cost-effectiveness analysis. 14 Okay, now Mr. Soulsby, I'm going to 15 MR. BOIS: Q: 16 direct this question to you, but I don't mean to pick on you, but I understand that you were one of the 17 18 participants here. I understand that after Norske 19 decided not to, or did not submit a bid, it invited representatives of B.C. Hydro, including yourself, to 20 attend a meeting to discuss Norske's proposal. 21 22 you attend that meeting? No, I did not attend that meeting. 23 MR. SOULSBY: **A:** Ι 24 recall the invitation and in fact the decision was taken not to attend the meeting for the reasons that 25

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we've just discussed.

1 MR. BOIS: Q: So you did feel bound not to talk to

- 2 Norske about it.
- 3 MR. SOULSBY: A: At that point, yes.
- 4 MR. BOIS: Q: Now, once Norske had submitted it in
- 5 September and it was a matter of public record, did
- 6 make any inquiries or do you know if anyone at Hydro
- 7 | made any inquiries to see if that invitation was still
- 8 open or to take Norske up on that invitation?
- 9 MS. HEMMINGSEN: A: Well, I guess at that point we'd
- 10 had a fairly formal proposal filed with BCTC which
- provided a sufficient basis for us to represent it in
- the cost effectiveness analysis.
- 13 MR. BOIS: Q: But it -- didn't it stimulate an interest
- on your part?
- 15 MS. HEMMINGSEN: A: Well, sure it did. It's
- represented in the cost-effectiveness analysis as an
- option to bridge the gap.
- 18 MR. BOIS: Q: But how would Norske have known that you
- 19 were even interested in their proposal if you didn't
- 20 talk to them?
- 21 MS. HEMMINGSEN: A: Until this proceeding concluded we
- weren't in a position to determine what our
- 23 requirements would be or what we might need of Norske,
- 24 and furthermore, that would be a consultation that
- would be jointly, presumably between BCTC and B.C.
- 26 Hydro to bridge any gaps.

1 MR. BOIS: Q: Did you talk to BCTC about it? Yes, I've had a number of 2 MS. HEMMINGSEN: **A**: conversations with Yakout Mansour about the possible 3 need for bridging and gap filling under various 4 scenarios of outcomes. 5 6 MR. BOIS: O: And what were those -- what were the 7 outcomes of those discussions? MS. HEMMINGSEN: That we needed to wait until the 8 **A:** CFT process was completed when we'd know what our 9 specific requirements were. 10 Well, I'm confused because my 11 MR. BOIS: Q: understanding is BCTC participated in several meetings 12 with Norske about the demand -- and management 13 I'm at a loss to understand why you didn't. 14 Well, when I say "you" I mean B.C. Hydro. 15 16 MS. HEMMINGSEN: **A:** I can't speak to what BCTC did or didn't do. 17 18 MR. BOIS: Q: So I'm just at a loss, you know. 19 have this proposal. You say in your CFT that it's there, you're going to rely on it potentially, but you 20 don't talk to them. I just -- I don't understand 21 that. Could you help me understand that? 22 Well, we were involved in a CFT 23 MS. HEMMINGSEN: **A:** 

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process which was not concluded until mid-November and
we put forward our application after evaluating the
various contingency options, and I guess my position

- Page: 1376 is until this process concludes on February 17<sup>th</sup>, we 1 don't know what we need of Norske. 2 MR. BOIS: O: Okay. Now, Ms. Hemmingsen at lines 21 3 through 22 of your direct evidence, you discuss 4 uncertainties with respect to portable generators. 5 6 Now, would that be a question I should better address 7 to Panel 4? MS. HEMMINGSEN: **A**: Yes. 8 9 MR. BOIS: Q: Okay. And would questions regarding the comments that you make in lines 23 to 26 on page 18 of 10 the CFT which deal with the alleged risk that Norske 11 proposal carries, would they be better addressed to 12 Panel 4? 13 MS. HEMMINGSEN: They would. 14 **A**: Proceeding Time 9:10 a.m. T13 15 16 MR. BOIS: Q: Okay, thank you. Now I have some further questions arising 17 18 out of your direct evidence, and I'll try to be quick, so that other intervenors have an opportunity. 19 response to question 16 of your evidence, Ms. 20 Hemmingsen, you indicate that the cost-effective 21 analysis was at a high-level review. 22 MS. HEMMINGSEN: That's correct. 23 **A:** 24 MR. BOIS: And that you were -- did that to Q:
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reject the Tier 1 outcome.

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determine if there were any compelling reasons to

- 1 MS. HEMMINGSEN: A: Correct.
- 2 | MR. BOIS: Q: Aside from a negative or an undesirable

- 3 NPV, would there be any other compelling reasons to
- 4 reject it?
- 5 MS. HEMMINGSEN: A: We looked at a number of
- 6 uncertainties that we were -- thought important in
- 7 managing the supply/demand balance, among them the
- 8 | timing of the cables, the load requirements that we
- 9 might face, and gas/electricity price relationships.
- 10 So we looked at both quantitative and qualitative
- 11 factors in that high-level analysis.
- 12 MR. BOIS: Q: Okay. And as a result, you found that
- there were no compelling reasons as -- in all of those
- 14 other uncertainties.
- 15 MS. HEMMINGSEN: A: That's right. And in assessing
- 16 cost-effectiveness, we took into account the
- 17 Commission's direction on that, to consider
- 18 reliability, timing, location, and other non-cost
- 19 factors.
- 20 MR. BOIS: Q: Okay. Now, in that cost-effectiveness
- analysis, and I'm going to talk to Appendix J here,
- would that be Panel 4?
- 23 MS. HEMMINGSEN: A: J, that's Panel 4.
- 24 MR. BOIS: Q: Thank you. Now, at page 9 of your direct
- evidence, Ms. Hemmingsen, you mention that senior
- 26 management had asked whether there were -- this is at

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- 1 lines 12 to 14, whether there were other non-price factors to be considered as part of the analysis. 2 MS. HEMMINGSEN: Once again, I think that's better 3 **A**: asked of Panel 4. 4 MR. BOIS: Q: Panel 4? Okay. I tried to get it out 5 6 early on the table. 7 And I just thought maybe -- I guess probably a lot of these will be Panel 4, but at lines 8 28 to 30 on page 10, you suggest that the Tier 1 bids 9 are no longer binding. Has B.C. Hydro made any 10 enquiries as to -- as a contingency exercise, if the 11 Commission denies this EPA here, has B.C. Hydro made 12 any enquiries with any of the Tier 2 bidders to find 13 out whether they'd be willing to commit to their 14 tenders? 15 16 MS. HEMMINGSEN: **A:** B.C. Hydro hasn't made enquiries, but the bidders, I understand, have put information 17 18 forward that suggests they're willing to hold those bids. I understand both Epcor and Green Island have 19 done that, in various letters. 20 MR. BOIS: So if the Commission were to deny the 21 Q: 22 EPA, what steps has B.C. Hydro taken to backstop itself and under its commitment --23 24 MS. HEMMINGSEN: Sorry, can I correct that? **A**:
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that forward in letters.

my understanding is, Calpine and Green Island have put

1 MR. BOIS: Q: Okay. Thank you. I'm not going to go
2 into them, I just wanted to know if you had done any
3 due diligence with respect to a backstop.

- 4 MS. HEMMINGSEN: A: Yeah. I mean, we've assumed that
  5 the price that they bid in to the CFT is -- that's the
  6 values that are included in the cost-effectiveness
  7 analysis.
- 8 MR. BOIS: Q: But you also comment that you think that those bids, those prices, are no longer binding.
- MS. HEMMINGSEN: A: In accordance with the terms of the CFT, the bidder is released from that binding obligation, yes.
- MR. BOIS: Q: Right. But from a contingency planning perspective, then, from what I understand you to be saying, you haven't really done anything.
- 16 MS. HEMMINGSEN: **A:** No, because the contingency plans were to look at options that would be available to us, 17 18 and our intent was to proceed through this hearing, and get a decision on the CFT option that we put 19 20 forward prior to acting on the contingency plans, which seems to be an appropriate course of action 21 22 given that we got a cost-effective -- our position is, we have a cost-effective outcome of the CFT process. 23 24 So I'm not quite sure why we would spend time firming up other options until we know we need to access those 25 26 other options.

1 MR. SOULSBY: **A:** In addition to that, the course of action that we might take arising from a negative 2 decision from this proceeding would in part depend on 3 some of the reasons for that decision, whether they 4 were related to cost-effectiveness or to reliability. 5 Proceeding Time 9:15 a.m. T14 6 7 MR. BOIS: Q: Right. But, nevertheless, you're here saying that there's a time crunch. You've been saying 8 that the time crunch requires expedited processes. 9 You're saying that we don't have time to fool around 10 any longer with other things. I'm just surprised that 11 you're here saying, "We'll wait and see what happens," 12 13 and you're not planning for a contingency. MS. HEMMINGSEN: Well, we're not waiting to see what 14 **A**: happens. We have a cost-effective solution that 15 16 delivers reliable power by the time that it's required. That's what we're putting forward. 17 18 event that the Commission determines otherwise, as Mr. 19 Soulsby outlined, we'd have to understand the reasons and what further direction they were giving us before 20 we proceeded with those options. 21 22 MR. BOIS: Q: So yesterday there was a comment with respect to the Commission rendering a decision on 23 24 February 17<sup>th</sup> without reasons. So as I understand it now, reasons with that decision would be important to 25

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you, especially if it was a denial.

- 1 MR. SOULSBY: A: Yes, that's correct.
- 2 MS. HEMMINGSEN: A: Mm-hmm.
- 3 MR. BOIS: Q: So the comments that you make at line 35

- 4 to 40 of your direct evidence then, with respect to
- all of the editorializing, I'll call it, that you
- 6 characterized the implications of a denial, you really
- 7 don't know if those things are going to happen then,
- 8 do you?
- 9 MS. HEMMINGSEN: A: Well, I have talked to a number of
- our IPP suppliers, and that reflects their sentiments
- in terms of future procurement processes and what
- might be the implications in the face of denial of a
- competitively determined cost-effective outcome.
- 14 MR. BOIS: Q: Well, if the Commission denies your EPA,
- then wouldn't you suggest that your view that it's a
- 16 competitively effective or cost-effective outcome
- would be wrong?
- 18 MS. HEMMINGSEN: A: Well, I quess what we're doing here
- 19 is we're looking at binding firm bids against various
- planning options. So I'd have to understand on the
- 21 basis that that decision was made. But my position
- 22 and my testimony here says that I would have a concern
- about that outcome.
- 24 MR. BOIS: Q: I'm sure you would. The other aspect of
- 25 it is, though, wouldn't a denial just simply indicate
- that your view of the world as to what's cost-

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effective or what you can do, even going back to the VIGP and the cost comparison differences between what you had proposed the cost of the plant being and what Duke Point's costs are, wouldn't a denial suggest that you need to sort of re-evaluate your view of the world and what's cost-effective?

MS. HEMMINGSEN: A: We ran a Call for Tender process which was subscribed and participated in by many parties, and it produced an outcome that was costeffective relative to what we had put forward. And the evidence that we will put forward in Panel 4 shows it's cost-effective relative to the other outcomes. So I would be concerned, as I've outlined here, about the statement that made to the market about competitive processes and the willingness to accept the results of those competitive processes.

And as I've testified in here, it suggests that B.C. Hydro would stand to be exposed to higher-cost outcomes because proponents would have to possibly increase their price to reflect the risk that they were accepting that those types of outcomes would be overturned.

MR. BOIS: Q: Well, isn't it equally just as likely that proponents would have to lower their risks to show that it was in fact cost-effective -- to lower their prices, I mean?

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1 MS. HEMMINGSEN: **A:** I'm not sure --Well, you're saying that they'd have to 2 MR. BOIS: Q: increase their prices to account for regulatory risk. 3 Wouldn't a similar sentiment just as equally be they 4 would have to lower their prices to ensure that they 5 6 escape regulatory risk? 7 MS. HEMMINGSEN: Α: Because I'm a believer in markets and competition, and I think we saw that bear out in 8 this process that in a Call for Tender people compete. 9 Oh, I'm sure that's true, but we only MR. BOIS: Q: 10 11 have your evaluations for what the competitive process was. And I don't know if that's a QEM question, Mr. 12 13 Chairman, or not. THE CHAIRPERSON: No, that's not a mechanics question. 14 Go ahead. 15 16 MR. BOIS: Q: Thank you. So we only have your evaluation of that process to determine exactly how 17 18 competitive it was. 19 MS. HEMMINGSEN: **A:** Well, I think you have the 20 testimony and evidence of the independent reviewers who oversaw every aspect of that process and produced 21 22 a series of reports, so you can put that question to 23 the independent reviewers. And also the Commission 24 Panel has received in confidence the results of that

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entire process for all the bids that we received.

Proceeding Time 9:20 a.m. T15

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- 1 | MR. BOIS: Q: Now, perhaps I missed it, and it's quite
- 2 likely, but I recall the VIGP decision requiring that
- 3 the independent reviewer report to one of the
- 4 Commissioners. That wasn't the case. Could you tell
- 5 me why B.C. Hydro elected not to do that?
- 6 MS. HEMMINGSEN: A: I believe there's an IR that speaks
- 7 to that rationale.
- 8 MR. BOIS: Q: There could be. I thought there might be
- 9 but I might have missed it. If you could draw me to
- 10 the reference that would be great.
- 11 MS. HEMMINGSEN: A: And I think that Panel 3 could
- 12 speak to the specifics of that.
- 13 MR. SANDERSON: I'll [inaudible] in connection with one
- of the IR responses that deals directly with that.
- 15 MR. BOIS: Okay, thank you.
- 16 MR. BOIS: Q: Now, yesterday there was some discussion
- with Mr. Wallace about the CFT and the changing term
- from 10 years to 25 years with the automatic exclusive
- 19 renewal clause -- addition of another 10 years. So
- 20 while we might argue about semantics, I'm going to
- 21 call it a 35-year project, because effectively it was
- 22 at your discretion.
- Now, yesterday --
- 24 | MS. HEMMINGSEN: A: I'm not sure I agree with that
- characterization. It's a 25-year contract with an
- option to renew.

- 1 MR. BOIS: Q: Okay, well, we can agree to disagree.
- 2 Yesterday you indicated that the CFT was driven by the

- 3 | shortfall -- to meet the shortfall of capacity in
- 4 2007-2008. Now --
- 5 MS. HEMMINGSEN: A: Is that a question?
- 6 MR. BOIS: Q: No no. No no. I'm just trying to
- 7 refresh your memory and I just want to make sure that
- 8 you and I are on the same page.
- 9 Now, I'm going to refer you to the JIESC
- spreadsheets that they produced yesterday and I don't
- know the exhibit numbers, and if Mr. Fulton could help
- me, that would be wonderful.
- 13 MR. FULTON: The spreadsheets, Mr. Chairman, are C19-17,
- 14 the graph is C19-18.
- 15 MR. BOIS: Thank you.
- 16 MR. BOIS: Q: I'm just going to refer to C19-17. And
- 17 I'm referring to the spreadsheet that starts with line
- 18 C363, so I think it's the third or fourth one in the
- 19 pile.
- 20 MR. SOULSBY: A: It's just that in respect of the
- 21 Chairman's remarks in the beginning, these are related
- 22 to the QEM so --.
- 23 MR. BOIS: Q: Are they?
- 24 MR. SOULSBY: A: Yes.
- 25 MS. HEMMINGSEN: A: Yes.
- 26 MR. BOIS: Q: All right, I just want to -- okay, my

the dispatch.

relationship.

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It depends on the gas/electricity price

MR. SOULSBY: 1 **A:** I'd just like to add to Ms. Hemmingsen's comments, unless the proceeding not be 2 The one day you refer to is actually driven 3 by a specific constraint in the model that requires a 4 minimum dispatch of 3 percent in any monthly period. 5 6 And that particular constraint was put in as a gaming 7 provision. So it's not being economically dispatched for that period of time. 8 MR. BOIS: Q: But you'd still agree that it's really 9 only planned to operate one day a month through those 10 winter months? 11 No, I think in 2010 it shows in 12 MS. HEMMINGSEN: A: November -- am I reading it right? 102,000 hours. 13 MR. BOIS: O: Well, I wasn't extending my question out 14 I only limited my question to 2007-2008, and 15 I think that's all the Chair asked you to answer. 16 unless I'm overstepping my bounds, would you just 17 answer my question about 2007-2008? 18 MS. HEMMINGSEN: **A**: That's what is shown in this table. 19 MR. BOIS: Q: Thank you. Now, after that, the 20 transmission line potentially is available. Is that 21 correct? 22 23 MS. HEMMINGSEN: **A:** Potentially. Proceeding Time 9:25 a.m. T16 24 Okay. Now, Mr. Eckert, you mentioned 25 MR. BOIS: Q:

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yesterday that the risk of non-supply of the power is

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1 borne by ratepayers, and that the EPA provides measures by which B.C. Hydro can mitigate those risks, 2 up to and including termination. Is that -- do you 3 recall saying that? 4 MR. ECKERT: **A**: Could you repeat that quote? 5 6 MR. BOIS: Q: Well, in a dialogue between Mr. Wallace 7 and yourself about the risk of non-supply, I think Mr. Wallace was making the point that the risk is borne by 8 ratepayers, and you mentioned that you -- I guess to 9 offset the risk, you said that there were mitigative 10 11 measures in the agreement up to and including termination. 12 MR. ECKERT: 13 **A:** If the plant were not available, there are mitigation rights in the contract for B.C. Hydro. 14 So if the plant weren't available, how MR. BOIS: 15 Q: does that solve your problem? 16 MR. ECKERT: Well, the mitigation -- well, what 17 **A**: 18 we've structured is a contract which creates some 19 significant economic incentives for the seller to make 20 the plant available, to ensure that the plant is If they fail to meet certain availability 21 available. 22 requirements, then that gives rise to a termination right, and if we're entitled to terminate the 23 24 contract, we have a couple of alternatives at hand. One is that we could step in and actually operate the 25 26 facility ourselves, if we felt that that was in our

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then we would have available to us the full capacity charge to offset any expenses we would incur in operating the facility. So that would give us an

- BCHVI Call For Tenders Review of Purchase Agreement Page: 1390 January 18, 2004 Volume 7 1 additional \$36 million a year that we could call on. If you assume that the operating charge -- or, I'm 2 sorry, the O&M charge would offset the direct 3 operating cost for the facility. 4 And that 36 million would be available MR. BOIS: 0: 5 6 for the full -- if this default happened in the first 7 year, you'd effectively have that capacity charge for the full 25 years. 8 MR. ECKERT: **A:** Well, until -- yeah. Until such time 9 as the lender chose to step in, in which case the 10 lender would be bound by the EPA. 11 In addition to having the full capacity charge available to us to 12 offset our expenses, we'd also have the security that 13 the seller has posted, which could provide another \$30 14
- MR. BOIS: Q: Well, that gives you lots of cash, but it still doesn't answer the reliability problems.

would have available to us as well.

first year that would be a \$30 million amount that we

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million.

If that were to happen, for example, in the

MR. ECKERT: A: Well, it gives you cash to fix some of the problems. The premise of your question was that there may be events that created an economic condition for the seller not to be able to operate the plant, and I'm just suggesting that what we've got available to us is the full capital charge, which would include the equity service and the debt service.

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Actually, I think my question just really 1 MR. BOIS: Q: was focused on what would happen if they just didn't 2 perform, and you had to use your mitigative measures. 3 I wasn't really focusing too much on economics. 4 think we've answered the question, thank you. 5 6 MR. ECKERT: Α: Okay. 7 MR. BOIS: Q: Mr. O'Riley, yesterday you mentioned that you would consider -- or that B.C. Hydro would 8 consider dispatching the plant based on B.C. Hydro's 9 value of the energy. Can you expand for me, or 10 describe for me, the value that this would have? 11 mean, if it's not the market value, what value is it? 12 B.C. Hydro, in the optimization of its 13 MR. O'RILEY: A: system and reservoirs, calculates a longer-term value 14 of energy. It's typically a two- or three-year value 15 16 of energy, and it represents B.C. Hydro's opportunity cost for dispatching the hydro generation. So you can 17 18 generate today from the hydro, or you can conserve 19 that water, buy power on the market or from thermal resource, and save that water for future, a future 20 time period. 21 So we use that signal, that energy value as 22 a signal to make the decision whether we buy power 23 24 from the market or run our thermal generators, whether they're Burrard or Island co-gen or, assuming this 25

project -- or contract receives approval, we would

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release the values because they are commercially

I mean, they would be telling competitors 1 sensitive. the price at which we're willing to buy and sell 2 electricity. 3 MR. BOIS: So then how could anyone other than B.C. 4 Q: Hydro determine that your cost-effectiveness study, 5 6 given the values that you attach to dispatching, are 7 reasonable? Well, we've explained, as I said, MR. O'RILEY: **A:** 8 we've explained this process by which we optimize the 9 reservoirs in numerous forms, and again I think we 10 explained it in the revenue requirements process. 11 mean, you have that concern today. I mean, how do you 12 know that we're not doing something silly with the 13 dispatch of the reservoirs? You don't, so you have to 14 trust the regulatory process that we have and the 15 16 integrity of the company to do what we say we're 17 doing. 18 MR. BOIS: Q: Well, I'm not questioning the integrity of B.C. Hydro and I don't want to be on the record of 19 doing that. But I am a little bit concerned that B.C. 20 Hydro has now [sic] once come before this Commission 21 and stakeholders to say VIGP was the most cost-22 23 effective solution. That wasn't accepted. 24 here talking about an EPA agreement with a number of stakeholders saying, "We don't think this is the right 25

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solution, " and you're saying, "Trust us."

1 MR. O'RILEY: **A:** Well --2 MR. SANDERSON: That's a complete mischaracterization of what we've just heard, and --3 MR. BOIS: Is it? 4 MS. HEMMINGSEN: **A**: Yes. 5 6 MR. SANDERSON: Absolutely. There's three or four bases 7 on which we've wasted, with respect, the last ten minutes. One is we're completely into cost-8 effectiveness. MS. HEMMINGSEN: **A:** Yes. 10 11 MR. SANDERSON: The only reason I've continued it is I was hoping maybe we'd get rid of it, because we're 12 also into stuff that was just spent -- and I 13 appreciate Mr. Bois wasn't there, but Mr. O'Riley is 14 absolutely right. This is what the Heritage Contract 15 16 hearing was about. And if Mr. Bois wants to learn more about this, I suggest he go read the transcripts 17 18 of that and the decision. It is on the public record. The reasons why the B.C. Hydro calculation 19 20 to value power isn't made public is also, I think, probably clear from that record. It's clearly in 21 22 everybody's interest it not be made public for the competitive reasons that Mr. O'Riley says, and all of 23 24 that was accepted by the Commission in its recommendations to Cabinet out of that decision. 25

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So maybe we start there, and if we can take

- Page: 1395
- 1 it up, if Mr. Bois isn't satisfied having read that,
- 2 he can take up the rest of it with Panel 4.
- 3 MR. BOIS: I'll move on. Thank you, Mr. Chairman.
- 4 MR. BOIS: Q: Mr. Simpson, you indicated yesterday that
- 5 Terasen and B.C. Hydro had not yet signed a gas
- 6 transportation agreement. Can you give the Commission
- 7 any comfort as to a timeline when you're going to do
- 8 that?
- 9 MR. SIMPSON: A: I think we've indicated that we would
- 10 expect to have some sort of an agreement in place by
- November of 2005.
- 12 MR. BOIS: Q: And what would happen if you don't?
- 13 MR. SIMPSON: A: Well, I don't think that's a
- 14 reasonable outcome. I think there is a very good
- 15 likelihood that we would have an agreement in place by
- November 2005. If we didn't, I would assume that
- initially we may have to accept interruptible service
- 18 for Duke Point.
- 19 MR. BOIS: Q: So how does that factor into the
- 20 commitments and obligations that you're imposing on
- 21 Duke Point with respect to operational reliability if
- you can't supply the gas?
- 23 MR. SIMPSON: A: I think that's more a contract issue.
- 24 I'm sorry, could you --
- 25 MR. BOIS: Q: Well, maybe it's a two-pronged question.
- 26 If you can't supply the gas to Duke Point because you

Page: 1396 1 don't have a B.C. -- a Terasen Gas contract, how do you expect Duke Point to meet its performance 2 commitments to you? 3 MR. SIMPSON: **A**: It would not be failing to meet its 4 performance requirements. If we were unable to supply 5 6 the gas to the plant, they would not be in violation 7 of the agreement. Proceeding Time 9:35 a.m. T18 8 MR. BOIS: They wouldn't. But would you agree with 9 Q: me that you're not being able to supply the gas on a 10 reliable basis, either through the lack of a firm 11 agreement or even if you had a transportation 12 13 agreement, produces uncertainty with respect to the reliability of the Duke Point Plant and it's 14 15 operation? I guess it could, but the evidence 16 MS. HEMMINGSEN: **A:** and the response to the information requests on that 17 18 issue established that we do believe that the 19 necessary supply arrangements can be in place with 20 Terasen Gas, and we have a number of other options to pursue in the event that they can't. So we've outlined 21 22 that in numerous responses to IRs and the latest one being what we filed with the McClellan response to the 23 second round or IRs 2.4.1. 24

- 25 MR. BOIS: Q: I haven't seen those responses.
- 26 MR. SANDERSON: Ms. Hemmingsen, those haven't been filed

1 with the panel and Mr. Bois doesn't have those. maybe you can provide him with the information that's 2 in that particular response. 3 **A**: But there's a number of other IRs 4 MS. HEMMINGSEN: that perhaps we could locate that outline the various 5 options and arrangements that we can access. 6 MR. BOIS: Q: 7 Well, I wasn't really going to ask you to go through in detail the options, I just wanted to 8 know and get your commitment -- or your confirmation 9 that the lack of a gas supply agreement -- or gas 10 transportation agreement puts Duke Point Power plant 11 and it's reliability into a realm of uncertainty. 12 Well, I quess our assessment is 13 MS. HEMMINGSEN: **A:** that uncertainty isn't very high and perhaps Mr. 14 Simpson can speak to the reasons for that. 15 16 MR. SIMPSON: **A:** Okay, I think the negotiations so far have been focusing on attempting to get a long-term 17 18 gas transportation agreement and I think there are --19 if you look at the record that's in the LNG proceeding, you'll see the reasons why we have some 20 concerns about committing to a long-term agreement. 21 22 I think we see as a viable option for Hydro 23 is to enter into some sort of a short-term arrangement 24 with Terasen which may make it difficult for them to justify proceeding with their proposed LNG expansion, 25

but it may be possible for them to put in a

Page: 1398 January 18, 2004 Volume 7 1 compression expansion on their system which could provide the necessary requirements for Duke Point by 2 the winter of 2007. And so we see that as a viable 3 alternative to a long-term contract with them 4 involving their LNG expansion. 5 So we don't think there's a reasonable 6 7 likelihood that we won't have any agreement at all with Terasen that would jeopardize the ability to get 8 gas to Duke Point by 2007. 9 Well, you could have an interruptible MR. BOIS: Q: 10 agreement, is that what you're saying? 11 MR. SIMPSON: A: That is -- I think that's a very 12 13 unlikely outcome. I think if we can have a short-term arrangement in place with them by November 2007, then 14 there should be a sufficient basis for them to proceed 15 16 with compression expansion on their system to provide the requirements for Duke Point. 17 MR. BOIS: Q: Okay. 18 MS. HEMMINGSEN: **A:** I think if you look at BCUC IR 19 20 1.44.7 it outlines the various options that we have. MR. BOIS: Q: I'm sorry, could you give me that 21 reference again, please? 22 1.44.7. MS. HEMMINGSEN: **A**:

- 23
- MR. BOIS: Q: Thank you. 24
- MS. HEMMINGSEN: I'd just like to get it. 25 **A:**
- 26 | MR. BOIS: Q: Now, I just have a couple of technical

1 questions and I'm not sure if this is the right panel, but in terms of -- I'm not even sure if this really 2 goes to the QEM model, Mr. Chairman, but they deal 3 with the decision to dispatch or not. And it's not 4 really the economic analysis so much as other factors. 5 So I'm wondering whether or not -- and for example, my 6 7 question would be -- my questions really are: Does the dispatching model consider whether the plant is in 8 a cold start-up mode or a hot start-up mode? 9 what would happen if one of the 500 kV lines was not 10 available and if the plant had to be started up? What 11 would the timing be? 12 Those are questions that, if you had 13 THE CHAIRPERSON: reviewed the model in Appendix H, that you would get 14 the answer to, I think other than with respect to the 15 16 implications for the 500 kV line. If that's not correct, then please correct me. 17 18 MR. SOULSBY: A: That's correct. Proceeding Time 9:40 a.m. T19 19 THE CHAIRPERSON: All right, so only ask your question 20 with respect to the 500 kV line. 21 Thank you, Mr. Chairman. 22 MR. BOIS: If one of the 500 kV lines tripped out, I 23 MR. BOIS: Q: 24 understand that the other line goes into intermediate overload and that it can handle that overload for a 25 26 short period of time. Do you have any idea what that

- 1 timeline is?
- 2 MR. SOULSBY: A: Subject to check, I believe the
- 3 overload rating is for one hour.
- 4 MR. BOIS: Q: One hour. And how long would it take
- 5 before other line capacity could be used or available
- 6 or would be needed? So maybe my -- I'll just leave it
- 7 at the one hour. Thank you, that's okay. I don't
- 8 understand my own question.
- 9 MS. HEMMINGSEN: A: I'd just like to correct the
- 10 record. It's BCUC IR 2.47.9 that outlines the
- 11 arrangements that B.C. Hydro would seek to meet the
- gas transportation requirements to service Duke Point.
- 13 It outlines that we would investigate a number of
- options, and we're quite confident that we would have
- that gas service available.
- 16 MR. BOIS: Q: Thank you. Now in assessing the project
- and Duke Point and other projects in the NPV analysis
- and the QEM model, did B.C. Hydro consider what would
- happen if the plant were down when one of these 500 kV
- 20 lines trips?
- 21 MR. SOULSBY: A: I think we need to be clear that the
- 22 QEM model itself doesn't consider the circumstances in
- 23 which, from a reliability perspective as we covered
- 24 yesterday, the plant would be dispatched. The QEM
- 25 model is an economic dispatch model, with the
- 26 exception of that 3 percent figure that's the minimum

- Page: 1401
- 1 monthly dispatch, that I talked about earlier.
- 2 MR. BOIS: Q: All right, then let's look at it from a
- 3 reliability perspective. Did you consider that
- 4 scenario?
- 5 MR. SOULSBY: A: That's an operational question and I'm
- 6 not prepared to answer that.
- 7 MR. BOIS: Q: Is anybody on this panel prepared to
- 8 answer that?
- 9 MS. HEMMINGSEN: A: What's the question again?
- 10 MR. BOIS: Q: If one of 500 kV lines tripped and Duke
- 11 Point is not operating, did you consider that?
- 12 MR. ECKERT: A: Well, I can tell you what -- it depends
- on -- I can tell you what the implications are of the
- 14 startup times.
- 15 MR. BOIS: Q: Well, before you do that, can you tell me
- whether you considered it, and then you can give me
- your opinion as to what the outcome is?
- 18 MS. HEMMINGSEN: A: Well, what we considered is Duke
- 19 Point being available on a 97 percent basis for
- 20 reliability purposes. That's industry standard
- 21 reliability criteria. So then there's a number of
- circumstances where it wouldn't be available, which as
- 23 Mr. Soulsby has outlined are operational reliability
- considerations, and there you avail yourself of
- operational contingency measures. And that's why we
- need to plan to have not just in time and not just

1 enough. 2 MR. BOIS: Q: So does that mean you considered it or not? 3 Well, it's considered in how we 4 MS. HEMMINGSEN: **A**: define reliability requirements and what we make 5 6 available as operating contingencies. 7 MR. BOIS: Q: So in that consideration of your planning and criteria, what was your response if this scenario 8 happened? 9 Well, it's part of how you define MS. HEMMINGSEN: **A:** 10 11 reliability. MR. BOIS: Well --12 Q: 13 MS. HEMMINGSEN: **A**: It's an assumption going into the supply/demand balance, and what you've determined is 14 the capacity deficit that you need to meet, and what 15 contingent options you need to maintain and access for 16 operational contingencies. 17 18 MR. SOULSBY: **A:** So I think the answer to your question 19 is that the contingencies that would be invoked are the operating orders that B.C. Hydro has in place to 20 ensure that all of its customers remain to be --21 remain -- continue to have service in the event of an 22 N minus 1 contingency. 23 24 MS. HEMMINGSEN: **A**: Thank you. And you'd agree that

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25 the N minus 1 criteria can be satisfied by the Norske 26 proposal, based on your knowledge of it? it's being operated.

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MR. SOULSBY: A: No, I wouldn't agree with that
statement. The N minus 1 planning criteria are
criteria that are applied not to specific projects per
se, but that are applied to the system as a whole as

- 6 MR. BOIS: Q: Right, but if the Norske proposal was
  7 part of your portfolio of supply options, and you had
  8 an N minus 1 criteria situation, you'd still be able
  9 to comply, wouldn't you?
- MS. HEMMINGSEN: A: My understanding of the Norske

  proposal is that BCTC has agreed to look at it and

  test it as a pilot option and consider whether it

  meets their criteria.
- MR. BOIS: Q: So why hasn't B.C. Hydro considered doing the same thing?
- MS. HEMMINGSEN: A: Once again, that goes back to my
  earlier testimony. We are here because we have a

  cost-effective, reliable, date-certain outcome, and
  until we get a decision on that we don't feel that
  it's appropriate to proceed with other contingency
  options.
- MR. BOIS: Q: Even though you have all these great concerns about reliability? You don't see it as a backup plan?
- 25 MS. HEMMINGSEN: A: This project meets them.
- 26 MR. BOIS: Q: Okay, thank you.

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1 I just have four more questions, and hopefully your answers will be short enough that I can 2 get out of the -- step down. 3 Proceeding Time 9:45 a.m. T20 4 If there had been a portfolio analysis in 5 your CFT process that had 150 megawatts that was 6 7 acceptable, given that you now know that your shortfall was not 106 -- or is not 116 megawatts, as 8 set out by the Commission in the VIGP decision, but is 9 now some 162 more megawatts, what would you have done? 10 Well, I guess there's a number of 11 MS. HEMMINGSEN: **A**: aspects. One is, the CFT process requires us to take 12 13 the least-cost option over 150 megawatts. So we would have taken that option, and we would have looked at 14 other options to bridge the gap. That wasn't the 15 16 outcome of the CFT process, so that we didn't have to explore that possibility. 17 18 MR. BOIS: Q: So knowing that there was this higher shortfall didn't influence any of your discussion or 19 your analysis in the CFT process? 20 MS. HEMMINGSEN: No, because it was a transparent, 21 **A**: 22 pre-prescribed rules and procedures according to a binding Call For Tender. 23 MR. BOIS: But it didn't affect your assumptions 24 Q: that went into your analysis or your models? 25 26 MS. HEMMINGSEN: **A:** It couldn't affect the assumptions

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1 in the CFT because we had to live up to what the CFT terms and conditions were. 2 Okay. Would you also agree with the 3 MR. BOIS: 0: assumption that, had B.C. Hydro indicated during the 4 CFT process that its shortfall was not the 116 as 5 determined by the Commission, but rather 262 6 7 megawatts, that you could likely have gotten a completely different array of suites of projects? 8 MS. HEMMINGSEN: Can you repeat the question? 9 **A:** Well, there were a number of addenda MR. BOIS: Q: 10 through the process. If B.C. Hydro had issued an 11 addendum that said "We know the Commission said there 12 was only 115, but our forecasts are now saying there's 13 262 megawatts of shortfall, therefore we're going to 14 amend the base from 150 to 260," do you think that 15 that would have resulted in a completely different 16 array of projects? 17 18 MS. HEMMINGSEN: **A**: Well, I guess it would have favoured a higher volume portfolio, because the 19 minimum would have been set at a higher level. 20 MR. BOIS: Q: But it would have also done a lot of 21 other things, wouldn't it? Wouldn't it have allowed a 22 lot of people to do a lot of different, other creative 23 things in terms of making supply? 24 MS. HEMMINGSEN: No, because the bidders in November 25 **A**:

had to outline what projects they were pursuing and

Longest term.

1 provide project-specific descriptions. It was a staged process throughout the 12- or 14-month period. 2 MR. BOIS: But as I understand what has been filed, 3 0: you knew that you needed 262 in November. 4 MS. HEMMINGSEN: **A**: No. 5 6 MR. BOIS: 0: No? 7 MS. HEMMINGSEN: **A**: No. In November, we filed -- and I'll make sure we're talking about the same dates. 8 In November, 2003 we filed our load forecast, which 9 indicated a deficit of 180 megawatts. Based on the 10 Commission-directed volume for us to seek of a 11 difference of 30, we felt that we could proceed with 12 13 the 150 megawatt level. In January, 2004 there was a number of peak 14 events on Vancouver Island which pointed to higher 15 16 load requirements. We had to evaluate those and determine that they established a new basis for the 17 peak, and that work was completed in the spring. 18 MR. BOIS: Q: Thank you. 19 And resulted in the load forecast 20 MS. HEMMINGSEN: Α: that we filed in November, 2004 indicating that the 21 deficit was 262 megawatts. 22 Okay. Now, I want to just change topics 23 MR. BOIS: Q: 24 completely. What's the longest contract, power contract or EPA that B.C. Hydro has right now? 25

1 MS. HEMMINGSEN: A: I don't know that off my -- top of

- 2 my head.
- 3 | MR. BOIS: Q: Could you endeavour to find that out? I
- 4 don't think it would be too onerous.
- 5 MR. SOULSBY: A: Yes, we can do that.
- 6 Information Request
- 7 | MR. BOIS: Q: Thank you. Now, just one last question.
- 8 Under today's scenario, and your operating
- 9 considerations with respect to Duke Point, and all of
- your analysis, if you didn't have a contractual
- obligation to run ICP, would you in fact simply shut
- that plant off, given the economic considerations
- 13 today?
- 14 MR. O'RILEY: A: Well, I think that would depend on the
- 15 relative values of energy and gas in the market. I
- don't think we would be running -- I don't think we
- would shut it down.
- 18 MR. BOIS: Q: But again, that goes back to your
- 19 mysterious values, right?
- 20 MR. O'RILEY: A: Well, I object to that
- 21 characterization completely. So --
- 22 MS. HEMMINGSEN: A: Yeah.
- 23 MR. BOIS: Q: Okay, well -- it's your value, as opposed
- 24 to a market value.
- 25 MR. O'RILEY: A: It's the value of energy as we've
- described several times.

examination.

MR. BOIS: Those are all my questions, Mr. 1 Q: Okay. Chairman, thank you. 2 Proceeding Time 9:50 a.m. T21 3 Green Island Energy, Mr. Weisberg. 4 MR. FULTON: MR. WEISBERG: Mr. Chairman, just a note on my cross-5 6 examination. I have no questions on the mechanics of 7 the QEM model, only on it's application. As a bidder Green Island was provided with a copy of the model. 8 Just a note. 9 As a sidebar before I begin cross-10 11 examination, Mr. Keough has advised me that he was unable to open the attachment in the e-mail I sent 12 13 yesterday, that being the letter that I requested the Commission to review on the application before you. 14 have 40 copies of that here. At your pleasure, I will 15 16 distribute them now or make them available at the table. 17 THE CHAIRPERSON: Make them available now to the panel 18 and leave some on the table for everyone else. 19 MR. WEISBERG: And Mr. Keough has -- I have handed a 20 copy to Mr. Keough already. 21 THE HEARING OFFICER: C9-15. 22 (LETTER FROM WEISBERG LAW, F.J. WEISBERG, DATED 23 JANUARY 17, 2005, MARKED EXHIBIT C9-15) 24 MR. WEISBERG: And with that I will turn to my cross-25

## CROSS-EXAMINATION BY MR. WEISBERG: 1 Good morning, panel. 2 MR. WEISBERG: Q: I would like to begin my questions to you with a tree. 3 MS. HEMMINGSEN: A: 4 A tree? MR. WEISBERG: Q: It's not an ordinary tree. Yes, a 5 6 tree. It's a decision tree, and it's found in 7 Appendix D to report number 4 of the independent reviewer. I have copies, not of the entire report but 8 simply of the appendix that I propose to look at. 9 I'll hand it up first for identification and then have 10 it marked as an exhibit. 11 Ms. Hemmingsen, as a chair of the panel, 12 13 can you just identify or confirm that that document I've handed up is as described? Or you haven't seen 14 the one I've handed up. 15 It looks similar to what we 16 MS. HEMMINGSEN: **A:** Yes. filed in Appendix -- or what was filed in Appendix D. 17 MR. WEISBERG: Q: Okay. Mr. Chair, I'd request that 18 19 Appendix D to Report Number 4 of the independent reviewer be marked as an exhibit, please. 20 THE HEARING OFFICER: C9-16. 21 MR. SANDERSON: Mr. Chairman, I don't want to (inaudible) 22 23 here, but I guess I'd like to discourage the habit, 24 that is this is an exhibit, it's already part of B-1, Appendix D, page 21. I'm thankful to Mr. Weisberg 25

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for giving us another copy to look at, but --

- MR. WEISBERG: I would agree with Mr. Sanderson, it
- 2 makes things simpler and I apologize for my oversight

3 on that part.

1

- 4 MR. SANDERSON: Appendix K to Exhibit B-1.
- 5 THE CHAIRPERSON: Thank you, Mr. Sanderson.
- 6 MR. WEISBERG: Q: All right. So we are looking at a
- 7 decision flow chart. By my counting, this is subject
- 8 to check, but I think there are 40 boxes, about 45 or
- 9 more arrows and a number of yes/no, pass/fail
- designations. So it appears to address almost every
- 11 contingency, is that the case?
- 12 MS. HEMMINGSEN: A: That was the intent to prescribe
- the processes up front that each tender would be
- 14 subjected to.
- 15 Proceeding Time 9:55 a.m. T22
- 16 MR. WEISBERG: Q: When was this document prepared?
- 17 MS. HEMMINGSEN: A: I'm not sure what was the specific
- date that it was prepared.
- 19 MR. WEISBERG: Q: I'd like you to provide your
- 20 undertaking to respond to that, please.
- 21 MR. SANDERSON: Well, on Panel 3 -- the witnesses that
- 22 will be responsible for all of this will appear as
- 23 part of Panel 3, so I'll just give them advance notice
- that that date should be forthcoming, then.
- 25 MR. WEISBERG: O: I do note that it is B.C. -- it's the
- B.C. Hydro CFT decision flow chart, so it speaks to

- decisions made by B.C. Hydro.
- 2 Who was it prepared by? Was it -- was that
- 3 the job of the IR, or was that something B.C. Hydro
- 4 does?
- 5 MS. HEMMINGSEN: A: This was prepared by B.C. Hydro at
- 6 the request of the IR, to specify the procedures that
- 7 | would be followed in advance of receiving the tenders.
- 8 That was part of the commitment that we had to
- 9 transparency throughout the process.
- 10 MR. WEISBERG: Q: And as for the date of preparation,
- 11 are you giving me an undertaking, or referring that to
- 12 Panel 3?
- 13 MS. HEMMINGSEN: A: My understanding is Mr. Sanderson
- has suggested that Panel 3 can answer that question.
- 15 I can --
- 16 MR. SANDERSON: Because it said PricewaterhouseCoopers on
- the document, and because it's part of the independent
- 18 reviewer's report, I assumed that was the right place
- for it. If I'm wrong, we'll do it through this panel.
- 20 But we'll find out at lunch.
- 21 MS. HEMMINGSEN: A: Either of us can answer.
- 22 MR. WEISBERG: Q: I'd prefer not to have to ask the
- 23 question of Panel 3 if you can -- if I may leave it as
- 24 an undertaking, I will do that.
- 25 MS. HEMMINGSEN: A: Okay. Yes, I will do that.
- 26 Information Request

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- 1 MR. WEISBERG: Q: Thank you. On this flow chart, where
- on the flow chart does B.C. Hydro provide for a
- process to determine when it's appropriate to move
- 4 from consideration of the first tier to consideration
- of the second tier?
- 6 MS. HEMMINGSEN: A: The consideration of the first tier
- 7 and the second tier is based on the volume. So, the
- 8 portfolios needed to be assembled at 150 megawatts.
- 9 So if projects could not be assembled to that level,
- they didn't make it in to a Tier 1 portfolio.
- 11 MR. WEISBERG: Q: I understand that, but that was not
- my question. I'm wondering where on this detailed
- decision flow chart does it provide for a process of
- when it's appropriate to move from consideration of
- the first tier to consideration of the second tier?
- 16 MS. HEMMINGSEN: A: That would be stemming out of the
- 17 recommendation to the PMO, and the PMO making the
- final recommendation to the CFT steering committee.
- 19 MR. WEISBERG: Q: You will have to help me identify
- 20 these boxes, and step me through this. I see a box --
- 21 MS. HEMMINGSEN: A: We're actually at the bottom, so
- they're not too hard to see.
- 23 MR. WEISBERG: Q: Oh. The big easy boxes at the
- 24 bottom.
- 25 MS. HEMMINGSEN: A: Right.
- 26 MR. WEISBERG: Q: "Recommendation", there's an arrow to

Page: 1413 1 "PMO", there's an arrow to "CFT Steering Committee"? 2 MS. HEMMINGSEN: **A**: That's correct. And it would fit somewhere in there? MR. WEISBERG: 3 0: Yes, so the process --4 MS. HEMMINGSEN: **A**: MR. WEISBERG: Q: That process? 5 6 MS. HEMMINGSEN: Α: The process was that each and every 7 tender was reviewed for compliance and if it passed the compliance, that it conformed with the tender 8 requirements in form, then it was re-assessed whether 9 it met the mandatory financial and technical criteria 10 in blinded committees. And if it passed both of those 11 then it was processed to the quantitative evaluation 12 13 model, where the price envelopes were opened, and they were assembled into portfolios. And to the extent 14 that a particular project couldn't be included in a 15 minimum 150 megawatt portfolio, it did not -- it is 16 not included in a Tier 1 outcome. 17 18 Then the Tier 1 outcomes were assembled, they were evaluated based on the least cost --19 MR. WEISBERG: Q: Ms. Hemmingsen, I'll allow you to 20 continue if you must, but I don't believe you're 21 22 responding to the question that I'm concerned about, and that I've asked twice now. I only want to know 23 24 about where on this decision flow chart it addresses

consideration of the first tier to consideration of

the process to be followed for moving from

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MR. WEISBERG:

Q:

reviewer and the written communications from the

Okay, I have your answer.

Are all reports from the independent

- Page: 1415
- 1 independent reviewer, or from B.C. Hydro to the
- 2 independent reviewer, available on the B.C. Hydro
- 3 website?
- 4 MS. HEMMINGSEN: A: That's my understanding, but you
- 5 could confirm that with Panel 3.
- 6 MR. WEISBERG: Q: I'm going to leave that flowchart,
- 7 and I would like you though to stay, panel, with the
- 8 same report that Appendix D is found at the back of.
- 9 That's the October 29<sup>th</sup> Report No. 4, the independent
- 10 reviewer. And in that document I would like you to
- 11 turn up page 13 please.
- 12 MS. HEMMINGSEN: A: Did you say Appendix D?
- 13 MR. WEISBERG: Q: We were looking at Appendix D to
- 14 the --
- 15 MS. HEMMINGSEN: A: K, K.
- 16 MR. SANDERSON: It's Appendix K to Exhibit B-1. Within
- 17 Appendix K there are four tabs. The fourth tab is the
- 18 fourth independent reviewer's report. It has an
- 19 Appendix D which is where we were previously
- 20 referring.
- 21 MS. HEMMINGSEN: A: Thank you.
- 22 | MR. WEISBERG: Thank you again, Mr. Sanderson, for your
- assistance. That's helpful for the record.
- 24 MR. WEISBERG: Q: So I think we've identified the
- document that we're looking at, hopefully.
- 26 MS. HEMMINGSEN: A: Thank you.

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- 1 MR. WEISBERG: Q: And I want you to turn to page 13.
- 2 And at the top it says it's a table summarizing
- determinations by B.C. Hydro. That's correct, is it?
- 4 MS. HEMMINGSEN: A: Yes.
- 5 MR. WEISBERG: Q: Okay. And I'm speculating here, but
- 6 I think based on what's understood about this process,
- 7 I'm not going far afield if I surmise that Tender F is
- 8 the tender submitted by Calpine. Can you confirm
- 9 that?
- 10 MS. HEMMINGSEN: A: No. We filed bidder information on
- 11 a confidential basis.
- 12 MR. WEISBERG: Q: That's fine. Can you tell me
- anything in terms of the -- under Tender No. F where
- 14 it says: "Tender failed, tender security and
- 15 conformity review." I believe that was a single
- review. Did that tender fail in more than one
- 17 respect?
- 18 MS. HEMMINGSEN: A: I'm not sure we agreed to reveal
- the reasons why, the specific reasons why a tender
- 20 failed or didn't fail.
- 21 MR. WEISBERG: Q: I haven't asked for the specific
- 22 reasons why. I've asked for whether there was more
- 23 than one criteria that it failed.
- 24 MR. SANDERSON: It's pretty hard to see how we're not
- going to slide down this slope at breakneck speed,
- frankly. I mean, I don't know what Mr. Weisberg is up

1 to exactly, but it seems to me that if he's going to ask a series of questions from which he later wants to 2 draw inferences about who or what any of the bids was, 3 we're doing on the record in small bits exactly what 4 we've already determined we're not going to do, which 5 is try and get at the confidential information with 6 7 respect to unsuccessful bids. I do think, Mr. Weisberg, your THE CHAIRPERSON: 8 questions clearly indicate an intent to do exactly 9 that. When you ask them if Tender F was Calpine, 10 clearly you are after information that is 11 confidential, and you knew that. 12 Proceeding Time 10:05 a.m. T24 13 MR. WEISBERG: The problem, Mr. Chair, is that it's an 14 in-scope issue, in our understanding, in this 15 16 proceeding, to determine whether there were requirements of the CFT that were unduly stringent, 17 18 and by that quality, disqualified otherwise-worthwhile projects. 19 THE CHAIRMAN: And I've already said that what's 20 necessary -- and really to accomplish that is a 21 developer that's prepared to come forward and make the 22 case. You can't make the case on behalf of someone 23 I've already spoken to the Calpine letter. I 24 else. think you need to move on. 25 26 MR. WEISBERG: I will move on.

MR. WEISBERG:

Q:

1 MR. WEISBERG: Q: Let's not move off the Appendix K, I believe, but I want to move to a different section. 2 It is the March 11<sup>th</sup>, 2004 letter from the independent 3 reviewer, the "re:" line for that is "supplemental to 4 second report of the independent reviewer." 5 6 MS. HEMMINGSEN: **A**: Do you have a reference for that? 7 MR. SANDERSON: This one -- and this goes back to something Mr. Weisberg raised earlier; he asked 8 earlier whether all of the correspondence between 9 Hydro and the independent reviewer were on the 10 In fact they're all filed, and maybe this is 11 Website. where this is from, I'm not sure of the March 11th one. 12 Panel 3's testimony -- the testimony of Mr. Hodgson, 13 attaches whatever wasn't in Appendix K. 14 Now, let me see if I can find the letter. 15 16 Just a sec. Yes. So it appears in the testimony of Panel 3, 17 18 which is Exhibit B-35, at tab 3, and there's a number 19 of attachments to the evidence of Mr. Hodgson. They're not numbered, but they all form part of 20 Schedule C, so -- and they're chronological under 21 Schedule C. The second one is the March 11th letter. 22 THE CHAIRMAN: Thank you. I have it. 23 MR. WEISBERG: Thank you once again, Mr. Sanderson, for 24 25 your help.

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Panel, I'm interested in -- the

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Page: 1419

fairness or transparency of the evaluation

process and may be viewed as a constructive

1 approach in contrast with simply terminating the CFT. However, B.C. Hydro will need to 2 clearly define and apply appropriate 3 processes to give effect to this second tier 4 of decision-making. Specifically, the IR 5 intends to review the decision rules for 6 7 moving from the first tier to the second tier." 8 That letter, Ms. Hemmingsen, was addressed to you. 9 **A**: That's correct. And I do recall MS. HEMMINGSEN: 10 that letter. And --11 Were you responsible for clearly 12 MR. WEISBERG: Q: 13 defining appropriate processes to give effect to the second tier of decision-making? 14 MS. HEMMINGSEN: I asked the team that was 15 **A**: 16 responsible for doing that to define that, and they made that definition in agreement with 17 18 PricewaterhouseCoopers, and I do believe there's an IR 19 that outlines what that criteria was, and it related to a definition of competition, which there was two 20 elements. One is the number of bidders, and the 21 absence of collusion. 22 And we did review that decision rule with 23 24 PricewaterhouseCoopers and they were satisfied that there was a critical mass of bidders that demonstrated 25 26 we had a competitive outcome and no evidence of

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MR. SANDERSON: If I might suggest, Mr. Chairman, we're

Page: 1422

and Tier 1 and Tier 2.

"These decision rules focused on bidder non-1 collusion and the competitiveness of tenders 2 received. The QEC applied these decision 3 rules to determine that Tier 1 bids were 4 competitive and not collusive." 5 6 And then it says: 7 "Other aspects of the cost-effectiveness tests were introduced in section 17 8 discussed in the next section." 9 We've also taken the opportunity to confirm 10 the date that that decision tree was produced, and 11 that was finalized and confirmed with the IR on August 12 12<sup>th</sup> prior to the receipt of the tenders. And also at 13 that August 12<sup>th</sup> meeting with the IR, we confirmed the 14 decision rules that are referenced on page 13, line 21 15 16 through 24. Proceeding Time 10:31 a.m. T27 17 18 MR. WEISBERG: Q: The date of that CFT report was what? 19 Was in October? MS. HEMMINGSEN: A: 20 This was provided to the Commission on November 19<sup>th</sup>. 21 MR. WEISBERG: O: November 19<sup>th</sup>. 22 MS. HEMMINGSEN: A: 23 Right. 24 MR. WEISBERG: Q: 2004. MS. HEMMINGSEN: A: Right. 25 26 MR. WEISBERG: Q: And when did the independent reviewer

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Information Request

- 1 MR. WEISBERG: Q: Did the -- the IR then provided no conclusions or recommendations regarding B.C. Hydro's 2 decision rules.
- MS. HEMMINGSEN: A: They accepted them. 4 That's what the minute of that meeting would show. 5
- 6 MR. WEISBERG: Q: That's what the minute will say.
- 7 MS. HEMMINGSEN: A: Yes.
- MR. WEISBERG: Q: Is there some reason that that's not 8 reflected in the IR's reports when the initial issue 9 and the indication that specifically -- and I'm 10 quoting "specifically the IR intends to review the 11
- decision rules for moving from first Tier to second 12
- Tier." 13

- MS. HEMMINGSEN: Yeah, well, I guess they did that, 14 **A**: and if it was an outstanding item you would have seen 15 16 it in their final report. But once again, you can pursue the independent reviewer on the reasons why --17
- 18 Proceeding Time 10:33 a.m. T28
- MR. WEISBERG: Q: Okay. 19
- A: -- they did or didn't include that 20 MS. HEMMINGSEN: in the final report. 21
- I just find it odd that the issue is 22 MR. WEISBERG: Q:
- flagged earlier on, but the conclusion is never 23
- 24 addressed.
- As I've outlined, it was addressed, MS. HEMMINGSEN: **A:** 25 and it was addressed on August 12th. 26

- Page: 1426
- 1 MR. WEISBERG: Q: I'm mindful of the time, Mr.
- Chairman, and I'm going to proceed without giving
- 3 specific references unless asked by the panel.
- The submission, the evaluation committee,
- or "SEC," had the right to ask Green Island to provide
- 6 further information to confirm that it met financial
- 7 capacity and creditworthiness criteria. Can you just
- 8 confirm that the SEC did not do so?
- 9 MS. HEMMINGSEN: A: The SEC just reported to me on an
- 10 exception basis. So, if there was no exceptions, I
- 11 wouldn't have heard about it.
- 12 MR. WEISBERG: Q: Okay. And you can confirm, as well,
- that the SEC had the right to ask Green Island to
- 14 provide further information to confirm adequate
- certainty of fuel supply, but did not do so?
- 16 MS. HEMMINGSEN: A: Well, Mr. Eckert was on that
- committee, so he would be in the best position to
- 18 confirm that.
- 19 MR. ECKERT: A: I do recall -- I do recall some
- qualification questions. But ultimately, the SEC took
- 21 the decision that Green Island did meet the fuel
- 22 certainty requirements.
- 23 | MR. WEISBERG: Q: Fully satisfied those requirements?
- 24 MR. ECKERT: A: Yes.
- 25 MR. WEISBERG: Q: Thank you. In the Commission's
- January 23<sup>rd</sup>, 2004 letter to B.C. Hydro, on page three

it states:

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"The Commission panel encourages B.C. Hydro to accept a cost-effective portfolio with dependable capacity as low as 115 megawatts before considering other resource additions than on-Island generation."

My question is, did B.C. Hydro interpret that to mean that the BCUC recommended a 150 megawatt minimum?

## Proceeding Time 10:36 a.m. T29

Our interpretation of those MS. HEMMINGSEN: **A**: directions, and I would like to get the letter, just so I'm clear, is that the BCUC established a minimum of 150 megawatts, and to the extent that there was no outcome that was cost-effective -- or sorry, as long as that project was cost-effective and the aggregate capacity is required to meet Vancouver Island and system load requirements, that we would proceed on that basis; and only if those criteria weren't met would we look at portfolios that aggregated to less than 150 megawatts. And on the basis that both those criteria were met, i.e. that the DPP project Tier 1 outcome was established as cost-effective, and the aggregate capacity was required to meet the Vancouver Island requirements, we proceeded with Tier 1.

MR. WEISBERG: Q: You prefaced that answer by saying that that was B.C. Hydro's interpretation, is that

1 correct? That's right, pursuant to the 2 MS. HEMMINGSEN: **A:** Commission's January 23<sup>rd</sup> letter. As we've outlined in 3 either IRs or in the report that we filed, we did ask 4 the Commission to approve the terms of the CFT and the 5 6 EPA early on, and they declined to do so, preferring 7 to give their recommendations in the form of this letter. 8 MR. WEISBERG: Did B.C. Hydro take any steps to have 9 Q: the Commission specifically confirm the interpretation 10 of the comment about a 115 megawatt limit? 11 MS. HEMMINGSEN: Well, as I said, we attempted to 12 **A**: 13 get the Commission to preapprove the terms and conditions, and they so declined and left us with this 14 letter. 15 16 MR. WEISBERG: Q: My question was more specific than that. I'm wondering if B.C. Hydro took any steps to 17 18 have the B.C. Utilities Commission to confirm B.C. 19 Hydro's interpretation of the comment regarding the 115 megawatt minimum. 20 MS. HEMMINGSEN: Throughout the CFT process we had a 21 **A:** number of meetings with Commission Staff, and they 22 23 were involved in workshops and received questions and 24 answers throughout the process. This appeared to us to be pretty clear about what to do, and we acted on 25

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it. And it also, I'd like to point out, reiterates a

26 MS. HEMMINGSEN:

1 point from the VIGP decision, so it was clear to us what the Commission was asking us to do, resulted in 2 the establishment of the Tier 2 option and the 3 decision rules under which we applied it. 4 5 MR. WEISBERG: Mr. Chairman, this morning in your 6 comments you provided a caution regarding areas of 7 cross-examination. One of the items that you identified as being sufficiently canvassed was the 8 Calpine letter. I just want to alert you on moving 9 into that area, and I would ask that you -- I have 10 perhaps eight questions and I will read them in at 11 speed and ask that you rule on each one of those. 12 Yes, you don't need to do that with 13 THE CHAIRPERSON: respect to the Calpine letter, but I will interrupt 14 you and interrupt the panel's response if need be, so 15 16 proceed. MR. WEISBERG: Fair enough. 17 MR. WEISBERG: Q: Can this panel confirm that Calpine 18 successfully passed the Phase 1 pre-qualification 19 20 phase of the CFT? MS. HEMMINGSEN: I believe that that was published 21 **A:** on our website, the names of the bidders and the 22 projects that passed the first technical and 23 financial --24 MR. ECKERT: That's correct. 25 **A:** 

-- criteria.

**A**:

1 MR. WEISBERG: Q: For the record, I don't think we're

Page: 1430

- 2 quite there yet. So Calpine did pass.
- 3 MR. ECKERT: A: They did pre-qualify, yes.
- 4 MR. WEISBERG: Q: Thanks. So by definition --
- 5 | THE CHAIRPERSON: I should just make this clear. My
- 6 silence does not suggest that you shouldn't object if
- 7 we're getting into confidential areas, Mr. Sanderson.
- 8 MR. SANDERSON: I understand, Mr. Chairman. The fact
- 9 that Calpine pre-qualified was on the record as far as
- 10 I can recall, so --
- 11 THE CHAIRPERSON: Okay.
- 12 MR. SANDERSON: -- I didn't object.
- 13 MR. WEISBERG: Q: Panel, can you confirm that by
- definition that means that Calpine met all mandatory
- 15 criteria? Is that correct?
- Proceeding Time 10:40 a.m. T30
- 17 MR. ECKERT: A: By definition, that meant that they met
- 18 all mandatory criteria applicable at the pre-
- 19 qualification stage, which did not include the
- development risk assessment for the fuel -- or fuel
- 21 certainty.
- 22 MR. WEISBERG: Q: When did B.C. Hydro first become
- 23 aware of Calpine's proposed revision to the EPA
- 24 regarding a termination of the EPA in 2029 if Calpine
- could not extend its lease to 2032?
- 26 MR. ECKERT: A: I'd suggest that that's a confidential

MR. WEISBERG:

Q:

-- that's confidential information. 1 Mr. Chairman, I'm not -- I don't have 2 MR. SANDERSON: instructions on exactly what communications there were 3 or weren't with the different committees, and if Mr. 4 Eckert says that that occurred in the context of a 5 confidential status, then it did, from my perspective. 6 7 Basically, what we're attempting to do is keep the communications between unsuccessful bidders and Hydro 8 generally confidential, and there was a limited 9 exception made in the context of the Calpine letter. 10 And it sounds like this goes well beyond that, because 11 it goes into the process as it was occurring, as 12 distinct from at the end with the letter. So I would 13 object. 14 I would -- I respect B.C. Hydro's caution, 15 MR. WEISBERG: 16 and I think it's completely appropriate. agree with it in the specific application, because 17 18 Calpine's letter of comment, filed as Exhibit E-123, 19 specifically raises this point. And there is, I would suggest on that point, no confidentiality left to 20 I'll give you a moment, Mr. Chair. 21 breach. -- information that's beyond what's in the 22 THE CHAIRMAN: letter, and this panel is of the view that that's 23 confidential, then I need some help from you as to why 24 it's not confidential. 25

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Paragraph 3 of Exhibit E-123 says

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that "we wish to point out" -- I'm quoting -- "we wish to point out that the Commission" -- sorry.

"We wish to point out to the Commission that our bid was not considered by B.C. Hydro because our bid proposed a revision to the EPA. Since our land lease with our steam host, Norske, currently only runs through 2029, we proposed to include a provision that would allow the project to terminate the EPA in 2029 if this lease was not extended through the full 25-year term of the EPA, or 2032."

I'm simply asking when B.C. Hydro first became aware of Calpine's proposed revision. And I'll accept an answer, a scope ruling, but I want to state the question.

MR. SANDERSON: And the reason, to be clear, for my objection is, the first paragraph of the letter is a proposal by Calpine to file all of its material on a confidential basis. Anything that goes beyond, then, the third paragraph, where they seem to have waived that, would remain confidential under the CFT process rules. What is being asked for here is information with respect to something Calpine can't know.

Calpine can know, and has disclosed, that they put in an admittedly-deficient bid. So they've

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volunteered that, and there it is. Why Hydro rejected it presumably, it may be fair to assume, includes the admitted deficiency here. It may include other things. I don't know. And the only way you can get there is to go into the specifics of how that bid was treated. Which is exactly what I think we've decided is outside scope. And that's the basis for my objection.

MR. WEISBERG: I just want the record to note that Mr. Sanderson came close, but didn't go over the line, of giving evidence. There is no evidence in this hearing that there was non-compliance in any respect, other than this lease term. And please correct me if I'm wrong.

## Proceeding Time 10:45 a.m. T31

MR. SANDERSON: That was precisely my point. Calpine had said we didn't comply in this respect. Hydro hasn't said whether they complied in other respects precisely or not. It said we have an admission from the party that they didn't comply on a specific request -- respect, and what is being sought is elaboration of Hydro. And that is going into what is otherwise confidential for every other bidder.

THE CHAIRPERSON: Mr. Sanderson is correct, Mr. Weisberg.

If you craft your question so that you're not seeking
the disclosure of confidential information, you can

Right. That's correct. And the

that were common to all bidders."

**A:** 

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26 MS. HEMMINGSEN:

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MR. WEISBERG:

proposed revision to the attention of the independent

Did B.C. Hydro bring Calpine's

Q:

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disqualifying Calpine, B.C. Hydro and all parties

MS. HEMMINGSEN:

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should be assured of the basis for that 1 disqualification. 2 MS. HEMMINGSEN: I quess it's an element of the CFT 3 **A**: terms and conditions too, so presumably Calpine with 4 their legal counsel went through all the terms and 5 6 conditions, and that was clear to them right from the 7 outset. All we did was reiterate that requirement. Proceeding Time 10:50 a.m. T32 8 MR. WEISBERG: Q: I would ask that B.C. Hydro just 9 confirm exactly where in any of the CFT documentation 10 is found the edict that there is no discretion to be 11 applied to non-compliant bids. 12 13 Information Request MR. ECKERT: **A:** I'd also like to add that because the 14 tender was disqualified at that stage was never 15 16 evaluated against the mandatory criteria. So we will find the reference in MS. HEMMINGSEN: Α: 17 18 the CFT documents to the requirement for unconditioned 19 bids. 20 MR. WEISBERG: Thank you. Does B.C. Hydro believe Q: that some degree of uncertainty about the lease for 21 Calpine's 48 megawatt project in 2029 in any way 22 jeopardizes that project's ability to contribute to a 23 24 bridging solution beginning in 2007?

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question, because they were rejected for non-compliant

**A**:

Well, I guess that's a hypothetical

- Page: 1438
- 1 bid. So we didn't have the opportunity to make that
- 2 assessment.
- 3 MR. WEISBERG: Q: I'm asking for B.C. Hydro's judgment
- 4 and belief.
- 5 MR. SANDERSON: Sorry, Mr. Chairman, I was distracted on
- 6 the last outstanding IR. I'll have to ask Mr.
- 7 Weisberg to repeat that question.
- 8 MR. WEISBERG: Q: The question was, does B.C. Hydro
- 9 believe that some degree of uncertainty about the
- 10 lease for Calpine's 48 megawatt project in 2029 in any
- jeopardizes that project's ability to contribute to a
- bridging solution beginning in 2007? And I contend
- 13 that your --
- 14 MS. HEMMINGSEN: A: I think that's a different question
- than you asked previously.
- 16 MR. WEISBERG: Q: I'll let the record speak for itself.
- 17 I believe I read it in accurately.
- 18 MR. ECKERT: A: The second -- the SEC technical sub-
- 19 committee would have evaluated that as part of the
- development risk assessment. So that would have been
- 21 debated amongst that committee, to determine whether
- or not that was material.
- 23 MS. HEMMINGSEN: A: And secure site tenure was not a
- 24 mandatory criterion.
- 25 MR. WEISBERG: Q: Mr. Eckert, what were the conclusions
- of the SEC, then? They determined that some

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1 uncertainty about a lease in 2029 --They did not review it. 2 MS. HEMMINGSEN: **A**: MR. ECKERT: We didn't review it. What I'm 3 **A:** suggesting is, it would have been that committee's 4 responsibility to review that, and that would have 5 6 been debated, and a recommendation would have been 7 made based on that review. A recommendation whether to deem the MR. WEISBERG: Q: 8 bid non-compliant or not. 9 Whether to accept -- whether to deem MR. ECKERT: **A:** 10 11 that that tender met the mandatory criteria with respect to development risk or not. 12 I just think it's important to 13 MS. HEMMINGSEN: **A**: reiterate the chain of events. Calpine submitted a 14 non-compliant bid. As such, the development risk 15 16 assessment could not be applied to them. MR. WEISBERG: 0: Does it -- does B.C. Hydro have no 17 opinion on my question as asked? 18 MR. ECKERT: **A:** Well, it -- well, the -- we would have 19 20 looked at the materiality of that, we would have also looked at what mitigation plans a tender -- a bidder 21 may have described in terms of resolving that 22 23 disconnect. 24 And that would have been -- we would have

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provided to try to make that judgment as best we

looked at whatever information the bidder would have

could.

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- 2 MS. HEMMINGSEN: A: But we did not have the opportunity
  3 to make that assessment, because it was a non4 compliant bid, so it was automatically, clearly
  5 eliminated from the projects we could consider.
- 6 MR. WEISBERG: Q: Ms. Hemmingsen, I'm giving you that opportunity now. I'm asking for B.C. Hydro's belief.
- 8 MS. HEMMINGSEN: A: It's not something we can --
- 9 MR. SANDERSON: That is just not constructive, Mr.
  10 Chairman. Whether or not Mr. Weisberg thinks it's
  11 sensible, the fact is the process couldn't have been
  12 clearer as testified to in the last 15 minutes by the
  13 witnesses. That is, a bid which contained a condition
  14 would not be opened, would not be considered and would
  15 not be subject to the technical review.

## Proceeding Time 10:55 a.m. T33

Now, if he wants to explore why was it set up that way, it seems to me that's fair enough, although there's probably answers to that on the record. But that's fair enough. That goes to the mandatory criteria and the structure of the whole process. But to say, well, what if it had been otherwise, and what would you now have done if you had opened it, which admittedly you didn't, and if it had said this, which admittedly we have no evidence of what it said, I suggest can't possible be constructive

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- 16 MR. WEISBERG:
- MS. HEMMINGSEN: 17 18 the cost-effective analysis that was performed outside 19 of the CFT process. So this question might be better directed to Panel 4. 20
- MR. WEISBERG: Stay on this line for one more 21 Q: question and you can see if all of it should be 22 23 directed to Panel 4.

24 Was senior management advised in the context of this review to see if there were any 25 26 compelling reasons to reject the Tier 1 outcome? Were

- 1 they advised of the specific circumstances and the impact of Calpine's disqualification? 2 3 MS. HEMMINGSEN: **A**: In the report to the senior management -- and I believe Ms. Van Ruyven testified 4 to this, the results out of the QEC were outlined to 5 6 them as well as the status of the bidders, and the 7 independent reviewer was in attendance at that meeting, and the senior management accepted that 8 9 report. Was senior management or the board of MR. WEISBERG: Q: 10 11 directors ever advised that the specific circumstances and the impact of the disqualification of Calpine's 12 bid and --13 MS. HEMMINGSEN: 14 **A**: They were --I'm not finished my question. 15 MR. WEISBERG: Q: the failure to evaluate an alternative Tier 1 16 portfolio might be a compelling reason to reject the 17 18 outcome of the CFT process? 19 MS. HEMMINGSEN: **A**: They were advised of the bidders
- that were disqualified and the reasons why they were disqualified generally, not the specifics. And they were also advised of the impact on the Tier 1 portfolios.
- MR. WEISBERG: Q: And by that was it made clear to senior mgt and the board of directors that two otherwise fully qualifying projects, Green Island and

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Rather than prejudging the process as fair and

deficit."

Vancouver Island's looming capacity

1 competitive, would it not have been more objective to ask whether there were simply any compelling reasons 2 to reject the CFT outcome? 3 **A**: Well, I would interpret the two as 4 MS. HEMMINGSEN: being one and the same. 5 6 Proceeding Time 11:00 a.m. T34 7 MR. WEISBERG: Q: I wouldn't, but I'll leave the 8 question. If some aspect of the process were found by 9 the Commission to be unfair, or uncompetitive, might 10 that in itself -- no, let me rephrase. If some aspect 11 of the process was unfair or uncompetitive, might that 12 13 in itself be a compelling reason to reject the CFT outcome? 14 MS. HEMMINGSEN: I suppose so, yes. 15 **A:** 16 MR. WEISBERG: Q: Are you able to say "yes" or "no"? If some process -- some aspect of the CFT process was 17 18 unfair or uncompetitive, might that not be a 19 compelling reason to reject the CFT outcome? 20 "might". You can be definitive. "Yes, it might," "No, it might." 21 I mean, I'm just finding the 22 MS. HEMMINGSEN: **A:** 23 question too general. We had an independent reviewer 24 who was involved in the design and execution of this process through all the stages, who affirmed its 25 26 fairness, and competitiveness. So I'm at a loss to

1 identify any reasons why it might be determined not to The rules, the requirements, were be fair. 2 transparently provided to bidders, where they had the 3 opportunity to provide revisions, changes, these were 4 considered carefully by B.C. Hydro in the process, and 5 the CFT was designed to attract bids to get dependable 6 7 capacity at a date certain time. And you understand that a MR. WEISBERG: Q: 8 determination whether the CFT process was unfair or 9 uncompetitive is a live issue for the Commission to 10 determine in this hearing? 11 MS. HEMMINGSEN: **A:** I do. And I quess our position is 12 13 that it was fair and competitive. MR. WEISBERG: Still on page 9 of your evidence, 14 0: lines 15 through 29. At line 26, you say: 15 "Therefore, had the analysis indicated that 16 the scenarios relying heavily on contingency 17 18 measures, such as the no award, were lowercost relative to Tier 1 outcome, B.C. Hydro 19 would have further considered the non-20 quantitative considerations." 21 Is it correct for me to say that, rather than 22 evaluating the Green Island, Epcor and Calpine 23 portfolio, all bids which satisfied all mandatory 24 criteria, B.C. Hydro instead used -- I'm sorry. B.C. 25 26 Hydro instead constructed a portfolio heavily reliant

- Page: 1446
- 1 upon hypothetical temporary generators?
- 2 MS. HEMMINGSEN: A: This is probably a question better
- addressed to Panel 4, but I can offer a quick
- 4 clarification, if you'd like.
- 5 MR. WEISBERG: Q: Please.
- 6 MS. HEMMINGSEN: A: B.C. Hydro constructed two
- 7 alternatives. One was a Tier 2 portfolio, which
- 8 consisted of the bids that met all the criteria under
- 9 the CFT, save being able to be assembled into a 150
- megawatt portfolio. And to that was added contingency
- 11 bridging measures on a least-cost basis.
- 12 MR. WEISBERG: Mr. Chairman, here are my specific --
- sorry. General questions regarding the QEM, just to
- 14 alert you.
- 15 MR. WEISBERG: Q: Did B.C. Hydro ever evaluate Green
- 16 Island's project alone, using the QEM?
- 17 MS. HEMMINGSEN: A: Green Island's project was
- 18 evaluated as a tender result, under the QEM. It could
- not be assembled into a portfolio. The price envelope
- 20 was opened and its price terms were processed through
- 21 the QEM.
- 22 MR. WEISBERG: Q: Did B.C. Hydro ever evaluate Green
- 23 Island and Epcor projects using the QEM? The
- 24 combination of the two.
- 25 MS. HEMMINGSEN: A: I can't comment on the name of the
- other party that we evaluated. However, there was a

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portfolio of 150 megawatts with any other project and

so therefore it was not evaluated in the portfolio

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not answer?

MS. HEMMINGSEN:

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I'm not sure I understand what the

**A:** 

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1 question is. 2 MR. WEISBERG: Q: The question is this. If Green Island's project, with or without other projects, was 3 not evaluated under the QEM, can B.C. Hydro 4 definitively say that either of those portfolios would 5 6 not have been more cost-effective than the Duke Point 7 project? I'm getting confused with your MS. HEMMINGSEN: **A:** 8 characterization of portfolios. Are we into the cost-9 effectiveness analysis and the two alternatives that 10 we put forward being Tier 2 combined with other 11 contingency measures and the no award, or are we 12 13 looking in the QEM where there was no portfolio to assemble that included Green Island? 14 MR. WEISBERG: We are in the vicinity of the latter. 15 Q: 16 MS. HEMMINGSEN: A: Okay. MR. WEISBERG: I think you've confirmed that Green 17 Q: 18 Island and Epcor, the portfolio that they might 19 have --MS. HEMMINGSEN: No, I confirmed the 47 megawatt 20 **A:** 21 plant. 22 MR. SOULSBY: **A:** There was no portfolio in a QEM that contained Green Island Energy in any other bid. 23 24 MR. WEISBERG: Q: I understand that. I'm saying

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because you didn't assemble those portfolios, and I

understand that's because you believe that's the terms

thank you.

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- of the CFT, but because you did not, and those projects existed, and in the case of Green Island and Epcor they met all the criteria of the CFT, under those circumstances can B.C. Hydro definitively say that either of those portfolios, and I will say this, hypothetical portfolios if it pleases you, would not have been more cost-effective than the Duke Point project?
- 9 MS. HEMMINGSEN: A: Once again this is probably a Panel
  10 4 question, but I can answer it fairly quickly.
- 11 MR. WEISBERG: Q: Please don't subject Panel 4 to --
- 12 MS. HEMMINGSEN: A: Pardon me? I'm on Panel 4 too, so.
- MR. WEISBERG: Q: I'm being glib. For the record, I'm trying to be glib.
- 15 MS. HEMMINGSEN: A: So do you want the quick answer?
- 16 MR. WEISBERG: Q: If you can give me a quick answer,
- 18 MS. HEMMINGSEN: **A**: The approach to undertaking the 19 cost-effectiveness analysis was to take the harshest 20 test against the Tier 1 outcome. So what we assembled was the two projects that were successful, which were 21 22 Tier 2 projects in terms of the CFT. And then we applied the next least cost contingency measure. 23 24 we had applied a peaker type of facility, it would

25 have increased the cost of that Tier 2 portfolio. So

26 that was the approach that we took.

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MR. WEISBERG:
1
                    Q:
                         Can you turn to page 10 of your
       direct testimony, Ms. Hemmingsen, looking at beginning
2
       at line 15?
3
             "Disallowing the DPP EPA will mean the
4
            Vancouver Island electricity supply will not
5
            meet Commission accepted reliability
6
7
            planning standards until such time as a 230
            kV AC replacement transmission system is
8
            built and put in service."
9
                               Proceeding Time 11:10 a.m. T36
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11
       Do you acknowledge that the projects bid by Green
       Island, Epcor and Calpine all satisfied the CFT
12
       criteria for being in service by 2007?
13
   MS. HEMMINGSEN:
                           The Calpine, we could not make that
14
                      A:
       assessment because they were a non-compliant bid, so
15
       we couldn't review their development risk.
16
   MR. WEISBERG:
                   0:
                         You couldn't because you were
17
18
       precluded from looking any further?
   MS. HEMMINGSEN:
                      Α:
                           Yes.
19
20
   MR. WEISBERG: Q:
                         And you saw the -- whatever it was, a
       note about the lease issue before there was any
21
       evidence of it -- of its availability for in-service
22
       by 2007?
23
   MS. HEMMINGSEN:
                           I think we testified to that.
24
                      A:
                         I note Mr. Sanderson getting to his
25
   MR. WEISBERG:
                    Q:
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feet. I'll move on.

1 Is it somewhat misleading, though, to suggest that the -- if the DPP EPA is disallowed, that 2 no other solutions could be put in place before the 3 230 kV cables are available? 4 5 MS. HEMMINGSEN: **A**: That's not what that statement 6 It says the reliability planning standards, 7 which means that we meet the gap that is forecast, and that's around 260 megawatts. And that's assuming that 8 the cable is in service at its earliest in-service 9 time. 10 MR. WEISBERG: So if the DPP EPA is disallowed in 11 0: this proceeding, it's your evidence that it's 12 impossible for B.C. Hydro to meet the Commission-13 accepted reliability planning standards? 14 No, I don't think that's what it 15 MS. HEMMINGSEN: **A**: 16 says. It says it will not meet, because there will be 17 a gap. 18 MR. WEISBERG: Q: When I read that in, I didn't say --19 I didn't read all of the quote, which said "Until such 20 time as the 230 kV replacement transmission system is built and put in service." Let's add that to the 21 record. 22 MS. HEMMINGSEN: 23 **A**: Mm-hmm. 24 MR. WEISBERG: Staying on page 10, Ms. Hemmingsen, Q: lines 28 to 30, there's a quote: 25 26 "Furthermore, since projects represented by

the CFT Tier 2 bids received are no longer 1 binding, B.C. Hydro would likely need to 2 establish some competitively-based process 3 to secure such options." 4 Earlier this morning in cross-examination you noted 5 that Calpine and Green Island have confirmed on the 6 7 record that they would proceed on the basis of -proceed with their projects on the basis as bid in the 8 CFT. And would you accept that Epcor may, before the 9 evidentiary phase of this proceeding closes, provide a 10 similar confirmation? 11 We keep having a disconnect, and I'm 12 MR. SANDERSON: afraid it's going to not get picked up by my very 13 alert witness one of these times. We keep hearing 14 from Mr. Weisberg, Epcor, we keep hearing from the 15 witnesses that they don't accept that that 16 characterization -- that they don't -- haven't 17 18 testified to, and we have no evidence of what the other project might have been that was under 122 19 megawatts. I think Mr. Weisberg successfully 20 characterized it as a 47 megawatt peaker at Ladysmith, 21 22 and maybe if he can just keep doing that, we'll keep the two sides of the debate on the same page. 23 MR. WEISBERG: Q: For clarification on the record, when 24 I've said Epcor in my questions up to this point, I 25 26 referred to the project as just described by Mr.

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1 Do you believe that success of the CFT equates to approval of the EPA with the EPP? 2 MS. HEMMINGSEN: **A**: Do I believe that success --3 Do you believe that "success of the 4 MR. WEISBERG: Q: CFT" equates to approval of the EPA with Duke Point? 5 Success of the EPA? 6 MS. HEMMINGSEN: Α: 7 MR. WEISBERG: Q: No, success of the CFT. MS. HEMMINGSEN: A: Equates to approval of the EPA? 8 Of the EPA with Duke Point. MR. WEISBERG: Q: 9 MS. HEMMINGSEN: A: In part, yes. 10 11 MR. WEISBERG: Q: What part not? Well, I think that these 12 MS. HEMMINGSEN: **A**: 13 proceedings are a signal to the competitive markets about what they may or may not expect in the future, 14 and that will colour their interest in participating 15 16 in B.C. Hydro's competitive processes. The goodwill aspect is very important, in fact. The conversations 17 18 with the unsuccessful bidders, barring Green Island, 19 indicated that they felt we ran a very fair, professional process that set a standard in terms of 20 their participation in other jurisdictions. 21 The reference I've given you and the 22 MR. WEISBERG: Q: quote I read-in was itself your quote of what the 23 24 Commission previously stated. The Commission, though, couldn't possibly have predicted that Duke Point would 25

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emerge as the winner of the CFT. So would you agree

did tell me that.

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1 MR. WEISBERG: Q: On page 11, line 8, your direct testimony states: 2 "To introduce new criteria raises the risk 3 profile..." 4 And the sentence continues on but I will end the quote 5 6 there. What new criteria are you referring to? 7 MS. HEMMINGSEN: **A**: Well, the VIGP decision committed to an expedited review, and the January 23<sup>rd</sup> letter 8 established that the prospect of no oral hearing. So 9 to the extent -- and I recognize why we're here, but 10 to the extent that we have this additional process, it 11 raises concerns for bidders and for future 12 participants in our calls. 13 MR. WEISBERG: Specifically what new criteria are 14 Q: 15 you referring to? 16 Proceeding Time 11:20 a.m. T38 MS. HEMMINGSEN: A: Going through additional processes 17 18 to seek approval and new risks associated with that, with the broader scope of review. 19 MR. WEISBERG: Q: We've reviewed over the past much too 20 long all sorts of different criteria in the CFT. 21 You're very good at criteria. Can you not elaborate 22 more than what you just have on what new criteria you 23 are referring to? Your answer is very general. 24 MS. HEMMINGSEN: **A:** Well, our previous calls resulted 25

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in successful awards and they were filed with the

- 1 Commission and there was no review of them. So that 2 could be a standard that bidders expect.
- 3 MR. WEISBERG: Q: I'm not sure that in the answer you just gave me you identified any other new criteria.
- 5 MS. HEMMINGSEN: A: No, in my previous answer I
  6 identified the new criteria. More significant review
  7 process than was originally anticipated.
- 8 MR. WEISBERG: Q: And that's the only --
- 9 MS. HEMMINGSEN: A: Which raises risks for bidders and increases the cost potentially for B.C. Hydro to contract with the private sector.
- MR. WEISBERG: Q: That's the only new criteria you are referring to in your evidence?
- 14 MS. HEMMINGSEN: A: Well, all of the criteria that are introduced by that process.
- MR. WEISBERG: Q: Well, what else are they? I don't
  want to speculate, I don't want to put words in your
  mouth or in argument attribute something to you that
  you didn't say, so tell me what those criteria are.
- 20 MS. HEMMINGSEN: A: Supplementing a competitive fair
  21 process -- supplanting, sorry. Supplanting a
  22 competitive fair process by some options that aren't
  23 binding, aren't firmed up, the volumes and timing
  24 certainty aren't the same as this process yielded.
- 25 MR. WEISBERG: Q: And you contend that those new criteria as you've described them were introduced by

1 the Commission, is that right? That these criteria are a result of 2 MS. HEMMINGSEN: A: this process, that as we've testified was more 3 extensive than we anticipated and I believe it was 4 more extensive than the bidders anticipated based on 5 the Commission's original directions and 6 7 recommendations and letters. Now, having said that, I appreciate why 8 we're here. 9 Whether or not one agrees with how MR. WEISBERG: Q: 10 you've defined criteria, it's certainly not B.C. 11 Hydro's position that the Commission lacks the 12 authority to impose criteria on B.C. Hydro? 13 MS. HEMMINGSEN: A: No it's not. 14 Regarding the EPA with Duke Point, MR. WEISBERG: Q: 15 were there any negotiations of any kind between B.C. 16 Hydro and Duke Point regarding the form of the EPA, 17 after the decision to award the contract on October 18 19 19<sup>th</sup> and before the filing of the EPA with the Commission? 20 MS. HEMMINGSEN: The only amendment or discussions 21 **A:** were around the misalignment of the date of the 22 Commission's decision being February 17<sup>th</sup> and the 23 24 current date in the EPA which is February 14th, and Mr. Sanderson outlined that and the actions that we're 25

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taking place to align those two dates.

- Page: 1460
- 1 And there was certainly nothing prior to
- 2 signing the EPA, signing and executing the EPA.
- 3 MR. WEISBERG: Q: In previous testimony, B.C. Hydro
- 4 | witnesses have stated that B.C. Hydro contracted --
- 5 has contracted 1800 gigawatts, gigawatt hours in the
- 6 last call, is that correct?
- 7 MS. HEMMINGSEN: A: That's correct. I think it's 1780.
- 8 That's close enough.
- 9 MR. WEISBERG: Q: Thank you. I appreciate your
- 10 precision. How many projects were awarded contracts
- 11 under that call?
- 12 MS. HEMMINGSEN: A: I believe there was 16, but that's
- 13 subject to check.
- 14 MR. WEISBERG: Q: I'll take -- accept that as an
- 15 undertaking please. Thanks. Is that acceptable?
- 16 MS. HEMMINGSEN: A: Sure, I'll check.
- 17 MR. SANDERSON: We can check that.
- 18 MR. WEISBERG: Q: Thank you.
- 19 Information Request
- 20 MR. WEISBERG: Q: How many of those projects have
- 21 broken ground?
- 22 MS. HEMMINGSEN: A: I don't have that information with
- 23 me.
- 24 MR. WEISBERG: Q: I would accept that, subject to your
- 25 check.
- 26 MR. SANDERSON: Sure. I mean, I'm sure we can check

1 into it. I guess I will inquire first, though, as to the relevance of that to this particular proceeding. 2 Proceeding Time 11:25 a.m. T39 3 Mr. Weisberg, are you moving on? 4 THE CHAIRMAN: MR. WEISBERG: I'm considering it. And I am moving on, 5 6 yes. 7 MR. SANDERSON: Just so the record's clear, I'm not agreeing to respond to that last one, unless I get 8 some indication of why it might be relevant. 9 MR. WEISBERG: Q: That's fine. 10 11 Does this panel agree, or --Just for the record, then, that last 12 THE CHAIRMAN: 13 undertaking will not be responded to. MR. WEISBERG: I accept that. 14 MR. WEISBERG: Does B.C. Hydro agree that the EPA 15 Q: 16 provides variations for heat and humidity for gas projects, but does not do the same for non-gas 17 18 projects? MR. ECKERT: **A:** The EPA provides for variations in 19 capacity and heat -- for capacity and -- for any 20 project, as I understand it. 21 MS. HEMMINGSEN: I believe there's an IR that 22 **A:** answers that question. I think it's the 1.4 series 23 actually asked by you, Green Island. 24 MR. WEISBERG: Do you agree that the EPA provides a 25 0:

tolling arrangement for fuel for gas projects, but

1 provides no equivalent accommodation for non-gas 2 projects? Well, Mr. Weisberg, do you not think 3 THE CHAIRMAN: that's in the evidence already? 4 I'll move on. 5 MR. WEISBERG: 6 THE CHAIRMAN: Please. 7 Proceeding Time 11:28 a.m. T40 8 MR. WEISBERG: Q: Mr. Simpson, can you turn up your 9 evidence, please, on page 1 -- I'm sorry, page 3 of your evidence. I'll just leave that as the general 10 11 reference. In the context of power planning 12 activities, can you tell me what you would normally 13 consider long term to be in terms of the number of 14 15 years? In terms of -- in the context of a --16 MR. SIMPSON: **A:** MR. WEISBERG: 0: I said in the context of power 17 18 planning activities, but --19 MR. SIMPSON: **A:** Power planning activities. I have 20 typically 20 years. 21 MR. WEISBERG: Q: Okay. MR. SIMPSON: 22 **A:** Yeah. MR. WEISBERG: 23 Thank you. Mr. Chair, those are all my 24 questions.

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- 25 MR. FULTON: Mr. Lewis is next, Mr. Chair.
- 26 MR. LEWIS: Thank you very much. I appreciate the time

1 you've allotted to everyone and wide berth you've given us so far. I have not requested a copy of the 2 I have, however, read every bit of information 3 regarding its development, implementation and 4 evaluation. Some of the documents that pertain to 5 that would be the QEM methodology summary dated August 6 7 6, 2004, Appendix 3 of the EPA, and both the CFT reports of B.C. Hydro and the independent reviewer. 8 So I'll try to limit any comments I may have regarding 9 the QEM to such higher-level examination rather than 10 11 simply the mechanics of it. Not being a lawyer and not having legal 12 counsel, I'm going to respectfully request that I get 13 some direction from you with regard to a comment you 14 made this morning on Panel 4 cross-examination. 15 16 now be an appropriate time? THE CHAIRPERSON: Yes, ask the question. 17 MR. LEWIS: Thank you. Is there any evidence that I'll 18 be needed to request or file in order so as not to 19 limit my cross-examination on Panel 4? 20 My comment was with respect to gas and 21 THE CHAIRPERSON: electricity prices in the context of this panel. 22 23 MR. LEWIS: Okay. THE CHAIRPERSON: I have not spoken to issues related to 24 Panel 4, and I'm not going to at this time. 25 26 MR. LEWIS: Okay, thank you. But you'll make those known

1 as early as possible if some arise, so that I would have an opportunity to prepare for that? Thank you. 2 Well, you had -- Mr. Lewis, you had an THE CHAIRPERSON: 3 opportunity to file evidence on the matters that are 4 before this proceeding. You made the decision that 5 6 you did with respect to that and put at issue things 7 in your own evidence that's relevant to consideration of the length of your cross-examination. There isn't 8 anything that you can do now to change that. 9 Sure, but my cross-examination isn't limited MR. LEWIS: 10 to simply my evidence. It's also the evidence 11 provided by Hydro. 12 13 THE CHAIRPERSON: That's correct, of course. MR. LEWIS: 14 Thank you. THE CHAIRPERSON: 15 Yes. 16 Proceeding Time 11:30 a.m. T41 CROSS-EXAMINATION BY MR. LEWIS: 17 18 MR. LEWIS: 0: My first question goes to Ms. 19 Hemmingsen. Can you explain to me how having unpublished criteria that allow B.C. Hydro to move 20 from a Tier 1 to a Tier 2 decision-making process that 21 22 was unspecified until a recent IR, adds certainty to the bidding process? 23 24 MS. HEMMINGSEN: **A:** Well, I guess we made tremendous effort to publish and provide all of the decision 25 26 rules, and that one was confirmed just prior to

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receipt of the tenders. And we have released what the decision rule was in the filing that we made. 2 was adhered to, and it can be affirmed by the 3 independent reviewer. 4 So I guess there was two mechanisms, one 5 was to publish all that information and make it 6 7 transparent; the second was to use the services of an independent reviewer throughout the process to affirm 8 that the process was transparent, and that pre-defined 9

rules were developed and applied. 10

11 MR. LEWIS: Q: Sure, thank you. I'm speaking specifically to the direction of the IR on -- that was 12 13 Section 4, that Mr. Weisberg spoke to earlier, that said they would like to see the specific decision-14 making process. And I believe your response to that 15 16 was that it was maybe noted in the minutes of a meeting between the IR and Hydro. 17

18 MS. HEMMINGSEN: Α: No, I don't think I said it was "maybe" noted, it was noted --19

MR. LEWIS: 20 Q: Okay.

MS. HEMMINGSEN: -- in the minutes, and that issue 21 **A**: was closed off to the satisfaction of the IR and I 22 think what I suggested is, you could pursue the IR as 23 to the reason why they did or didn't include that in 24 25 their report.

26 MR. LEWIS: Q: And so, just to clarify, then, when was

1 that fact made public? When was it available to everyone, to the bidders, that you had made that 2 determination? 3 MS. HEMMINGSEN: I don't think it was made public. 4 **A:** 5 MR. LEWIS: Okay, so it wasn't in the flow chart Q: 6 that Mr. Weisberg showed, and it wasn't in any public 7 documentation until the IR that requested that? It -- subject to a check, I'm not MS. HEMMINGSEN: **A:** 8 sure the flow chart was made available to bidders. 9 The IR's requirements were that we had prescribed 10 rules, developed in advance, about how we would treat 11 But I'd have to check that. 12 tenders. 13 MR. LEWIS: Q: Okay. So what -- basically what I'm looking at is this cost certainty you talk about for 14 bidders. How did they have that, if, under Section 15 17.3 of Addendum 10, that gives B.C. Hydro the sole 16 and unfettered discretion to reject a portfolio over 17 18 150 megawatts for unspecified and undisclosed cost 19 effectiveness criteria, how does that eliminate risk or certainty in the CFT bidding process? 20 MS. HEMMINGSEN: So you prefaced that by saying, 21 **A:** "How do we have cost certainty" by having that --22 No, bid certainty. 23 MR. LEWIS: Q: MS. HEMMINGSEN: 24 **A:** Okay. You've said that by having a negative 25 MR. LEWIS: Q: 26 outcome of this process it will do damage to the bid

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certainty. What I'm saying is, I sort of feel that you already have implanted that in this bid process.

- MS. HEMMINGSEN: A: Yeah. And I guess we went to our utmost efforts to specify all the criteria that were applicable, and there was -- and I believe Ms. Van Ruyven testified to this; there was this privative clause, and I believe, if I'm not wrong, it's Section 17.3, where B.C. Hydro had to reserve a discretion in the event of two circumstances.
  - One is there was no ceiling price, so therefore we didn't want to subject ourselves to taking, you know, silly bids that were bid in, and second, we had to be -- consider the cost-effectiveness in terms of the impact to ratepayers of any of the solutions. So we reserved that right, we discussed with the independent reviewer what would be the basis to move from Tier 1 to Tier 2 within the CFT competitive process. And then we got direction from senior management on what would be the basis to move and overturn the competitively-determined outcome of Tier 1.
- 22 MR. LEWIS: Q: Thank you, I --
- MS. HEMMINGSEN: A: And that's what we've put forward here, is that approach.
- 25 MR. LEWIS: Q: I -- sorry. I appreciate your utmost efforts, but the specific question I'm asking is with

MS. HEMMINGSEN:

**A**:

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       the privative clause, 17-3, it gives you the sole and
       unfettered right to disqualify a 150 megawatt project
2
       or larger based on unspecified criteria, does it not?
3
                                Proceeding Time 11:35 a.m. T42
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                           It does --
   MS. HEMMINGSEN:
                     A:
5
6
   MR. LEWIS:
                 Q:
                      Thank you.
7
   MS. HEMMINGSEN:
                     A:
                           -- establish our right --
   MR. LEWIS:
                       Thank you.
8
                 Q:
   MS. HEMMINGSEN:
                           -- to do that, yeah.
9
                     A:
                     Thank you. Does that not --
   MR. LEWIS: Q:
10
                      Now, Mr. Lewis, I'm sorry. Let the
11
   MR. SANDERSON:
12
       witness finish, please. Thank you.
   MR. LEWIS: Q:
13
                      Proceed, I'm sorry.
   MS. HEMMINGSEN:
                           It establishes that right and then
14
                     A:
       it defines cost effectiveness, and I'm not sure if Mr.
15
       Eckert can maybe get me that provision, in terms of
16
       consideration of the ratepayer, and that references
17
18
       the Commission's direction again on the cost-
       effectiveness test, that it wasn't just least cost, it
19
       included non-price factors and reliability and timing
20
       considerations.
21
                      Okay, so walk me through the process
22
   MR. LEWIS: Q:
              The 17.3 was put through on March 5<sup>th</sup>, if I'm
23
24
       correct, the IR came back with a letter dated March
       11th saying, "You have to specify this."
25
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Yes.

- MR. LEWIS: Q: You've since answered that the IR said,
  "Okay, we discussed, we figured out that it was based
  on collusion and competitiveness." You didn't say
  anything about what's cost effective.
- MS. HEMMINGSEN: A: Yeah, and maybe I can just take you back a little further into the derivation of that clause. The CFT, as is standard with most competitive procurement processes, always had a right of excerpt because we have to retain that, and it was unspecified. I mean, no criteria, no caveats. When we got the Commission letter in January 23<sup>rd</sup>, we reviewed that direction and the direction to look at smaller portfolios. Then we built that criteria into the exit clause that we had already established. So we actually defined it further.

As we progressed through the CFT process, the independent reviewer's primary focus was on the fairness and competitiveness of the process and as we've noted in their March 11<sup>th</sup> report, they required some prespecified decision roles about how within the CFT process we would move between a Tier 1 and a Tier 2 award. So we did that and we confirmed that with them and you can pursue their side of it in Panel 3.

- MR. LEWIS: Q: Sure. And that was confirmed based on competition and the lack of collusion.
- 26 MS. HEMMINGSEN: A: Right. As we've discussed just

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- 1 with Green Island just now.
- 2 MR. LEWIS: Q: Sure.
- 3 MS. HEMMINGSEN: A: So that was the basis for them to
- 4 affirm that it was appropriate to move from Tier 1 to
- 5 | Tier 2.
- 6 MR. LEWIS: Q: Okay, so maybe this is more appropriate
- 7 to Panel 4, but considering that you've said that
- 8 there was competition, considering you've said there
- 9 was no collusion, why did you move onto an evaluation
- of Tier 2?
- 11 MS. HEMMINGSEN: A: The executive asked us, amid those
- 12 broader considerations that the Commission had pointed
- to in the VIGP decision, and to make sure that the
- 14 outcome was consistent with that.
- 15 MR. SOULSBY: A: Just to be clear, we did not move in
- onto Tier 2 within the context of the CFT process
- itself. That was as part of the cost-effectiveness
- 18 analysis.
- 19 MR. LEWIS: Q: Thank you. Did you object to them doing
- 20 that?
- 21 MS. HEMMINGSEN: A: No. No, I thought it was entirely
- 22 appropriate.
- 23 | MR. LEWIS: Q: Okay, do you think there was an element
- 24 of uncertainty to bidders that was instilled by them
- doing that, as it wasn't provided for in the CFT.
- 26 MS. HEMMINGSEN: A: It was provided for in the CFT

because there was clause 17.3 which established that 1 there was a sole and unfettered discretion to B.C. 2 3 Hydro. How much certainty is there in a sole 4 MR. LEWIS: Q: and unfettered discretion on undisclosed criteria? 5 Well, it has to be exercised in 6 MS. HEMMINGSEN: A: 7 good faith and if we didn't exercise it in good faith we'd be subject to legal claims. 8 MR. LEWIS: Q: Thank you. On to another subject, and 9 I'm going to be right on the outskirts here so don't 10 11 get your hackles up as soon as I mention ICP. If ICP didn't have a security on the last 12 three years of its lease, and the Duke Point Power 13 project didn't have a secured fuel supply, why was one 14 compliant and the other not? 15 If IC -- ICP didn't bid into this 16 MS. HEMMINGSEN: **A**: process. ICP is an existing plant. 17 MR. LEWIS: Q: Oh, sorry, I'll say Calpine. Sorry. 18 MS. HEMMINGSEN: **A:** Okay, so Calpine's project? 19 Calpine's lease, it's been determined, 20 MR. LEWIS: Q: was three years short. They asked for a change to the 21 Duke Point didn't have a secured fuel supply. 22 terms. One is one considered compliant and the other not? 23 24 MS. HEMMINGSEN: **A:** Okay, just a couple of points. First of all, Calpine submitted a non-compliant bid so 25

they conditioned their bid. They didn't ask us for a

Page: 1472 1 change in the terms. Yeah, I don't disagree with you on that. 2 MR. LEWIS: Q: Proceeding Time 11:40 a.m. T43 3 So why was there -- and we've 4 MS. HEMMINGSEN: **A**: explained why their bid wasn't considered. We didn't 5 have the opportunity to review and consider the 6 7 development risk or the inherent risk of that. never had the opportunity in the confines of the CFT 8 process. 9 The second part of that question MR. ECKERT: **A:** 10 relates to Duke Point Power, and they tendered as a 11 tolling project, which meant that B.C. Hydro took on 12 the responsibility for providing gas to the plant. 13 Now we did, as part of our evaluation, what we did, we 14 would evaluate the tenders to make sure that the 15 16 tenders met all the mandatory criteria. portfolio basis we would look at the development of 17 18 risk around the gas supply. So we did do a 19 development risk assessment on gas transportation, and 20 that was based on information that we were provided with by actually a separate committee which was called 21 22 the Gas Team, and they outlined what the -- you know, the series of contingency plans that we had around gas 23 supply, and we took that into our consideration, 24

debated that as part of our deliberations as to

whether or not we should disqualify a portfolio for

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1 failing to meet the development risk on that basis. So it was a fully compliant tender with 2 respect to gas supply because it was a tolling tender. 3 MR. LEWIS: Thank you. I'll return to this. 4 0: Earlier, Ms. Hemmingsen, Mr. Bois alluded 5 6 that the contingency planning with regard to -- you 7 implied that you weren't doing any because you were awaiting the CFT results, correct? 8 MS. HEMMINGSEN: **A:** I don't think I quite said that. 9 MR. LEWIS: Okay. Can you --10 Q: 11 MS. HEMMINGSEN: **A:** He was -- seemed to be asking questions about why weren't we proceeding further. 12 mean, we have some contingency plans, we've looked at 13 contingency options, and we have them shelf-ready to 14 pursue in the event that there is a decision that 15 disallows this Duke Point contract. 16 MR. LEWIS: Okay, thank you. Now I don't have an 17 0: 18 exhibit number handy. I'm sorry, I apologize. It's 19 the second piece of evidence. There was only two 20 submitted by the Village of Gold River. But it's on the second page, the second piece of evidence. 21 an article from The Cowichan. 22 Sure, yeah, I'll wait. 23 It's C5-6. Thank 24 you. Can I just take moment to have a 25 MS. HEMMINGSEN: **A**: 26 look at it?

MR. LEWIS:

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Sure, of course. If you'd like I can

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- direct you exactly to what I'm going to speak to now.
- 3 MS. HEMMINGSEN: A: Okay, sure.

Q:

- 4 MR. LEWIS: Q: And that might make it easier. It's the
- 5 very last sentence on the second page.
- 6 MS. HEMMINGSEN: A: Okay. It's the quote at the end of
- 7 the second page?
- 8 MR. LEWIS: Q: Yes, that's correct.
- 9 MS. HEMMINGSEN: A: And what's the date of this?
- 10 MR. LEWIS: Q: The date is August 4<sup>th</sup>, I believe -- July
- 11  $4^{th}$ , I'm sorry.
- 12 MS. HEMMINGSEN: A: July 4<sup>th</sup> of 2004 or 3?
- 13 MR. LEWIS: Q: It would have been 2003.
- 14 MS. HEMMINGSEN: A: Yes, okay. So this article would
- 15 have appeared before we got the Commission decision in
- 16 September. So the Commission decision informed our
- 17 subsequent actions with respect to VIGP. And as we're
- all aware, we created an option for the private sector
- 19 to acquire the VIGP assets.
- 20 MR. LEWIS: Q: Thank you. I'll move on.
- Other than greenhouse gas requirements,
- 22 what measures has B.C. Hydro incorporated into the CFT
- evaluation process with regard to environmental offset
- 24 costs?
- 25 | MS. HEMMINGSEN: A: Well, once again that was informed
- by the Commission's direction that we create a

1 simplified evaluation methodology, and they gave us some direction on cost to include related to GHG 2 emissions for the VIGP benchmark. So on that basis 3 that's what we included. 4 I think another factor is that this was a 5 call for capacity, and that heavily flavoured the 6 7 product that we were looking for and the reliability that we were looking for. So environmental factors 8 were not featured as prominently. 9 Proceeding Time 11:45 a.m. T44 10 11 MR. LEWIS: Q: Okay, so the answer would be, other than 12 greenhouse gas requirements, what measures has B.C. 13 Hydro -- so other than greenhouse gas requirements, so there'd be none, other than greenhouse gas. Is that 14 correct? 15 16 MR. SOULSBY: **A:** Are you talking about within the context of the mandatory criteria? 17 MR. LEWIS: Q: Well, within the evaluation. Within the 18 entire CFT process and the evaluation of projects --19 MR. SOULSBY: **A:** Okay, well --20 MR. LEWIS: -- what measures other than greenhouse 21 Q: 22 qas requirements --And I'm just clarifying, because I'm 23 MR. SOULSBY: **A:** 24 not sure what you mean by "other than greenhouse gas requirements", because there's no requirement for 25

greenhouse gas in the evaluation, that the liability

- Page: 1476
- for greenhouse gases, as part of the EPA process and
- 2 the CFT process, is put to the bidders.
- 3 MR. LEWIS: Q: Correct.
- 4 MR. SOULSBY: A: So even that is not part of --
- 5 MR. LEWIS: Q: No, but it values that. And it does
- 6 place that risk, or that cost of those, to the bidder.
- 7 MR. SOULSBY: A: I need to clarify that.
- 8 MR. LEWIS: Q: Sure.
- 9 MR. SOULSBY: A: It does not value that in the
- 10 evaluation methodology itself. The benchmark, as Ms.
- 11 Hemmingsen said, includes a cost adder at the
- 12 Commission's direction, for GHG offsets.
- 13 MR. LEWIS: Q: Would it be fair, then, to say that each
- 14 bidder is responsible for the cost of greenhouse gas?
- 15 MR. SOULSBY: A: Yes.
- 16 MR. LEWIS: Q: Thank you. Do you feel that greenhouse
- qas offsets are sufficient to mitigate all the
- 18 environmental impacts of a power project?
- 19 MR. SOULSBY: A: I'm sure that B.C. Hydro corporately
- 20 has a view on that, but that's really, I don't think,
- 21 part of the discussion, and I'm not prepared to
- discuss that here today. What I am prepared to
- 23 discuss is, how greenhouse gases were treated in the
- 24 CFT process. And as we've just covered off, they were
- 25 put to the account of the bidders. So any GHG costs
- that the bidders may have assumed that they might

- incur would reasonably be expected to be built into
  the tenders that they submitted.
- MR. LEWIS: Q: I appreciate you not -- may not be
  willing to discuss it, but I believe the environmental
  costs as a whole are within scope. So my question,
  then, I'll place it to Mary -- Ms. Hemmingsen, is, are
  those the only costs that were factored in, or were
  taken into account?
- MS. HEMMINGSEN: **A**: Any change of law provisions were 9 on the account of bidders. So to the extent the 10 regulations change for other environmental issues, 11 that's the responsibility of the bidders. And as Ms. 12 Van Ruyven testified yesterday, I think it was, just 13 yesterday; that B.C. Hydro designed and structured 14 this CFT process prior to formulating the long-term 15 environmental objectives, and that on a going-forward 16 basis there may be broader consideration of how this 17 relates, but that's for future processes. 18
- MR. LEWIS: Q: Thank you, I appreciate that answer.

  Would a commitment from senior executives within Hydro
  constitute a change of law?
- 22 MS. HEMMINGSEN: A: In terms of the bidders' responsibility?
- 24 MR. LEWIS: Q: Yes.
- 25 MS. HEMMINGSEN: A: No.
- 26 MR. LEWIS: Q: Thank you.

1 MS. HEMMINGSEN: A: No, my understanding would be not.

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- 2 MR. LEWIS: Q: Does it state anywhere in the EPA that
- 3 if environmental offset costs relating to this project
- 4 are required, that they will be Duke Point Power
- 5 Limited Partnership's sole responsibility?
- 6 MR. ECKERT: A: The EPA does address that, in Section
- 7 8.10(a), where it specifically says that the seller is
- 8 responsible for any greenhouse gas costs.
- 9 MR. LEWIS: Q: Correct, greenhouse gas costs. So I'll
- try and make this clear. If you had a hydroelectric
- project, are you saying because there's no greenhouse
- qas implications, that there's no environmental
- 13 impact?
- 14 MR. SOULSBY: A: No, I don't think we're making that
- 15 claim.
- 16 MR. LEWIS: Q: Okay. So there may be environmental
- impacts outside of greenhouse gas costs that are not
- 18 evaluated within this CFT process.
- 19 MS. HEMMINGSEN: A: That's right. As Mr. Soulsby just
- 20 related, the QEM process did not evaluate --
- 21 MR. LEWIS: Q: Thank you.
- 22 MS. HEMMINGSEN: A: -- any environmental impacts other
- than may have been evaluated in the development risk
- 24 assessment, if permits were --
- 25 MR. ECKERT: A: Yeah, we did look to see whether or not
- 26 -- for example, in the EPA there is a requirement that

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MR. LEWIS: Q:

Okay.

So any conditions in this agreement related to a

failure to receive material permits have been deleted.

Does B.C. Hydro have all material

1 permits required for this project? B.C. Hydro provided as part of the 2 MS. HEMMINGSEN: **A:** VIGP assets that were made available to bidders a set 3 of permits in the share transfer. 4 5 MR. LEWIS: Q: You don't have a fuel supply contract 6 though, do you? Wouldn't that be similar to a permit? 7 Maybe I used the wrong word. Maybe I should change that a little. 8 MS. HEMMINGSEN: A: Okay, a fuel supply, so you do mean 9 a gas commodity contract or a gas transportation --10 11 MR. LEWIS: Q: No, the actual transportation and the 12 supply of it. 13 MS. HEMMINGSEN: A: Okay, and Mr. Simpson can speak to that. 14 MR. SIMPSON: A: At the moment we don't have a gas 15 16 transportation contract but the indication is that we can likely get one and we put a number of pieces of 17 18 information in the information request to indicate our options in that regard. 19 MR. LEWIS: Q: Thank you. When you evaluated that, 20 what price did you use for that? How did you put a 21 price on it if you didn't in fact know how it was 22 going to be achieved? 23 24 MR. SIMPSON: A: Well, we did, as part of the

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evaluation process, obtain information from Terasen

for all of the qualifying portfolios that involved gas

- tolling projects, estimates of the tolls that would
  apply over the period of the EPA and those were used
  for evaluation purposes.
- 4 MR. LEWIS: Q: And that's simply one option, correct?

  The Terasen option.
- 6 MR. SIMPSON: A: Yes, but we think it's probably the
  7 most likely option. That it's most likely we will
  8 contract for gas transportation with Terasen.
- 9 MR. LEWIS: Q: I apologize. Likely but not definitive.
- MR. SIMPSON: A: Well, we think that it's probably -
  if we elect to go with Terasen that it's almost

  certain that we could have an arrangement with
- Terasen. Now, whether there might be something better that comes along, either by 2007 or after 2007, that's
- an open question.
- 16 MR. LEWIS: Q: Have you got a commitment on price from
  17 Terasen Gas that they can't back out of?
- MR. SIMPSON: A: We don't have a commitment that they can't back out of, no. We have their best estimates of the tolls that would apply.
- 21 MR. LEWIS: Q: Okay, thank you. If you approve this
  22 EPA, what leverage do you have, given GSX is dead, to
  23 fairly secure a price for fuel transport?
- MS. HEMMINGSEN: A: Well, Terasen is a regulated
  entity, so they need to bring the toll in front of the
  Commission for their review and approval and any

- material differences between B.C. Hydro and Terasen on that front would be aired and considered in that decision.
- 4 MR. LEWIS: Q: It just seems that we talk about
  5 uncertainty and yet when it comes to an unsigned
  6 contract to supply fuel at an undefined rate, it's
  7 cast aside as no big deal.
- Yeah, and I quess in terms of our MS. HEMMINGSEN: A: 8 assessment of uncertainties and our confidence on 9 certain inputs we look at the range of alternatives 10 11 that we have. As Mr. Simpson outlined, and I think there's various IRs, we are satisfied that there is a 12 13 number of infrastructure options available to Terasen or even measures beyond that available to us in the 14 range of prices that Terasen provided. So we're 15 16 confident that we can achieve that gas transportation at that price, and further, we are confident that 17 18 process exists where we can air any differences and get them resolved. 19
- 20 MR. LEWIS: Q: Thank you. Did B.C. Hydro retain the right to cancel this EPA if it cannot supply gas at the cost it projected?
- 23 MR. ECKERT: A: No, there's no such right in the contract.
- 25 MR. LEWIS: Q: Thank you. Mr. O'Riley, I'd like to revisit a comment that you made yesterday and correct

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me if I'm wrong when I -- I'll try and restate it The comment was about alternative fuel accurately. supplies for thermal projects specifically using wood I believe you stated something along the lines that the assumption was that most of the types of projects had access to their own fuel supply, and that therefore negated their fuel supply risk. Proceeding Time 11:55 a.m. T46 MR. O'RILEY: Yeah, I think the way I characterized **A:** it was that coal projects and wood waste projects are typically developed by proponents with access to their own fuel supply. And the examples I gave were minemouth coal fire generation and hog fuel, wood waste burners within integrated pulp and paper mills. MR. LEWIS: Okay, so the fact that B.C. Hydro was Q: taking on the fuel supply risk in terms of transportation for gas plants was really irrelevant because they were both risk neutral. Would that be a correct assumption?

20 MR. O'RILEY: A: Sorry, I'm not sure I understand that.

MR. LEWIS: Q: Well, what I think is there's a risk associated with this unsigned contract to supply.

Whether it's big or small, there's a risk. Now, I believe you said that these other projects are also risk neutral because they supply their own, so it's a level playing field. Would that be a correct

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characterization?

- MR. O'RILEY: A: Well, I think the important point that
  Ms. Hemmingsen and Mr. Simpson made is that we did an
  assessment of the gas transportation risk and looked
  at the probability and the consequences of various
  outcomes and felt that we could live with that risk.
  MR. SIMPSON: A: I think I'd add something, you know.
  Terasen has recently concluded a proceeding with the
  Commission over its proposed liquefied natural gas
  - Commission over its proposed liquefied natural gas expansion of its system, and it's put a lot of evidence on the record in terms of what it will cost to expand its system to meet the requirements of the Duke Point project. And we think, based on that evidence and the information that they provided in respect of the tolling, that it's pretty clear that any tolling payments that B.C. Hydro would make for the Duke Point project to Terasen will more than cover

So there's a very low risk there that there will be some unexpected costs that come along with respect to supplying gas to the Duke Point project.

22 MR. LEWIS: Q: Thank you, I appreciate your candour.

the expansion costs of their system.

MR. O'RILEY: A: And I'd just sort of add, if I could, that there's a -- we were talking about the gas transportation costs versus the commodity, so that's a -- I was preparing more the gas commodity risk as

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       opposed to the hog fuel or coal.
                      Sure, right now I'm simply dealing with
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   MR. LEWIS:
       the transportation risk of supply in terms of
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       providing it.
                   So I've heard that it's a low risk and I've
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       heard that we're willing to live with that. So was
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7
       that risk evaluated in the process in any manner?
                       Can you refer to the specific risk
   MR. ECKERT:
                  A:
8
       you're talking about?
9
                      Having a fuel transportation contract in
   MR. LEWIS:
                 Q:
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       place that says, "We can provide this gas to you."
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       Not the price risk but just supplying the gas.
12
   MR. ECKERT:
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                  A:
                       We did evaluate the development risk
       around gas transportation on a portfolio basis,
14
       because we were -- for those plants, for those gas
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       plants which elected tolling, so we did do a
       development risk assessment for that. We also did a
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       fuel assessment for non-gas plants where we looked at
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       the fuel supply and the transportation arrangements a
       potential proponent would utilize, and looked at that
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       to see what the risk was associated with that, with
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22
       fuel supply for non-gas plants.
                             But there was no risk premium
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   MR. LEWIS:
                 Q:
                      Sure.
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       established for those that didn't require that service
                    The alternative users of wood and whatnot
25
       from Hydro.
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that didn't require you to take that risk on, there

- 1 was no premium to them for that.
- 2 MS. HEMMINGSEN: A: So we're talking about gas as a

- 3 commodity?
- 4 MR. LEWIS: Q: No, the supply.
- 5 MS. HEMMINGSEN: A: The supply.
- 6 MR. LEWIS: Q: We've heard that there is a risk
- 7 associated with the supply. It may be low but you're
- 8 willing to take that on. So where was that evaluated
- 9 for projects that didn't need that?
- 10 MS. HEMMINGSEN: A: I guess it was evaluated in terms
- of the assessment of the low risk of taking on the gas
- transportation in the absence of the contract, and we
- deemed that there wasn't a basis to have any sort of
- 14 premium. I mean, you can talk about a premium or you
- 15 can talk about a discount, so --
- 16 MR. LEWIS: Q: Sure, either/or, correct, but there was
- 17 none.
- 18 MS. HEMMINGSEN: A: There was none, no.
- 19 MR. LEWIS: Q: Thank you.
- 20 Mr. O'Riley, do you know if Green Island
- 21 Energy produces its own wood waste?
- 22 MS. HEMMINGSEN: A: I'm not aware of that.
- 23 MR. LEWIS: Q: If they didn't and they had to secure it
- 24 from someone else, that would eliminate that risk
- 25 neutral position, wouldn't it?
- 26 MR. ECKERT: A: Yeah, I think that's -- I'm not sure

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own alternative fuel, such as wood waste?

- Page: 1488
- 1 MS. HEMMINGSEN: A: Not necessarily, no. I mean, it's
- 2 conceivable that projects that have to source their
- 3 own fuel have an advantage over those that have to
- 4 secure it at market prices.
- 5 MR. LEWIS: Q: Why didn't B.C. Hydro offer to supply
- 6 their fuel for them, then?
- 7 | MR. O'RILEY: A: I can answer that. I mean, B.C. Hydro
- 8 has no experience or capability supplying wood waste.
- 9 There's also -- it doesn't seem to be any ready market
- for acquiring it on a spot-market basis or a forward-
- 11 market basis, as there is for natural gas.
- 12 MR. LEWIS: Q: So where you had some background, you
- supplied that service without taking on any cost --
- 14 without assessing any cost for that. But for others
- where you didn't, you didn't offer that service?
- 16 MR. O'RILEY: A: Yeah. Well, I -- yeah, I think the
- qas risk is something worth sort of talking about in--
- 18 MR. LEWIS: Q: I'm not talking about gas risk yet.
- 19 Just --
- 20 MR. O'RILEY: A: Well I think you are, actually. 1
- 21 think you're -- you're talking about B.C. Hydro being
- 22 willing to take on the gas risk in the CFT, and not
- take on risk of other commodities.
- 24 MR. LEWIS: Q: Well then I'll clarify. There's a
- 25 difference between buying gas and then getting it to
- the plant. There's a difference between buying wood

- 1 waste and getting it to the plant.
- 2 MS. HEMMINGSEN: A: Yeah.
- 3 MR. LEWIS: Q: So -- am I correct?
- 4 MR. O'RILEY: A: So are we talking -- we can talk about

- 5 transportation --
- 6 MR. LEWIS: Q: Yes.
- 7 MR. O'RILEY: A: -- we can talk about the commodity
- 8 itself. Either one.
- 9 MR. LEWIS: Q: I'm strictly talking right now about
- 10 transportation. I will get to the fuel price
- 11 escalator.
- 12 MR. O'RILEY: A: Okay.
- 13 MR. LEWIS: Q: But as far as just transportation, you
- did not offer that service to alternative suppliers,
- that were proposing other alternative fuels.
- 16 MS. HEMMINGSEN: A: And once again, it relates to what
- 17 I outlined before in terms of gas transportation
- 18 service as a regulated service, we were confident that
- we had the channels to pursue to address any
- differences that we might have. Whereas with ships
- 21 and --
- 22 MR. LEWIS: Q: I'll move on.
- 23 MS. HEMMINGSEN: A: -- terminals, and everything else,
- we didn't have the same situation.
- 25 MR. LEWIS: O: I'll move on.
- 26 | THE CHAIRMAN: Mr. Lewis, do you have very many more

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bidder workshop --

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## Proceeding Time 1:33 p.m. T1A

The other section that touches this issue is section 18.17 and it deals with non-compliant

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tenders, and it states that:

"All tenders that are incomplete in any material respect, or that contain material amendments, modifications or conditions that are not authorized by the CFT, including amendments, modifications or conditions to the specified form of tender or final form agreements, or that otherwise do not conform in a material respect to the requirements of the CFT, will be rejected. B.C. Hydro reserves the right to accept or reject in its discretion, tenders that contain nonmaterial emissions, amendments, modifications or conditions, or that otherwise do not conform to the requirements of the CFT where such a non-conformity is not material. B.C. Hydro has the discretion to determine what constitutes a material omission, amendment, modification, condition, or non-conformity.

MR. SANDERSON: Q: Thank you, Mr. Eckert. And now, Ms. Hemmingsen, you described a document which I'm now going to get marked, which I think you just said was minutes from the bidders' tender workshop of the 7<sup>th</sup> of July 2004. And if I can get that marked as the next exhibit.

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- 1 MS. HEMMINGSEN: A: Just a correction. I think these
  2 were the presentation slides that were made at that
- 3 bidder's workshop.
- 4 MR. SANDERSON: Q: All right, thank you.
- 5 MR. FULTON: In terms of numbers, I think, Mr. Chairman,
- I know that we have an updated list. I believe that
- 7 number should be B-56. And I'll check that with the
- 8 Hearing Officer for the updated exhibit list that, as
- 9 I understand it, incorporates the exhibits that were
- 10 filed prior to today.

## Proceeding Time 1:35 p.m. T02A

- 12 MR. SANDERSON: Q: Ms. Hemmingsen, I wonder if you
- could just take the panel to the particular reference
- that you're making to what is now Exhibit B-56.
- 15 MS. HEMMINGSEN: A: Sure. It's on slide 77, which is
- 16 attached, and it speaks to conformity requirements,
- and it's the third bullet point relating to
- 18 conformity, where it establishes under the sub-bullet
- 19 point -- no footnotes, conditions, caveats or riders.
- 20 And then goes on to identify material non-conformity
- 21 equals rejection.
- 22 MR. SANDERSON: Q: Thank you. And I'm advised, and
- 23 maybe you can confirm, that this -- these workshops
- 24 were available on Hydro's website during the bidding
- 25 process?
- 26 MS. HEMMINGSEN: A: The notification of the workshops?

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MR. O'RILEY:

1 Or the materials for the workshops? 2 MR. SANDERSON: Q: The materials for the workshop, are you aware of whether they were posted? 3 MS. HEMMINGSEN: 4 **A**: The materials for the workshops were posted on our website after the workshops were 5 6 held, and all bidders were required to attend these 7 workshops --MR. SANDERSON: Q: Thank you. 8 -- as a condition of the CFT. MS. HEMMINGSEN: A: 9 MR. SANDERSON: Q: Thank you. 10 11 MR. FULTON: And just to correct the exhibit number, Mr. Chairman, that should be Exhibit B-60. And there will 12 13 be an updated list available for everyone some time early this afternoon. 14 THE HEARING OFFICER: Exhibit B-60. 15 16 (EXTRACT FROM "VANCOUVER ISLAND CALL FOR TENDERS, BIDDERS' TENDER WORKSHOP, 7 JULY 2004", MARKED AS 17 EXHIBIT B-60) 18 THE CHAIRMAN: Mr. Lewis, you may proceed 19 MR. LEWIS: Thank you very much. 20 CROSS-EXAMINATION BY MR. LEWIS (Continued): 21 22 MR. LEWIS: Q: My first question is for Mr. O'Riley.

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26 during the revenue requirement for a number of

B.C. Hydro applied to the Commission

Did B.C. Hydro recently apply to the Utilities

Commission to approve deferral accounts?

**A**:

- 1 deferral accounts.
- 2 MR. LEWIS: Q: Were those accounts to be established to
- 3 help eliminate the impacts that the cost of gas price
- 4 risk, among other factors, could have on annual
- 5 revenues?
- 6 MR. O'RILEY: A: What the deferral accounts did, and
- 7 there's really two that relate to that; there's a
- 8 heritage deferral account and a non-heritage energy
- 9 deferral account. And what those allow us to do is
- 10 carry forward variances between the forecast and
- 11 actual energy costs, subject to some exceptions around
- the load forecast and variability around that, to
- future years. And the idea is that the gains and
- 14 losses over time, positive and negative variances over
- time, will tend to cancel one another out.
- 16 MR. LEWIS: Q: Okay, thank you. Is there any cost to
- the ratepayer of having these deferral accounts or
- 18 using them?
- 19 MR. O'RILEY: A: There is a financing cost to the
- 20 ratepayer. If there's a negative balance we're
- 21 carrying forward, there's an interest cost that's
- 22 borne. I think it's our average debt cost that
- 23 accrues to the account. And at a certain point, with
- 24 a -- when the balance reaches -- well, an unspecified
- amount, either party, either B.C. Hydro or ratepayer
- 26 group, could apply to have those accounts cleared and

- Page: 1496
- 1 have the difference factored into rates over time.
- 2 MR. LEWIS: Q: Thank you. How are these financing
- 3 charges or costs associated with deferral accounts
- 4 factored into the QEM?
- 5 MR. O'RILEY: A: They are not factored into the QEM.
- 6 MR. LEWIS: Q: Thank you.
- 7 Were there any reputable forecasts of gas
- price that were lower than the one you used, the EIA,
- 9 I believe it's called?
- 10 MR. O'RILEY: A: We've looked at a range of gas prices,
- and we've put forward one lower gas forecast, which
- we've talked about in various regulatory proceedings,
- and that's produced by a company called Confer in
- 14 Alberta. And that's certainly lower. That forms the
- 15 lower bound of our official B.C. Hydro gas price
- forecast. The EIA is the middle bound, and we have a
- high gas forecast as well, which we've talked about in
- 18 BCUC 1.13.1.
- 19 MR. LEWIS: Q: Okay, thank you. Now I'm not
- 20 tremendously familiar with this --
- 21 MR. O'RILEY: A: Okay.
- 22 | MR. LEWIS: Q: -- so please feel free to correct me as
- 23 I go forward, but I guess where I'm going is, if a
- 24 proponent of a gas project felt that the gas forecast
- used by B.C. Hydro was in fact high, they would have
- benefited by assuming the fuel supply risk, wouldn't

1 they? Proceeding Time 1:40 p.m. T3A 2 The gas-fired proponents certainly had 3 MR. O'RILEY: **A:** the option of choosing a fixed price resource or a 4 variable price resource. The information they had 5 6 throughout the summer, I quess, when we first issued 7 the QEM model it was populated with a range of gas forecasts, the three forecasts I described to you, 8 plus an average case of those. So they had 9 information about a range of gas forecasts. 10 Right. And if they thought that gas 11 MR. LEWIS: 0: price forecast would indeed be lower than what you 12 13 purported to use, that would be a benefit to accept that option? 14 Well, they could take that into their 15 MR. O'RILEY: **A:** 16 determination of which way they wanted to bid. MR. LEWIS: Okay, thank you. No one chose that 17 Q: option, did they? 18 MR. O'RILEY: **A:** I don't believe anyone chose a fixed 19 price gas option. 20 By their unwillingness to accept to take 21 MR. LEWIS: Q: that option on, doesn't that indicate that there's a 22 benefit to them of having B.C. Hydro assume that risk? 23 24 **A:** Yeah, I think it's -- well, I think MR. O'RILEY: it's difficult for me to look into their own -- I 25 26 mean, they're making their own assessments of risk

MR. LEWIS: Thank you. 25 0:

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With regard to the comment you just made,

1 Ms. Hemmingsen, that you were looking to balance this risk to help with the CFT process, that was simply for 2 the gas price or for the gas-fired projects, correct? 3 No, it was overall in the design of 4 MS. HEMMINGSEN: **A**: the CFT so that we would ensure it would produce a 5 cost-effective outcome. So what we want to do is 6 7 consider what party is best able to take the risks in terms of producing a lower-cost outcome. 8 MR. LEWIS: By offering to balance this risk, 9 Q: doesn't that imply that you're providing a benefit to 10 the person that you're doing it for? 11 MS. HEMMINGSEN: No, because I think it's an overall 12 **A:** assessment in terms of all of the terms and conditions 13 of the CFT. And to serve the ratepayers, we need to 14 make sure that that overall balance is correct. 15 16 MR. LEWIS: Q: But that overall balance you speak of only applies to gas-fired plants, correct? 17 MS. HEMMINGSEN: 18 **A**: No, I don't think it does only apply to gas-fired plants. 19 MR. O'RILEY: **A:** I think it's important to see this 20 sort of allegation of gas risk bias really does cut 21 22 both ways. And we've talked a lot this morning about this subset of bidders, and these are the 47 megawatt 23 24 peaking projects, and these projects typically have higher heat rates and wouldn't be expected to dispatch 25

very often. And requiring them to provide a fixed

price power would have made it very difficult for them to bid into the CFT. And the reason for that, as Mr. Eckert alluded to, it's very difficult to buy gas for 25 years where the volume -- or the price is fixed but the volume varies depending on when B.C. Hydro calls on the associated power.

So as we did talk about this morning, these assets, these potential bidders played an important role in forming a non-VIGP-based portfolio, 150 megawatt portfolio. And we talked a lot this morning about, you know, if we had one more we might have created a different portfolio and what that would have meant.

So arguably there is a benefit conferred on other projects in the process that weren't necessarily gas-fired projects. So I think it does, you know, cut both ways --

MR. LEWIS: Q: Yeah, thank you, I understand what you're saying and I do agree that that could have provided more solutions or more portfolios. It didn't. But what it did do was it took some of that risk or uncertainty away from those projects that were going to use gas to fuel their generator.

## Proceeding Time 1:45 p.m. T04A

MR. O'RILEY: A: Yeah, yeah, I guess I'd go a little further and I'd say it didn't prevent -- if we had

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- 1 required those small projects to be fixed-price, I
- 2 | would argue it would have prevented them from
- 3 participating, and it would have, in fact, eliminated
- 4 portfolios.
- 5 MR. LEWIS: Q: And how many of those small projects did
- 6 you evaluate?
- 7 MS. HEMMINGSEN: A: Oh, there was two that were bid-in
- and, as we've discussed this morning, there was one
- 9 that was rejected for non-conformity.
- 10 MR. LEWIS: Q: Correct. So you only evaluated one.
- 11 MS. HEMMINGSEN: A: Correct.
- 12 MR. LEWIS: Q: Thank you.
- 13 MS. HEMMINGSEN: A: But I think the point is that it
- allowed for those two projects to bid-in.
- 15 MR. SANDERSON: Just for the record, the witness said two
- and Mr. Lewis said one. I'm not sure which is right.
- 17 MR. LEWIS: Q: I believe what I was looking for is, Ms.
- 18 Hemmingsen said two bid-in but only one was evaluated.
- 19 MS. HEMMINGSEN: A: Yeah, that's right.
- 20 MR. LEWIS: Q: Ms. Hemmingsen, when you stated
- 21 yesterday that there's no credible market price
- forecast for the long term, can I just make sure
- 23 that's -- is that accurate to what you said?
- 24 MS. HEMMINGSEN: A: No, I think I corrected myself --
- 25 MR. LEWIS: Q: Okay.
- 26 MS. HEMMINGSEN: A: -- on that one. B.C. Hydro doesn't

1 see a credible forward price for the long term. 2 MR. LEWIS: Q: Okay. And no bidder opted to accept the gas price risk, given that assumption as well, 3 4 probably. MS. HEMMINGSEN: **A**: I'm not sure that we can make that 5 6 link. 7 MR. LEWIS: Q: So I guess the question is, why is it prudent for B.C. Hydro to take on this gas price risk 8 on behalf of its ratepayers if the proponents aren't 9 willing to? 10 Well, I think Mr. O'Riley can speak 11 MS. HEMMINGSEN: **A:** to some of the considerations around that. 12 I mean, we've alluded to a 13 MR. O'RILEY: **A**: Yeah. number of these over today and yesterday, and there 14 are markets for gas, spot and forward markets in B.C. 15 16 which make it possible to acquire gas from multiple sellers and make it possible to manage or mitigate the 17 18 risks on those -- on that commodity. And that's not 19 something that we've conferred, that's not an 20 advantage that we've conferred onto gas, that's a -it's been conferred onto gas-fired generation by the 21 22 role that gas plays in our economy, and the production and transportation and distribution infrastructure, 23 and market infrastructure that's grown up over time. 24 Sure, I can appreciate that. 25 MR. LEWIS: Q: 26 MR. O'RILEY: **A**: Yeah.

1 MR. LEWIS: Q: You used the word "mitigate". didn't use the word "eliminate". 2 I have not used the word "eliminate". **A:** 3 MR. O'RILEY: I think we made that clear in a number of IR requests. 4 MR. LEWIS: Q: Okay. Thank you. 5 With regard, Mr. O'Riley, to a response you 6 7 gave yesterday, regarding there being no options or alternatives provided to the EIA forecast by B.C. 8 Hydro with regard to, I believe it was an article by 9 Weisman, and you stated, "Well, he doesn't provide any 10 alternatives either, when he was critical of it." 11 would -- can you just give me the context of that? 12 Yeah. Well, the article was critical 13 MR. O'RILEY: A: about relying -- utilities relying on economic 14 forecasts to make large energy infrastructure 15 decisions. And my -- one of my comments, in response 16 to that, and my read of the article was, that he's --17 18 he was critical of what utilities were doing, but didn't offer them an alternative to use instead. 19 MR. LEWIS: Q: Sure. Sure. Would making the proponent 20 carry the risk be an alternative? 21 22 MR. O'RILEY: **A**: It would be an alternative, but it may also have led to higher costs, and eliminated a number 23 24 of bidders from the process, resulting in an -- which potentially could have resulted in an uncompetitive 25

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process. Certainly would have eliminated the

- Page: 1504 likelihood of a smaller portfolio. 1 So it would have eliminated gas-fired 2 MR. LEWIS: Q: process, not -- projects, eliminated --3 MR. O'RILEY: **A**: It would have made it more difficult 4 for them to have bid-in. 5 6 MR. LEWIS: Q: Would having penalties that would have 7 been applicable if gas prices exceeded the forecast price be an option? 8 MR. O'RILEY: **A:** We considered the use of a risk 9 premium, and there was a number of IRs there, and we 10 had some work done by a consultant, E-3, and there's 11 some slides included in the evidence. The issue with 12 that is, it's a fairly complex and very subjective 13 calculation, and certainly wasn't in keeping with the 14 idea of transparency and simplicity in -- that we were 15 trying to build into our process. So we moved away 16 from the idea of using a risk premium. 17 MR. LEWIS: Q: Okay, thank you. I'm now going to move 18 on to Mr. Eckert for a couple of questions. 19 MS. HEMMINGSEN: **A**: I can just give you that reference, 20 for the IR. It's 117.1 for BCUC. 21 MR. LEWIS: Thank you. 22 Q: MS. HEMMINGSEN: It discusses the credit risk 23 **A:**

- 24 premium.

Proceeding Time 1:50 p.m. T5A 25

26 MR. LEWIS: Q: Thank you. With regard to what Mr.

- Page: 1505 O'Riley just said about the difficulty in assigning 1 penalties, there are penalties established within the 2 CPA for other causes, are there not? 3 MR. ECKERT: Well, there are penalties in the EPA 4 **A**: with respect to items that the bidder has control 5 6 over, yes. 7 MR. LEWIS: 0: And if Duke Point Power doesn't meet its reliability standards, they can be penalized, correct? 8 MR. ECKERT: **A:** Yes they can. 9 But that really doesn't solve the MR. LEWIS: 10 Q: 11 ratepayer's problem of needing the capacity then, does it? 12 Well, there are a number of measures 13 MR. ECKERT: **A:** that are included in this contract that give us a high 14 degree of confidence that they're going to perform, 15 16 and I can walk you through those if you like. I mean, it starts with the evaluat- --17 MR. LEWIS: Q: I'll accept your assertion. 18 MR. ECKERT: **A:** 19 Okay. MR. LEWIS: Just for the expediency, I'll accept 20 Q: that --21 MR. ECKERT: 22 **A:** Sure. -- that the penalties can be applied to 23 MR. LEWIS: Q:
- 25 MR. ECKERT: A: The penalties applied to incent high

provide that capacity. Would that be a fair --

26 performance.

24

1 MR. LEWIS: Q: Okay, thank you. So those penalties are
2 not so much a means to fixing a problem, but rather
3 they act as, as you said, an incentive to ensure the
4 problem doesn't arise.

- 5 MR. ECKERT: **A**: Right, they do, and then to the extent that -- for example, if their availability were to 6 7 fall below 80 percent on a 12-month rolling basis, it would give rise to a termination event. And if a 8 termination event were to -- if B.C. Hydro were in a 9 position where it was allowed to terminate the 10 contract, we have other options available to us at 11 that point including stepping in and actually 12 operating the plant ourselves. 13
- MR. LEWIS: Q: Sure, thank you. If a schedule had been provided that allowed for a penalty if B.C. Hydro had to operate the plant when gas price exceeded the forecast, that would have increased their bid cost, would it not?
- MR. ECKERT: A: Well, it would be an additional risk
  that the bidders would have had to take into account.
- 21 MR. LEWIS: Q: Thank you.
- MR. O'RILEY: A: I'm not sure what kind of behaviour
  we'd be trying to incent with that clause as opposed
  to some of the clauses Mr. Eckert described.
- 25 MR. LEWIS: Q: I think, although I'm asking the questions, I'll answer your question. I think that

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what we're talking about is having penalties to fix the problem. We see a problem that, you know, they may not provide the reliability, so we put a penalty in to create a disincentive so that problem doesn't arise. In this case we have a problem about gas price risk. And what we want to do is evaluate what's the best means to provide power at a least cost method. If we don't evaluate that risk, how do we then say we got the least cost?

So a penalty is a means of saying, "We're not going to solve the problem but we're going to factor in what that cost is."

MS. HEMMINGSEN: A: I guess there's sort of two elements of what you're outlining. One relates to a reliable supply, and the second relates to the cost of that supply. So on the reliable supply front, not only is there penalties to incent them to deliver reliable supply, there is also an entire process to assess their ability to be on time, their technical capabilities, their operating history. So throughout the CFT process, all of those assessments and mechanisms were used to assure that we selected the proponent that was most able to meet that dependable capacity requirement.

MR. LEWIS: Q: I don't disagree, and I use the reliability just as a means, as an example to show

1 that you did have penalties to achieve that. But what you don't have is penalties to fix the problem of gas 2 price risk. 3 MR. ECKERT: Well, I think we do have certain 4 **A:** rights. We do have rights under the contract to 5 6 dispatch it. It was tendered as a dispatchable 7 tolling plant, and as such we do have the option of running it less if we choose to, and that we could do 8 that in response to market conditions for gas and 9 electricity. 10 Okay, just for quick clarification, the 11 MR. LEWIS: Q: number that was used before was about 81 and a half 12 percent operability, I believe, for the plant. 13 MR. ECKERT: I think that's the right number 14 **A**: referenced. 15 16 MR. LEWIS: Q: Okay. MR. ECKERT: And I think that's in an IR. 17 Α: 18 MR. LEWIS: Q: Now, I'm also not particularly clear, I've heard two numbers, but the baseload capacity is 19 20 90.5 percent or 92 percent, would that be correct, as far as the availability of the unit? 21 Well, the unit -- the plan itself, 22 MR. ECKERT: **A**: there's a requirement that it be available in that it 23 24 is capable of operating at the direction of B.C. Hydro 97 percent of the hours, when it's not being -- when 25

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it's not undergoing scheduled maintenance. So that's

Page: 1509

undergoing scheduled maintenance. And that would

1 apply in any month where it was -- and there were restrictions on the months in which it can schedule 2 3 maintenance. MR. LEWIS: What I'm get -- looking for is 4 0: Sure. the overall availability of the unit and the 5 opportunistic dispatchability of it. So if it has to 6 7 undergo maintenance, and I know you've scheduled it for the summer, and low load times, and it has to 8 undergo that maintenance, that's a certain percentage 9 of its capacity. Then to get to that 81 percent, how 10 much of the time when it's not undergoing maintenance 11 does it have to operate in order to achieve that 81 12 and a half percent? 13 MR. ECKERT: Oh, you mean the 97 percent? Or the --14 **A**: Well, the overall number you've used is 15 MR. LEWIS: Q: 16 the machine is scheduled to operate 81 and a half percent of the time. I believe. 17 18 MR. SANDERSON: Mr. Chairman, I think I understand the 19 question. I think it's difficult to calculate on the stand. So perhaps that's one -- I mean, it's clear on 20 the record, I think the question is clear, so we can 21 22 give you that number. 23 Information Request 24 MR. LEWIS: Q: Thank you. We'll move forward. Sure. Question to Mr. Soulsby. Were there any 25 26 inherent flaws in the QEM that allowed it to fairly

- Page: 1511 determine the cost-effectiveness of 150 megawatt 1 portfolio but not a 122 megawatt portfolio? 2 MR. SOULSBY: **A:** 3 No. 4 MR. LEWIS: Q: Thank you. Sorry, I'm just moving through questions 5 6 that have been asked and answered already, to try and 7 move --THE CHAIRMAN: Thank you. 8 9 MR. LEWIS: If there were a qualified portfolio of Q: 151 megawatts, B.C. Hydro would have used the QEM to 10 evaluate it under the rules of the CFT, would they 11 12 not? MR. SOULSBY: 13 **A:** Yes. MR. LEWIS: With regard to the QEM, the capacity 14 Q: nature of it separates the capital costs of the 15 16 project from the variable costs, correct? MR. SOULSBY: Α: That's correct. 17 18 MR. LEWIS: Q: With regard to the 25 percent capital 19 cost recovery threshold used in one of the electricity 20 price forecasts, can you just tell me the logic behind using 25 percent as the lower limit? 21 I think I'll let Mr. O'Riley answer 22 MR. SOULSBY: **A:** 23 that question --
- 24 MR. O'RILEY: A: Yeah.
- 25 MR. SOULSBY: A: -- because it really comes from --
- 26 MR. LEWIS: Q: Yeah, sorry, I switched over to whoever

1 on the panel. I appreciate that. Previously, when we've traditionally 2 MR. O'RILEY: **A:** done price forecasting, we looked at using the Henwood 3 model for a number of years, and then we shifted to 4 this proxy of a natural gas-fired CCGT at 100 percent 5 recovery of the cost. And one of the concerns we had, 6 7 particularly coming out of the VIGP hearing, is we needed to test that. So we looked a bunch of 8 different -- a number of different alternatives 9 including examples like a steady percentage 10 11 improvement in market heat rates over time, or we looked at taking the current low heat rate and 12 extending that through time, and we landed on the 25 13 percent recovery, the exact number being somewhat 14 arbitrary, but it provided a good range of heat rates 15 16 for evaluation of decisions. And it's important to note that this is a really -- a separate process. Our 17 price forecasting is completely separate from --18 MR. LEWIS: Q: Sure. 19 -- the evaluation of the CFT bids. MR. O'RILEY: **A:** 20 MR. LEWIS: Correct. And this may knock off a whole 21 Q: bunch of questions, because I may be incorrect in my 22 23 assumption here. Proceeding Time 2:00 p.m. T7A 24 So the 25 percent cost recovery doesn't 25

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allude to the fact that that is the lowest threshold

1 at which an operator will provide power, you know, they won't go below that limit. 2 **A:** No, recall -- we did say -- I think I 3 MR. O'RILEY: said yesterday that the 25 percent recovery case could 4 occur from any number of outcomes, including an 5 6 oversupply, change in technology, more efficiency, 7 efficiency improvements in the existing --MR. LEWIS: Q: Okay. 8 MR. O'RILEY: So it's just a proxy for a lower 9 **A**: market price. 10 Okay, thank you. That helps me out. 11 MR. LEWIS: Q: I'll move forward. 12 13 Question to Ms. Hemmingsen: In acquiring permits, land and assets from VIGP or for VIGP, did 14 B.C. Hydro operate in a fiscally responsible, 15 efficient and prudent manner? 16 MS. HEMMINGSEN: **A**: I'm not sure what context you're 17 18 speaking to. And I wasn't personally involved with B.C. Hydro's acquisition of those permits. 19 MR. LEWIS: Q: Well, I'll give you the end question and 20 then you can work back from there. 21 22 MS. HEMMINGSEN: **A**: Okay. If the developer is being credited for a 23 MR. LEWIS: Q: 24 \$50 million expenditure, why are they being credited for that if they're assets that they would have 25

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otherwise had to expend themselves to move the project

those assets and had to reflect it in their tender

So they paid for

price that into their tender to us.

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1 cost. B.C. Hydro received consideration for those 2 assets because as part of the CPA is the VIGP Asset 3 Transfer Agreement, and the proponent has to pay B.C. 4 Hydro \$50 million. So that comes as a cash value to 5 B.C. Hydro. Consistent with all finance theory that I 6 7 know, you assemble your net cash flows and you calculate the net present value of those. So that's 8 what we did. MR. LEWIS: So there was a tremendous benefit to 0: 10 11 Hydro then, to the tune of \$50 million, to have Duke Point go forward. 12 MS. HEMMINGSEN: 13 **A**: No, I wouldn't say that. extent that those assets meant that bidders could 14 spend less incremental costs, it reduced the price to 15 16 ratepayers for that contract. And ratepayers also benefit by realizing the value for those assets, and 17 18 that \$50 million could be credited against the provision that we currently have, resulting in us 19 going forward only with \$17 million to recover. 20 MR. LEWIS: So those were sunk costs that were 21 Q: credited back within the CFT? 22 No, I wouldn't characterize them as 23 MS. HEMMINGSEN: **A**: They represented assets that have value 24 sunk costs.

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Okay, thank you.

either in salvage or in use.

Q:

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MR. LEWIS:

1 Given the fact that you have asserted that the Duke Point is considerably cheaper than the VIGP 2 benchmark, it's turned out to be a pretty good 3 decision, then, by the BCUC last time around to give a 4 negative outcome, isn't it? 5 6 MS. HEMMINGSEN: Α: I think we acknowledged that. 7 think Ms. Van Ruyven stated that yesterday. MR. LEWIS: Q: Did you ever suggest during those VIGP 8 hearings that a negative outcome would affect the 9 future ability of B.C. Hydro to acquire the necessary 10 capacity on Vancouver Island? 11 MS. HEMMINGSEN: **A:** We were concerned about the timing 12 13 and the potential for any delay. We partially addressed that by setting out the terms and conditions 14 where there was no conditions, where bidders had to 15 meet and establish that they could meet the May '07 16 in-service date. So we addressed some of those 17 concerns in the design of the CFT. 18 MR. LEWIS: Q: So I guess to characterize it, and 19 correct me if I'm wrong, when you previously had 20 concerns about a negative outcome affecting your 21 22 ability, given that you've stated that this was a robust competition, and you assert that it's a cheaper 23 price, you were wrong in that instance, were you not? 24 To say a negative outcome would be bad? 25 26 Proceeding Time 2:05 p.m. T08A

MS. HEMMINGSEN: 1 **A:** Well, at -- my recollection of the VIGP proceeding, and I was involved in terms of 2 outlining B.C. Hydro's plans for the CFT, was that we 3 were quite willing to go forward, we did voice some 4 concerns about timing, and as I said I believe we 5 6 addressed that in the design of the CFT. 7 MR. LEWIS: Q: Okay. I'm not sure if I'm going to go over the line on this one, so please stop me if I do. 8 We shouldn't be surprised, then, that B.C. 9 Hydro feels this way about a negative outcome, should 10 we, given that if the -- essentially the same project 11 is turned down for the second time, and B.C. Hydro is 12 13 left trying to account for between 120 and 50 million dollars of lost ratepayer money, it would look pretty 14 bad for you, wouldn't it? 15 16 MS. HEMMINGSEN: **A**: Is that a quote, or is that just a statement you're making? 17 MR. LEWIS: 0: That's a characterization from me. I'm 18 just asking a question. 19 MS. HEMMINGSEN: **A:** Sorry, from me? 20 Or --MR. LEWIS: 21 Q: From me. 22 MS. HEMMINGSEN: Oh. **A**: I'm just asking the question. 23 MR. LEWIS: Q: 24 MS. HEMMINGSEN: It's your characterization. **A:** 25 Could you repeat that again?

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Should we be surprised that B.C. Hydro

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MR. LEWIS:

Q:

1 feels this way about a negative outcome, given that essentially the same project, if it's turned down for 2 the second time, and Hydro is left trying to account 3 to the ratepayers for a loss of between \$50 and \$120 4 million, it would look pretty bad? 5 6 MS. HEMMINGSEN: Α: Yeah. My objective, and my team's 7 objective in designing the CFT, was to get the most cost-effective outcome. So we had no preconceived 8 notions of what that outcome might be. To be totally 9 honest, we were somewhat surprised that the outcome 10 11 was a VIGP outcome, because the evaluation methodology favoured smaller outcomes. And we had monitored the 12 13 process throughout, and were satisfied that there was enough active smaller bidders that that was a very 14 likely outcome. 15 16 So when events and bidder dynamics prevailed, and we got this outcome, it wasn't 17 necessarily what we expected. 18 MR. LEWIS: Q: Okay, thank you. I'd just like to draw 19 your attention to a piece of evidence, Exhibit C5-6, 20 it's the newspaper article that we referenced 21 22 previously. MS. HEMMINGSEN: This is the one from 2003? 23 **A**: 24 MR. LEWIS: That's correct. It was in the middle of 0: Now, just like Mr. Bois said earlier, 25 the process.

there's a statement that's attributed to you in there,

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against other portfolios?

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MS. HEMMINGSEN: A: It was not able to be assembled into a portfolio.

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- Okav. So I think we have a bit of 3 MR. LEWIS: 0: disparity here between my definition of "competition" 4 and your definition. Now, I looked it up in the 5 6 dictionary, and it says "to compete against, or to 7 qualify for." Now it seems to me that they were not competing, if they were not evaluated. So how can you 8 state that without giving them a numerical value to 9 compare against the other portfolios, that they were 10 11 actually evaluated?
- MS. HEMMINGSEN: A: Because a criteria was that they had to be assembled into a minimum portfolio of 150 megawatts.

## 15 Proceeding Time 2:10 p.m. T9A

- 16 MR. LEWIS: Q: Correct. But how, then, were they
  17 evaluated against those that made those portfolios?
- MS. HEMMINGSEN: A: Well, that was through the costeffectiveness test and the section of the CFT that
  specified the criteria for moving between Tier 1 and
- 21 Tier 2.
- 22 MR. LEWIS: Q: I believe I directed it though in this
- panel strictly to the QEM and the CFT process. So
- where were they within that process, using the QEM
- evaluated numerically against the other portfolios?
- 26 MS. HEMMINGSEN: A: Unless that evaluation was

- Page: 1521
- 1 triggered by section 17.3, they could not be evaluated
- 2 under the CFT.
- 3 MR. LEWIS: Q: Thank you, that simple answer.
- 4 MS. HEMMINGSEN: A: On a portfolio basis.
- 5 MR. SOULSBY: A: I think the other point that's worth
- 6 mentioning is that any determination about the
- 7 competitiveness of the process is not necessarily
- 8 restricted to looking at the outcome but also looking
- 9 at, so to speak, how many horses started the race.
- 10 And so just to look at the final element of the whole
- 11 process and make a determination about competitiveness
- is, I think, an insufficient test of whether --
- 13 MR. LEWIS: Q: Well, we definitely differ and I'd like
- 14 to explore that quickly. This is my last question or
- my last line of questioning. But as I said, in the
- 16 definition of it, it means to qualify for. Those
- original bidders did not qualify, did they?
- 18 MR. SOULSBY: A: Those original bidders didn't know
- whether or not they would qualify when they submitted
- 20 the tenders.
- 21 MR. LEWIS: Q: But they did not qualify for evaluation
- 22 under the QEM, correct?
- 23 MR. SOULSBY: A: My point is that they didn't know that
- 24 when they submitted their bid.
- 25 | MR. LEWIS: Q: My point is they didn't compete because
- 26 they didn't qualify.

1 MS. HEMMINGSEN: A: So I think we have a different view on what defines competition.

- MR. LEWIS: Q: Yes, I'll leave that up to the panel.

  But the one thing that I can say, based on your

  answers, is when it came to numerically evaluating

  qualified portfolios, there were only gas-fired

  generation projects included in those portfolios.
- 8 MS. HEMMINGSEN: A: Portfolios, yes.
- 9 MR. LEWIS: Q: And when originally bid in, as Mr.

  10 Soulsby indicated, I believe there were at least six

  11 different generation technologies: wind, hydro,

  12 thermal with wood, thermal with coal, thermal with

  13 gas, and then there were a variety of mixtures,

  14 correct?
- MS. HEMMINGSEN: A: There was 11 different non-gas
  bidders originally. Then there was a prequalification stage where a number of -- there was
  attrition there. And then in the final bidding there
  was one non-gas bidder.
- MR. LEWIS: Q: So based on the panel's interpretation
  of competition, if in fact only one, or in fact there
  were no other projects that used a fuel other than gas
  evaluated quantitatively under the QEM, numerically in
  a qualified portfolio, to go from 11 to simply one,
  does that indicate competition to you?
- 26 MS. HEMMINGSEN: A: No, because the portfolios could be

- Page: 1523
- assembled from gas-fired smaller projects as well.
- 2 MR. LEWIS: Q: Thank you. But as far as just the
- generation fuel -- you've answered my question with
- 4 gas fire.
- 5 MS. HEMMINGSEN: A: I'm not sure that speaks to the
- 6 competition.
- 7 | MR. LEWIS: Q: Well, we agree to disagree on that and
- 8 we'll leave that in the Panel's determination. Thank
- 9 you very much.
- 10 MR. FULTON: Commercial Energy Consumers, Mr. Craig.
- 11 MR. CRAIG: Good afternoon, Mr. Chairman, panel.
- 12 CROSS-EXAMINATION BY MR. CRAIG:
- 13 MR. CRAIG: Q: Ms. Hemmingsen, I think we should --
- 14 THE CHAIRPERSON: Mr. Craig, you need to let me know
- 15 whether or not you're going to be asking any questions
- about the QEM model.
- 17 MR. CRAIG: Sorry. I have a copy of the QEM model and I
- don't intend to ask any questions with regard to the
- 19 mechanics or details of it.
- 20 THE CHAIRPERSON: Thank you.
- 21 MR. CRAIG: I intend to stay focused just on the credits
- and the principles of evaluation and fairness around
- those items.
- 24 THE CHAIRPERSON: Thank you.
- 25 MR. CRAIG: Sorry, Mr. Chairman.
- 26 MR. CRAIG: Q: Ms. Hemmingsen, it was your job to make

1 sure that the process was fair and objective, and to that end you and your group established principles for 2 evaluation? 3 MS. HEMMINGSEN: We did. 4 **A**: MR. CRAIG: Q: And in establishing those principles of 5 6 evaluation, what I would like to do at this point is 7 discuss principles in general and then go to the So as a first concern about a principle in specifics. 8 evaluation, would you consider that it's fair to 9 provide assets of B.C. Hydro to one of the proponents 10 11 or one of the project types without any charge for the use of those assets. 12 13 Proceeding Time 2:15 p.m. T10A MS. HEMMINGSEN: Now, I'm going to have some trouble 14 **A:** with this line of questioning because I need to have 15 16 specific examples to be able to answer. So I have difficulty with generalities. 17 18 MR. CRAIG: Q: Right. Let me make it a specific 19 example. If B.C. Hydro had agreed to write a cheque 20 for \$10 million to one of the proponents without any charge for that, that's a use of B.C. Hydro's assets. 21 Would that be a fair benefit to provide to one of the 22 23 proponents? 24 MS. HEMMINGSEN: Well, as I said, I'm going to have **A:** some trouble. I can talk about this in terms of the 25

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VIGP value and how the cash receipt was applied in the

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Hemmingsen's concerns, but I, at the same time, am

sympathetic to this line of questioning as well, and

so I'm hoping that you can, in fact, adopt the suggestion that Mr. Sanderson has made, because I do think it's an area that needs to be explored. It hasn't been explored yet. So I don't want to discourage you, but at the same time, as I say, I do have some sympathies with Ms. Hemmingsen's concerns about your hypotheticals, because they often do take one to certain outcomes and it's much better if you can apply it in the context of the credit that's here.

And I think you can do that. So I'd encourage you to try to do that if you can.

MR. CRAIG: Well, I can certainly do that, Mr. Chairman. It just is helpful to me if I segregate specific situational circumstances from principle and by using in place of B.C. Hydro assets, cash, it leaves out the situation but allows us to address the principle directly. If I go into the specific situations and I just get situational responses, I don't get to deal with the principles.

So I will follow your suggestion and attempt to deal with it specifically and reserve the attempt to come back to principles if I'm not getting answers that deal with the principle, and if those are not helpful and we can't get answers from the panel, well, then so be it. But I will proceed to specifics and try and do it that way.

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megawatts.

1 THE CHAIRPERSON: And I accept your reservation. MR. CRAIG: Thank you, Mr. Chairman. 2 MR. CRAIG: Q: Ms. Hemmingsen, just a moment ago you 3 said the process was set up to favour smaller bidders. 4 Can you tell me specifically how it was set up to 5 6 favour smaller bidders and exactly how much advantage 7 the smaller bidders were given? MS. HEMMINGSEN: **A:** Okay. 8 MR. CRAIG: Q: And I'd like that reduced to dollar 9 terms. 10 11 MS. HEMMINGSEN: **A:** I'm not sure I can do that, and we need to go back to the originations of the CFT. 12 So 13 originally when we started this process we had envisioned a transmission deferral credit being 14 included in the evaluation methodology which would 15 16 level the playing field for large and smaller projects. 17 18 As we worked through the issues and we 19 received the Commission letter in January 23rd, it 20 clearly said there was no support to have a transmission deferral credit. 21 22 The way the evaluation methodology was 23 designed, it was a lowest net present value dollar of 24 any portfolios between 150 megawatts and 300

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to 150 megawatts, the more likely it would be the

So basically the closer the portfolio was

least dollars in NPV terms. 1 So that was the basis that their evaluation model favoured the outcome of a 2 smaller award, towards the 150 megawatt level. 3 Proceeding Time 2:20 p.m. T11A 4 5 MR. CRAIG: Q: And can you translate that benefit that 6 you provided into dollar terms versus some specific 7 other size of project? MS. HEMMINGSEN: **A:** I really can't think of a way to 8 translate it into dollar terms. Other than it would 9 set up so that a project that was 285 megawatts had a 10 very small chance of competing with three projects 11 that were 150 megawatts. 12 13 MR. CRAIG: And I need some help understanding that, Q: because as I looked at it, you provided some very 14 substantial credits, the energy margin credit being 15 16 the biggest one, to a big project, and that helped reduce the big project in NPVs down to the size of 17 18 other ones. MS. HEMMINGSEN: But one thing, that was based on 19 **A:** volume --20 MR. CRAIG: I don't understand how you've developed 21 Q: a benefit for small projects. 22 So once again, that was based on 23 MS. HEMMINGSEN: **A:** 24 So it was scaled similarly. In terms of how volume. the credit would apply. So if you have a larger 25

volume and you're producing more energy, it's going to

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process, because they all had the evaluation model,

and the rules and requirements were clearly outlined

to them. And they could run all those scenarios and

understand how they stacked up against the larger projects. And in fact, that may have encouraged their interest in the process.

- 4 MR. CRAIG: Q: So, that's the only aspect of the CFT process that you felt favoured smaller bidders?
- 6 MS. HEMMINGSEN: A: Well, that directly went to
  7 supporting an outcome, more along the 150 megawatt
  8 level.
- 9 MR. CRAIG: Q: Yes, I understand that. I'm asking if there was anything else.
- MR. O'RILEY: A: Well, I think the willingness to take
  gas price risk by B.C. Hydro favoured the smaller gasfired peaking projects, because it would have made it
  very difficult for them to bid in on a fixed-price
  basis. I would argue impossible to bid in on a fixedprice basis.
- 17 MR. CRAIG: Q: Okay. Anything else?
- 18 MS. HEMMINGSEN: A: Not that I can think of.
- MR. CRAIG: Q: Okay. Now, let me turn to the specific example of the VIGP assets, and the credit that you've provided --
- 22 MS. HEMMINGSEN: A: Thank you.
- MR. CRAIG: Q: -- and there's been some discussion on
  that to this point. My understanding is that you view
  the VIGP assets as having a salvage value of 20
  million, and that's a value that's obtained not in the

context of using them for a gas plant on the Island,

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2 correct?

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- 3 | MS. HEMMINGSEN: A: I believe that the final salvage
- 4 value was established at \$14 million.
- 5 MR. CRAIG: Q: At 14?
- 6 MS. HEMMINGSEN: A: And that was based on liquidating
- 7 the hard assets in the marketplace.
- 8 Proceeding Time 2:25 p.m. T12A
- 9 MR. CRAIG: Q: Right, and so that's taking the set of
- assets and saying they don't have value in use in a
- 11 gas-fired plant on the Island.
- 12 MS. HEMMINGSEN: A: That would be one of the --
- 13 MR. CRAIG: Q: So the residual salvage value is 14
- 14 million. And the value that you've attributed to them
- in use is 50 million.
- 16 MS. HEMMINGSEN: A: Correct.
- 17 MR. CRAIG: Q: You've described it as a market value,
- 18 but in fact it's a value that B.C. Hydro set, correct?
- 19 MS. HEMMINGSEN: A: Informed --
- 20 MR. CRAIG: Q: You didn't obtain that from a market?
- 21 MS. HEMMINGSEN: A: Well, informed by the value of
- 22 those assets and the value of the permitting and
- 23 development activity that had been undertaken to
- 24 bidders given the stage it was at.
- 25 MR. CRAIG: Q: Right.
- 26 MS. HEMMINGSEN: A: So it was a considered assessment.

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It wasn't made arbitrarily.

MR. CRAIG: Q: No, I wasn't disputing that it was a considered assessment.

The value that's then offered to the bidder is something that they're required to take into their costs, and then you've credited them in evaluation for the same amount that they've been required to take into their costs. So I can assume from that, that they then charge you back for what they've taken into their costs, and the fact that you've credited them for that in evaluation balances out the cash flow that you've received. Is that correct?

MS. HEMMINGSEN: A: Maybe I can just characterize it in my own words. So, we -- the bidders were charged a price for the VIGP assets, which creates a cash flow for B.C. Hydro. In paying that price, they needed to reflect that in their bid price. So we would expect although we don't know what -- that they incorporated that in the price tendered to B.C. Hydro. The result is that B.C. Hydro has, pursuant to the tender, a net cash out-flow and a net cash in-flow. And what we did is we netted those two cash flows for evaluation purposes.

Similarly for the non-VIGP portfolios, we netted the cash flow associated with those against the salvage value.

- 1 MR. LEWIS
- 2 MS. HEMMINGSEN: A: #118
- 3 MR. CRAIG: Q: All right. So when you've netted the

- 4 cash flows like that, that becomes the equivalent of
- transferring the asset value in use above the salvage
- 6 value to the proponent for their use.
- 7 MS. HEMMINGSEN: A: For consideration.
- 8 MR. CRAIG: Q: Well --
- 9 MS. HEMMINGSEN: A: For cash consideration.
- 10 MR. CRAIG: Q: But you've offset the consideration in
- 11 the evaluation, right?
- 12 MS. HEMMINGSEN: A: No, because it's a cash flow. So
- it's going to B.C. Hydro ratepayers.
- 14 MR. CRAIG: O: It's a cash flow that is received in
- 15 B.C. Hydro, but for then which you also receive
- charges from the proponent if they're successful,
- offsetting the cash flow, correct?
- 18 MS. HEMMINGSEN: A: And for which presumably those
- 19 charges were less because the incremental cost to the
- 20 proponent of completing the project based on acquiring
- 21 those assets and avoiding the need to incur those
- charges produced a lower-cost outcome.
- 23 MR. CRAIG: Q: No, now hold it a minute. They were
- required to pay for the assets, correct?
- 25 MS. HEMMINGSEN: A: That's right. So they did not have
- 26 to acquire them themselves and to incur those costs of

- nuary 18, 2004 Volume 7 Page: 1534

  acquiring them themselves.
- 2 MR. CRAIG: Q: Right, for which --
- 3 MS. HEMMINGSEN: A: And this is -- can I just finish,
- 4 please? This is all outlined in a comprehensive way
- in a response to bidder Q&A's number 118.
- 6 MR. CRAIG: Q: Yes.
- 7 | MS. HEMMINGSEN: A: And it would probably be worthwhile
- 8 to distribute that to everyone because these issues
- 9 are discussed there, examples are given, and in fact
- 10 bidders accepted this treatment, we shared it with the
- 11 Commission Staff, who agreed it was an appropriate
- 12 treatment to pursue.
- 13 MR. CRAIG: Q: Yes. It's unnecessary for us to
- 14 distribute those. I don't intend to go into question
- 15 118 at this point, unless Mr. Sanderson wants to do
- 16 it.

- 17 MS. HEMMINGSEN: A: Well, this is question 118, what
- you're asking me.
- 19 MR. SANDERSON: I was going to say it sounds to me like
- Ms. Hemmingsen is suggesting that the answer she's
- given is given more fulsomely in that particular
- 22 exhibit, which is a public document, which I guess it
- 23 sounds like Commission Staff has. So everyone's got
- 24 it except the Commission. It strikes me it probably
- should be part of the record.
- 26 THE CHAIRPERSON: I think so too.

- 1 MR. SANDERSON: Would that be Exhibit B-61?
- 2 | THE HEARING OFFICER: Marked Exhibit B-61.
- 3 (RESPONSE TO BIDDER Q&A'S, "TREATMENT OF VIGP ASSET
- 4 PRICE VERSUS SALVAGE VALUE, 118 NOVEMBER 26, 2003",

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5 MARKED AS EXHIBIT B-61)

## 6 Proceeding Time 2:30 p.m. T13A

- 7 MR. CRAIG: Q: Okay, Ms. Hemmingsen, when you have
- 8 charged them for these assets, and they turn around
- 9 and charge you back in the price for it, you have a
- 10 cash flow going out, and you have a cash flow coming
- in for what they've paid you for those assets. In the
- evaluation\ you have given a credit for that, so that
- it's netted out. Correct?
- 14 MS. HEMMINGSEN: A: Well, it -- I would just
- characterize the credit as a cash flow.
- 16 MR. CRAIG: Q: That's fine. But it has netted out,
- 17 right?
- 18 MS. HEMMINGSEN: A: Yeah. The net --
- 19 MR. CRAIG: Q: So that the --
- 20 MS. HEMMINGSEN: A: -- cash flow associated with that
- 21 portfolio, that's what we sought to measure.
- 22 MR. CRAIG: Q: So that the net effect at the end of the
- 23 day is, they're getting to -- in the evaluation, have
- 24 the advantage of those assets.
- 25 | MS. HEMMINGSEN: A: Which they've paid for.
- 26 MR. CRAIG: Q: Which they've paid for, but which you've

- 1 credited them for.
- 2 MS. HEMMINGSEN: A: Because --
- 3 | MR. CRAIG: Q: So there's no net -- there's no net

- 4 charge for it.
- 5 MS. HEMMINGSEN: A: Because they've paid us for them.
- 6 MR. CRAIG: Q: Which we just agreed to.
- 7 | MS. HEMMINGSEN: A: Well, I'm not sure we did agree to
- 8 that.
- 9 | MR. CRAIG: Q: You just agreed that, from a cash flow
- point of view, you've charged them for it, you've
- 11 received something, they'll charge you back for it.
- 12 MS. HEMMINGSEN: A: Right.
- 13 MR. CRAIG: Q: Correct? So you're net zero there, and
- you've added a credit for the assets into the
- 15 evaluation.
- 16 MS. HEMMINGSEN: A: Well, we don't know what they've
- included in their tender charge to us. We know that
- they have to reflect the cost.
- 19 MR. CRAIG: Q: I understand that we don't have any
- 20 precision with regard to what they've charged you for
- 21 it, because that's buried in a set of charges that are
- 22 based on a different valuation. But whatever they've
- 23 got in the way of benefit for it, they've included in
- 24 their charges to you.
- 25 MS. HEMMINGSEN: A: Right. So it's -- like, absolutely
- tangible. There's a payment by B.C. Hydro, and a cash

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- receipt to B.C. Hydro, and what we did is, we netted
  the two in the evaluation, and as they outlined
  before, we undertook the same approach for the nonVIGP assets and the cash flow to B.C. Hydro was the
  salvage value.
  - MR. CRAIG: Q: When you've taken the cash flows out of the equation, they have a net addition in terms of the value of those assets, to their bid. Because you've credited them for that in the evaluation itself.
- 10 MS. HEMMINGSEN: A: I just -- I'm really not

  understanding your point. We're talking about

  tangible cash flows, and that's what we evaluated in

  the QEM methodology. So we netted all of the cash

  flows. What was paid by Hydro, and what was received

  by Hydro.
  - So a non -- and once again, this was at the option of the bidders. So a bidder could develop a similarly-configured facility to VIGP. They weren't required to acquire the VIGP assets, and they could bid in a price which would result in us not getting a payment for those assets, and they would have been credited with the salvage value on -- you know, netting the cash flows.
- 24 I'm just -- I'm missing your point.
- 25 MR. CRAIG: Q: Clearly.
- 26 MS. HEMMINGSEN: A: And once -- this is outlined in

- Page: 1538
- this question, 118. There's an example given there.
- 2 MR. CRAIG: Q: From the point of view of Hydro's
- 3 balance sheet, you've transferred assets over to a
- 4 proponent that you've valued at 50 million.
- 5 MS. HEMMINGSEN: A: And received value back, which gets
- 6 credited against our provision --
- 7 MR. CRAIG: Q: And received value back of 50 million,
- 8 in cash, so those net out. Now in addition to that,
- 9 you're going to be charged for those assets by the
- proponent, there'll be a cost, and we agree that we
- don't know the exact amount but, for sake of argument,
- allow me to assume that we're getting the cost of
- those assets charged back to us. Correct? And then
- you've credited the amount of 50 million against that
- 15 charge back.
- 16 MS. HEMMINGSEN: A: Correct.
- 17 MR. CRAIG: Q: So you've netted that value out.
- 18 MS. HEMMINGSEN: A: Because we're getting a cash flow
- 19 back from the bidder.
- 20 MR. CRAIG: Q: No, I've already netted the cash flow
- 21 back against the transfer of assets.
- 22 MS. HEMMINGSEN: A: Well, there's --
- 23 MR. CRAIG: Q: You've missed one piece of the
- transaction. You have transferred assets to the
- 25 benefit of a proponent.
- 26 MS. HEMMINGSEN: A: No, we've transferred assets for

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MR. SANDERSON:

Page: 1539 1 which they paid us for. So therefore, we reflect that cash flow in the analysis. 2 MR. CRAIG: So we can leave it at this point that 3 0: you -- you don't understand that you've transferred 4 that benefit to the proponent? 5 Proceeding Time 2:35 p.m. T14A 6 7 MS. HEMMINGSEN: **A**: No, I don't think we'll leave it that way. It's clear we understand what we did, and 8 it's outlined in this question and clearly outlined in 9 the QEM model. 10 MR. CRAIG: Q: I think that's just what I said, that I 11 was leaving it that that's clearly your view that you 12 don't believe that you've done that. 13 MS. HEMMINGSEN: 14 **A**: Okay. Had you done that, would you have 15 MR. CRAIG: Q: 16 considered that unfair and improper if you had transferred assets? 17 MS. HEMMINGSEN: **A:** Well, since I don't believe we did, 18 19 I don't think it's unfair. MR. CRAIG: Q: I think it's a fair principle question 20 to ask you, though, in the context of what we've 21 If you had transferred assets of that 22 discussed. nature without receiving adequate compensation or 23 charging them for it, would that have been unfair? 24

disagreement in terms of calculation between the

Mr. Chairman, the record will show

that?

1 cross-examiner and the witnesses. Mr. Craiq can make what he will of that in argument and he can try and 2 persuade you in argument that the arithmetic that he's 3 putting forward is superior to the responses he's 4 That allows him to make whatever point he getting. 5 wants to make from this. He doesn't have to belabour 6 7 the what-ifs with the panel, who clearly don't agree with his suppositions. 8 MS. HEMMINGSEN: **A:** Right, and I can probably just 9 offer up one final comment. This was also reviewed 10 with the independent reviewer, who completely and 11 fully affirmed that this approach was appropriate and 12 13 fair. So you can pursue that with them as well. MR. CRAIG: Okay, let me go on to the tolling 14 Q: 15 aspect. It's, as I understand it from the record, 16 that B.C. Hydro has offered to take on the responsibility for the tolling because you have the 17 18 ability to manage your gas and electricity 19 requirements and do a better job of achieving a reasonable cost for the tolling than perhaps bidders 20 And that's why you've offered that? 21 would. Mr. O'Riley is going to --22 MS. HEMMINGSEN: **A:** That is correct. 23 MR. O'RILEY: **A:** 24 MR. CRAIG: Thank you. And can you give me your Q: best estimate of the value that is added by doing 25

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- 1 MR. O'RILEY: A: I don't have an estimate. We have a qualitative argument that explains why it makes sense
- for B.C. Hydro to bear that risk.
- 4 MR. CRAIG: Q: And would you be able to estimate that
- as a value that you're adding?
- 6 | MR. O'RILEY: A: I don't believe it would.
- 7 | MR. CRAIG: Q: Can you help me understand what it is
- 8 about B.C. Hydro's abilities in managing it that
- 9 allows you to do a better job then?
- 10 MR. O'RILEY: A: I mean, B.C. Hydro has a portfolio of
- gas requirements, it has a portfolio of electricity
- purchase and sale requirements, it has a portfolio of
- gas transportation positions, it has a transaction
- infrastructure through Powerex, all of which it can
- through that infrastructure access, spot and forward
- markets for gas. We would expect that an individual
- proponent would have to go out and buy long-term fixed
- 18 price gas in a fairly illiquid market and incur risk
- premiums and such, illiquidity premiums and such. It
- would be difficult for them to do that given the
- 21 concerns about the utilization factor and such, all of
- which would add to the cost.
- 23 MR. CRAIG: Q: Right.
- 24 MR. O'RILEY: A: So there's transaction costs all round
- 25 that are going into the equation that we don't think
- 26 need be incurred.

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- 1 MR. CRAIG: Q: Right. Now that capability that you
- 2 talked about and how it works through Powerex, that's
- a capability that is otherwise used by Powerex or B.C.
- 4 Hydro in general to earn revenue, trade income from
- 5 the markets?
- 6 | MR. O'RILEY: A: Yeah, I wouldn't characterize it as a
- 7 | limited capability. It's certainly -- like it's not a
- 8 | scarce resource, if you will.
- 9 MR. CRAIG: Q: I didn't ask if it was a scarce
- 10 resource.
- 11 MR. O'RILEY: A: Okay.
- 12 MR. CRAIG: Q: It's a capability that is otherwise used
- to earn income?
- 14 MR. O'RILEY: A: Yeah, I quess it's not a tradeoff.
- 15 It's not like if we use that capability for managing
- this risk, we can't use it for something else. That's
- 17 what I was suggesting.
- 18 MR. CRAIG: Q: That's fine. But it is otherwise used
- 19 to earn income --
- 20 Proceeding Time 2:40 p.m. T15A
- 21 MR. O'RILEY: A: It's used to -- it's used to manage
- 22 our risk, optimize our assets, earn trade income, any
- 23 number of things.
- 24 MR. CRAIG: Q: So, to that extent, that capability is
- an asset of B.C. Hydro.
- 26 MR. O'RILEY: A: Well, I --

1 MR. CRAIG: Q: In combination with its subsidiary,

- 2 Powerex.
- 3 MR. O'RILEY: A: I struggle, I think, with the --
- 4 calling it an asset, and maybe it's a lack of
- 5 imagination but I think of an asset as something a
- 6 little more tangible.
- 7 MR. CRAIG: Q: Well, certainly not all assets are
- 8 tangible. Ms. Hemmingsen just referred to the VIGP
- 9 assets as a combination of soft assets and hard
- 10 assets.
- 11 MR. O'RILEY: A: Mm-hmm.
- 12 MR. CRAIG: Q: So perhaps you can --
- 13 MS. HEMMINGSEN: A: It's a capability --
- 14 MR. O'RILEY: A: It's a capability.
- 15 MR. CRAIG: Q: It's a capability, and capabilities can
- 16 be assets.
- 17 MR. O'RILEY: A: Yeah.
- 18 MR. CRAIG: Q: And they're particularly assets if they
- 19 have long-term value and they can produce income
- 20 streams associated with them.
- 21 MR. O'RILEY: A: Yeah. It -- I struggle with
- 22 suggesting that there's an income stream attached to
- 23 this capability. It's a --
- 24 MR. CRAIG: Q: But you have just offered to me that you
- 25 -- B.C. Hydro and, through Powerex, can and do use
- this capability to earn income in the market.

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- 1 MS. HEMMINGSEN: A: And yet -- what Mr. O'Riley
- 2 outlined is that combination of activities earn
- income, mitigate risk, and reduce costs for
- 4 ratepayers.
- 5 MR. CRAIG: Q: Yes -- no, I understand that. I'm just
- 6 saying that it has this -- is this difficult? I mean,
- 7 it has this capability --
- 8 MR. O'RILEY: A: Yeah.
- 9 | MR. CRAIG: Q: -- I didn't hear you resisting it, I'm
- just asking to finally confirm it.
- 11 MR. O'RILEY: A: Yeah. And I think it's not just --
- it's not just something within B.C. Hydro, a
- capability within B.C. Hydro that's the consideration,
- it's the fact that there is this larger market and
- infrastructure that's not -- it's not -- that's not an
- asset of B.C. Hydro, that's just a fact of the gas
- market.
- 18 MR. CRAIG: Q: No, no. The market that you're
- 19 accessing is not -- but you have capabilities within
- 20 B.C. Hydro, a portfolio, and all these other things
- 21 that you mentioned.
- 22 MR. O'RILEY: A: Mm-hmm.
- 23 MR. CRAIG: Q: That allow you to do a better job of
- 24 accessing that than somebody else.
- 25 MR. O'RILEY: A: Yeah.
- 26 MR. CRAIG: Q: And I put the proposition to you that

1 that's an asset, because you are in other circumstances and situations, through Powerex, earning 2 money in the markets through that. Correct? 3 Well, I would call that capability. 4 MR. O'RILEY: **A:** Perhaps we can --5 But Ms. Hemmingsen, you'll agree that 6 MR. CRAIG: Q: 7 the capabilities that B.C. Hydro has, be they soft or hard assets, can be characterized as assets of the 8 9 company. Well, unfortunately I'm an MS. HEMMINGSEN: **A:** 10 11 accountant, so I come down with a pretty hard-core definition of "assets". 12 13 MR. CRAIG: Q: And your hard-core definition, what, restricts it to hard assets? 14 MS. HEMMINGSEN: It would restrict it --15 **A**: 16 MR. CRAIG: Q: Or do you agree with me that soft assets can be --17 18 MS. HEMMINGSEN: **A:** -- more than calling it -- sorry. 19 It would restrict it more than calling capabilities 20 assets, yes. Sorry, that's just what my position would be. And I'm not sure it matters whether we --21 22 you call it an asset or we call it a capability, the 23 fact is, it's a basis to reduce risk or cost to 24 ratepayers, and goes back to the overall balance that we were trying to achieve in designing the CFT, is to 25

make sure that we secured a cost-effective outcome.

1 MR. CRAIG: Q: Let me go with you as far as you've gone, then. It's a capability that has significant 2 value to you in the context of working with Powerex to 3 earn income, and in this context, has a capability 4 that has been used to confer a benefit in terms of --5 as you've characterized it, reducing a cost that would 6 7 otherwise have to be incurred by a proponent. Am I correct? 8 MS. HEMMINGSEN: But -- no, I said ratepayers. 9 **A:** Because our over-arching objective -- because 10 11 remember, you wanted to talk about principles, was to design a CFT that would produce a cost-effective 12 13 outcome for ratepayers. And within that over-arching objective, it was to be fair and competitive and to 14 follow the Commission's directions. So what we were 15 16 trying to do is achieve a balance under those subsidiary objectives. 17 MR. CRAIG: Q: So I -- you're not --18 MS. HEMMINGSEN: **A:** But cost-effectiveness was the 19 paramount parameter. 20 So can I get you to answer the question? 21 MR. CRAIG: Q: That this is a capability that B.C. Hydro has, we've 22 agreed to that. It otherwise earns income in the 23 hands of Powerex, in the marketplace --24 **A**: Yeah, sorry, just on that point, I 25 MR. O'RILEY:

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mean, it implies the scarcity to it. I mean, we're

- Page: 1547
- 1 still going to earn the same income at Powerex, and
- 2 apply the capability to this service, if you will.
- 3 MR. CRAIG: Q: This is sort of the second time that
- 4 I've said I'm not trying to imply a scarcity.
- 5 MR. O'RILEY: A: Okay.
- 6 MR. CRAIG: Q: So --
- 7 MS. HEMMINGSEN: A: Or maybe a "fundability," or
- 8 something.
- 9 MR. O'RILEY: A: Yeah. I mean, you're trying to get us
- to agree, and so I'm trying to find agreement. So I'm
- trying to tell you where I -- where I don't agree, I
- 12 quess. So. And it is in the details
- Proceeding Time 2:45 p.m. T16A
- 14 MR. O'RILEY: A: So. And it is in the details, so --
- 15 MR. CRAIG: Q: But you're disagreeing with things that
- 16 I haven't asked or asserted, so --
- 17 MR. O'RILEY: A: Okay.
- 18 MR. CRAIG: Q: -- let's try again. This is a
- 19 capability that B.C. Hydro and its subsidiary Powerex
- 20 have.
- 21 MR. O'RILEY: A: Yes.
- 22 MR. CRAIG: Q: In other circumstances in the
- 23 marketplace it's applied to earn income --
- 24 MR. O'RILEY: A: And mitigate --
- 25 MR. CRAIG: Q: -- generate revenue, trade income.
- 26 MR. O'RILEY: A: And mitigate risk and optimize assets.

1 MR. CRAIG: Q: And mitigate risk and reduce costs.

- 2 MR. O'RILEY: A: Yes.
- 3 MR. CRAIG: Q: And in this case you've applied it to
- 4 offer this as a benefit to a proponent.
- 5 MR. O'RILEY: A: Well, I think as we described earlier,
- 6 it's a benefit -- it actually benefits different
- 7 proponents in different ways.
- 8 MR. CRAIG: Q: Yes.
- 9 MR. O'RILEY: A: And so I gave an example where it
- 10 benefits gas-fire proponents by giving them more
- options to bid, making it more competitive, allowing
- them to bid inflexible dispatchable products, products
- that have low utilization. It also benefits
- proponents of smaller fixed-price bids by allowing the
- 15 construction of more small portfolios. So there's
- benefits all round and benefits to ratepayers as well.
- 17 MR. CRAIG: Q: Now, are you talking about just the
- 18 tolling?
- 19 MR. O'RILEY: A: I'm talking about the capability that
- 20 we've --
- 21 MR. CRAIG: Q: Overall, the overall capabilities that
- you've supplied, which include the --
- 23 MR. O'RILEY: A: I'm talking about the capability,
- 24 which it has been suggested that we're conferring upon
- certain bidders.
- 26 MR. CRAIG: Q: Yes, but you're talking about taking on

1 the gas risk in combination with this, and at the moment I'm just talking about the tolling, right? 2 **A:** Okay, I'll let you --3 MR. O'RILEY: So what I'm trying to get you to agree 4 MR. CRAIG: Q: with is you have this capability. In other 5 6 circumstances you use it to earn income, and you have 7 used it in this case to reduce costs for proponents of gas-fired plants by offering them a tolling 8 incapability, and it's a significant benefit that you 9 cannot estimate the amount of benefit --10 We're using it to lower costs for 11 MR. O'RILEY: **A:** ratepayers. We're trying to avoid the addition of a 12 gas risk premium that we wouldn't want to incur --13 MR. CRAIG: I understand that. 14 0: MR. O'RILEY: 15 **A:** -- and the ratepayers are going to 16 pay. 0: And I think it's very important to 17 MR. CRAIG: 18 distinguish, particularly for the Commission, the difference between a purchasing decision where you 19 benefit the ratepayers, and a competitive process 20 where you apply an asset or a value or a benefit to 21 22 the benefit of one proponent or one type of project. MS. HEMMINGSEN: Well, I think we --23 **A:** 24 MR. CRAIG: Q: And so I want to stick at this point with just the competitive process, and you have 25

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applied this to help reduce the costs of tolls and

create a benefit for them which you cannot estimate
the amount of.

MS. HEMMINGSEN: A: And I think where we disagree with

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- you, as we've outlined, and I think Mr. O'Riley and I have both outlined that, is it wasn't a single consideration. The decision to do this was made in terms of balancing a number of competing objectives.

  The most prominent of those was cost-effective outcome.
- 10 MR. CRAIG: Q: Oh, sure.

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- 11 MS. HEMMINGSEN: A: It also facilitated competition.
- 12 It had a number of different benefits. So we're not
- agreeing with your narrow kind of definition.
- 14 MR. CRAIG: Q: I don't understand what I was defining
  15 that you can't agree with.
- 16 MS. HEMMINGSEN: A: Well, I can't agree --
- 17 MR. CRAIG: Q: I thought it was a pretty

straightforward question.

- 19 MR. SANDERSON: It was many things. Straightforward it
- elaboration laid out his position. The witnesses have

was not. Having said that, Mr. Craig has with great

- responded. The record is clear. Again, I think Mr.
- Craig has got all he's going to get to argue with.
- 24 I'm not sure that the debate going back and forth,
- whether these two sides of the coin ever see eye to
- eye I don't think matters. I think he can make his

- Page: 1551
- 1 points, such as they are, in argument, based on the record he's now got.
- I'm prepared to accept that I've gone as far 3 MR. CRAIG: as I can, Mr. Chairman. 4
- 5 MR. CRAIG: Q: Let me turn to the energy margin.
- 6 There's a very substantial credit provided in the
- 7 evaluation for the energy margin.
- There's a credit provided in the MR. SOULSBY: **A:** 8 evaluation for an energy margin, yes. 9
- You're disputing that it's very MR. CRAIG: Q: 10 11 substantial?
- MR. SOULSBY: Well, that depends on the situation. 12 **A:**
- As has been pointed out by a number of intervenors 13
- already, in certain years it's not substantial at all, 14
- in fact it's zero. 15
- 16 MR. CRAIG: Q: In certain years. No, but I was talking
- about the NPV evaluation. 17
- MR. SOULSBY: **A:** Right. 18
- MR. CRAIG: Q: And at the least the one I looked at and 19
- the one that's in the exhibit that you've just put on 20
- the record is quite substantial, I thought. 21
- Proceeding Time 2:50 p.m. T17A 22
- Are you talking about the EPA now? 23 MR. SOULSBY: **A:**
- 24 are you talking about a specific bidder within the
- evaluation? I mean, it can be substantial, it can be 25
- 26 not substantial.

- 1 MR. CRAIG: Q: All right. Let's leave that.
- 2 What happens if the energy margin that
- 3 you've provided a credit for is not realized?
- 4 MR. SOULSBY: A: Is that a question for the EPA or is

- 5 it a question within the --
- 6 MR. CRAIG: Q: It's a question for the panel. You'll
- 7 know best who is the right person to answer.
- 8 MS. HEMMINGSEN: A: Well, if the energy margin isn't
- 9 realized, it would be driven by the dispatch being
- 10 lower than expected, because we wouldn't dispatch it
- if it was uneconomic to do so, and the net price on a
- 12 unit basis would increase.
- 13 MR. CRAIG: Q: Okay. So costs go up if we don't
- achieve this energy margin that's in there.
- 15 MR. O'RILEY: A: Well, the per-unit cost --
- 16 MR. CRAIG: Q: Per-unit cost.
- 17 MR. O'RILEY: A: -- of the portfolio goes up.
- 18 MS. HEMMINGSEN: A: Yes.
- 19 MR. SOULSBY: A: Yes.
- 20 MR. O'RILEY: A: It may well be we're buying cheaper
- 21 power in the market.
- 22 MR. CRAIG: Q: Yes, I --
- 23 MR. O'RILEY: A: And we're better off than what we
- 24 forecast.
- 25 MR. CRAIG: Q: I understand that. And that would be
- because you'd have already committed to this

1 arrangement, so you would have some fixed costs, and--

- 2 MS. HEMMINGSEN: A: That's right, for that --
- 3 MR. CRAIG: Q: -- so at that point your decisions are
- 4 made based on variable costs, which is quite
- 5 appropriate.
- 6 MR. O'RILEY: A: Yes.
- 7 MR. CRAIG: Q: Okay. And what degree of assurance or
- guarantee or high probability do we have that this
- 9 energy margin will be realized?
- 10 MR. O'RILEY: A: Well, we've described our forecast
- 11 methodology, and we've tested the dispatch against
- different scenarios for the relationship between power
- and gas, which is really the driver for utilization.
- 14 And we've offered two scenarios as well as a stress
- 15 test in the cost-effectiveness study, that results in
- a substantially lower dispatch.
- 17 MR. CRAIG: Q: Can you give me a probability that this
- will be realized?
- 19 MR. O'RILEY: A: The scenarios -- we don't have
- 20 probabilities attached to our scenarios, we're
- 21 weighting them equally, 50 percent equally.
- 22 MR. CRAIG: Q: Can you at this point give me your
- 23 judgment or best estimate as to what the probability
- is that that will be realized in the amount that's
- included for the successful proponent?
- 26 MR. O'RILEY: A: Well, we have a reasonable

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- expectation, based on the work that's gone into constructing the portfolio -- the price scenarios that they reflect expectations of future market conditions.
- 4 MR. CRAIG: Q: And that's helpful, that you have a
  reasonable expectation. I would like to help the
  record, and help the Chair understand that, in terms
  of a quantitative value. Can you give me your
  estimate of the probability that it will be achieved?
  - MR. O'RILEY: A: We don't have a -- I can't give you a percentage confidence interval -- confidence value for the two scenarios, beyond the 50 percent weighting that we've provided.
- MR. CRAIG: Q: So where should the record look to
  understand whether or not that is highly achievable?
- 15 MR. O'RILEY: A: Well, I think there's --
- 16 MR. CRAIG: Q: Or more likely to result in higher unit costs?
- 18 MS. HEMMINGSEN: **A**: Well, it's our expected value, as 19 Mr. O'Riley outlined. And furthermore, some of the 20 other options that we evaluated in the costeffectiveness analysis don't have confident bands 21 around them either. For example, the transmission 22 23 cable does not have a band to allow for cost 24 uncertainties, nor timing uncertainties. So there's uncertainty with that option as well. We can't 25 26 guarantee that that cable will be built at \$209

1 million, and it will be delivered in October, 2008. Mr. O'Riley, when you're evaluating 2 MR. CRAIG: Q: risks for B.C. Hydro, do you find it useful to try and 3 quantify those in terms of probabilities of things 4 occurring? 5 6 MR. O'RILEY: Α: We do, but I think with longer-term 7 decisions like this, it's -- I mean, we've had tremendous discussions here about the forecasting 8 process and it's quite frankly very difficult to 9 attach probabilities to different scenarios. So we do 10 it on a qualitative basis, and we test outcomes with 11 different scenarios. And that's what we've done in 12 13 this -- in the price forecasting approach that was used in the OEM. 14 MR. CRAIG: But as I see it, for the Commission 15 Q: 16 panel and for anybody that's going to try and argue from the record, it's essential to have some 17 18 understanding of these uncertainties, particularly 19 when they can be so sizeable, and they can vary what will be the cost-effective outcome significantly. 20 Proceeding Time 2:55 p.m. T18A 21 22 And at this point, from a risk point of view, I can get your confirmation that we have not 23 24 assessed the uncertainties in terms of likelihood or probability. We have no quantitative way of 25 26 discussing these.

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- 1 MR. O'RILEY: A: We've provided three scenarios, two in
- 2 the QEM model and one in the cost-effectiveness study,
- of different outcomes for the future.
- 4 MR. CRAIG: Q: Right, and I understand that from the
- 5 record. But that doesn't give me an assessment of the
- 6 uncertainty or probability in a quantitative term.
- 7 | MS. HEMMINGSEN: A: Well, quite frankly, our position
- 8 | would be any assessment would be arbitrary. So what
- 9 we've done is we have provided what we consider to be
- 10 a reasonable range of scenarios and tested the outcome
- 11 against that, and we're satisfied that the outcome is
- 12 good in light of our expected --
- 13 MR. CRAIG: Q: Now, when you're providing this energy
- margin, you're essentially taking on the risk of
- 15 managing the gas costs?
- 16 MR. O'RILEY: A: We are.
- 17 MR. CRAIG: Q: And is that something that you do with
- 18 this capability that you have through Hydro and with
- 19 Powerex?
- 20 MR. O'RILEY: A: We will use our capability to manage
- 21 this risk, assuming this contract proceeds.
- 22 MR. CRAIG: Q: And in doing that, is that a capability
- in the marketplace that Powerex also uses to make
- 24 revenue, trade income?
- 25 MR. O'RILEY: A: Yes.
- 26 MR. CRAIG: Q: And is there an unlimited amount of

- Page: 1557
- 1 trade income that can be earned from using this
- 2 capability?
- 3 MR. O'RILEY: A: There's not an unlimited -- we have
- 4 forecasts, for example, for trade income which we've
- 5 shared, of showing it growing over time.
- 6 MR. CRAIG: Q: It's not an unlimited capability. It's
- 7 very much dependent on what the market has. And in
- 8 fact, you've also provided evidence earlier that over
- 9 time the market changes as certain things are taken
- 10 advantage of or happen in the marketplace. So it's a
- 11 limited capability.
- 12 MR. O'RILEY: A: I would suggest the limits on the
- capability are more the opportunities that exist in
- 14 the market --
- 15 MR. CRAIG: Q: Yes.
- 16 MR. O'RILEY: A: -- as opposed to our ability to --
- 17 MR. CRAIG: Q: I accept that.
- 18 MR. O'RILEY: A: And we can scale up easily our
- 19 capability to --
- 20 MR. CRAIG: Q: You have the capability regardless of
- 21 what happens in the market. The market doesn't offer
- 22 endless opportunities.
- 23 MR. O'RILEY: A: Yes.
- 24 MR. CRAIG: Q: That's fair and that's helpful.
- Now, because this is a scarce opportunity,
- and Powerex is involved in doing it, and Powerex is

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Page: 1558 involved in using this to earn trade income, as I understand the situation here, you've applied that capability to generate a benefit that you've applied to the project specifically. MR. O'RILEY: **A:** Yeah. I'm not sure we're talking about the same opportunity throughout. And I should just make clear that it's not just Powerex, that this capability doesn't just reside in Powerex; and within B.C. Hydro in Distribution and Generation we manage

- MR. CRAIG: 11 0: Yes.
- 12 MR. O'RILEY: **A:** -- and we execute transactions through 13 Powerex.

the domestic purchasing portfolio --

- MR. CRAIG: 14 0: Sure.
- MR. O'RILEY: That's the mechanics of the process. 15 **A:** 16 So I'm not clear we're using "opportunity" in the same context. I was referring to the opportunities that 17 18 Powerex has to go out and take advantage of opportunities and to capture margin in the market. 19
- MR. CRAIG: Q: I think we are using them in the same 20 sense, that this is an opportunity that you've said is 21 not a restriction in terms of a capability of asset, 22 or capability of strengths inside Hydro. 23 opportunity that's limited in the marketplace. 24
- **A:** Yes, and our ability to take on risk 25 MR. O'RILEY: 26 in the marketplace and considerations like that.

- 1 MR. CRAIG: Q: Yes.
- 2 MR. O'RILEY: A: Capital, for example.
- 3 MR. CRAIG: Q: That whole set. So Powerex has a

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- 4 mandate to use that capability and to go into the
- 5 marketplace and earn trade income, correct?
- 6 MR. O'RILEY: A: Yes.
- 7 MR. CRAIG: Q: And if you -- well, you have said that
- 8 you've used that capability here to create a benefit
- 9 for a certain type of project and certain proponents.
- 10 MR. O'RILEY: A: I think we said we've used that
- 11 capability to get a lower-cost outcome for ratepayers,
- 12 which is our overall objective.
- 13 MR. CRAIG: Q: Yes. I understand what your intent was.
- 14 But you'll agree with me that you've used that
- capability to provide a benefit to gas-fired plant
- type projects, and a specific proponent has benefited
- 17 from that.
- 18 MR. O'RILEY: A: Well, I also described examples, and
- we had an extensive discussion this morning about how
- this approach of B.C. Hydro taking on the gas risk
- 21 benefited other proponents as well. So I think it's
- 22 difficult to quantify the relative benefits, but I see
- 23 gas-fire proponent benefiting from this, non-gas-fire
- proponents benefiting, and B.C. Hydro ratepayers
- benefiting. So I see it's a win-win-win proposition.
- Proceeding Time 3:00 p.m. T19A

1 MR. CRAIG: Q: By no means do you see that benefit as being equal, or that you will give me a value or a 2 number for the amount of benefit for each type of 3 4 project? 5 MR. O'RILEY: A: Well, I'm not sure we can calculate 6 the benefit, the relative benefit, but I think it's a 7 substantial benefit for all three parties in the course of this. 8 MR. CRAIG: Q: Right. And we've agreed that it's a 9 limited opportunity in the marketplace that's 10 providing the source of this benefit, and will you 11 agree with me that Powerex in its mandate to use this 12 13 capability to generate income from this limited opportunity does so and produced trade income? 14 15 MR. O'RILEY: A: Yes, Powerex does. And we may have 16 lost a little bit, and we're using the term capability and opportunity and I'm not sure we -- I'm not sure 17 18 it's clear to me what we mean by each of them any 19 more. MR. CRAIG: Q: So let me be clear what I'm meaning 20 The capability we've described, and I think we 21 then. 22 agree on, is the internal ability of B.C. Hydro 23 retained within the subsidiary Powerex and in certain 24 other areas of B.C. Hydro to access the market plus B.C. Hydro's capability to take on risk and a few 25

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other relevant things that are a part of actually

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1 capturing an opportunity, and by opportunity I mean the marketplace provides a limited range of 2 opportunities to turn the management of gas and 3 electric prices and risks into value. 4 MR. O'RILEY: **A:** Yes, and I think that's an important 5 6 distinction, and we should just remember that this 7 plant is not being built to access those external market opportunities. The energy from this plant, we 8 will use to meet our domestic load. We are using this 9 evaluation methodology, this QEM approach where we 10 calculate the value of power and the cost of the gas 11 to terminate energy margin, but once we've -- if, 12 presuming the contract is approved and the project is 13 built, this project will be primarily there to meet 14 domestic load. 15 I understand that and I don't think it 16 MR. CRAIG: O: would be valuable for us to confuse the panel that I 17 18 would be suggesting that this would be used to earn 19 trade income. It's the capability that you are applying and the limited opportunities in the 20 marketplace that Powerex has a mandate to turn into 21 22 trade income, and in fact does it. And you were there in Powerex doing it. 23 MR. O'RILEY: Yes, and I think I agree with that. 24 **A:** Thank you. Most helpful. And would you 25 MR. CRAIG: Q:

agree with me that in the context of the Heritage

26 MR. QUAIL: Q:

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Ms. Hemmingsen, during your cross-

MR. ECKERT:

**A**:

1 examination by Mr. Weisberg you appeared to be saying -- my understanding of your testimony was to the 2 effect that the introduction of new criteria in this 3 process by the Commission in the approval of the EPA 4 could have a negative impact on future bidders of 5 future Hydro projects. Is that a fair statement of 6 7 your testimony? My recollection is what I stated in MS. HEMMINGSEN: **A:** 8 terms of new criteria was looking at additional 9 options that weren't available to us under the CFT 10 process and supplanting a competitively determined 11 outcome with those options, would, in my estimation, 12 13 send reverberations to the IPP community in the future, and raise their sense of the risk of 14 contracting with B.C. Hydro. 15 16 Proceeding Time 3:05 p.m. T20A MR. QUAIL: I see. In other words, a regulatory 17 0: 18 risk, in effect, that you thought would -- might 19 hamper bids for projects. Is that what you're saying? 20 MS. HEMMINGSEN: **A**: It might dampen the interest or increase the cost to B.C. Hydro of acquiring that 21 22 supply. Now, the agreement that you've brought 23 MR. QUAIL: Q: here for approval with Duke Point Power is subject to 24 Commission approval, is it not? 25

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That's correct.

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MR. QUAIL:

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1 MR. QUAIL: Q: And both parties contemplated that the details and merits of the proposal --2 Can I just clarify that? 3 MS. HEMMINGSEN: **A**: understanding of Section 71, under which we're putting 4 forward the EPA, is the Commission can either allow or 5 6 disallow that agreement --7 MR. QUAIL: Q: Yes. -- which I don't think is the same MS. HEMMINGSEN: **A**: 8 as approval of a project or not. 9 All right. Take that -- in terms of MR. QUAIL: Q: 10 11 this context, probably distinction without a difference, but thank you for the clarification. 12 13 Now, both parties had contemplated that the details and merits of their proposal would be matters 14 within the jurisdiction of this Commission, to review. 15 16 Is that not correct? MS. HEMMINGSEN: **A**: I sense that they contemplated it 17 18 would be, but considering that the CFT was conceived 19 under a regulatory hearing, the Commission put forward some recommendations in the VIGP decision, and further 20 made some comments in a letter in January, that B.C. 21 Hydro followed, I think bidders could anticipate that 22 there would be some Commission endorsement of the 23 24 process.

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you and not engage in argument, this process will go

If you'd just answer questions put to

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MS. HEMMINGSEN:

**A**:

players in this sort of bidding process, are we not?

That we're talking about sophisticated

I think there's a range of players

25 MR. QUAIL: Q: And presumably participants in future calls for bids would also be aware of that

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may not, yes.

- Page: 1567 1 possibility. Is that not the case? MS. HEMMINGSEN: 2 **A**: Yes. That regulatory risk, if we can call it 3 MR. OUAIL: that, from the proponent's point of view, comes with 4 the territory, doesn't it? 5 6 MS. HEMMINGSEN: **A:** It does come with the territory. Ι 7 guess it's the degree of regulatory risk. Okay. And as you have acknowledged, MR. QUAIL: Q: 8 that varies a great deal from jurisdiction to 9 jurisdiction. Or jurisdiction --10 MS. HEMMINGSEN: 11 **A:** That's my understanding. Proceeding Time 3:10 p.m. T21A 12 There are jurisdictions in North America 13 MR. QUAIL: Q: that are much -- involve much closer regulator handles 14 than we have in British Columbia, isn't that correct? 15 MS. HEMMINGSEN: And there's some that involve less. 16 **A**: MR. QUAIL: Yes. Now, with reference to some 17 Q: 18 questions you were asked by Mr. Lewis, you indicated 19 that in the agreement Duke Point Power Incorporated is 20 responsible for greenhouse gas liability. You recall giving that evidence? I forget which member of the 21 panel it was, but somebody said that. 22
- 23 MR. SOULSBY: A: Yes.
- MR. QUAIL: Q: For the record could you indicate where
  the provisions governing this issue would be found in
  the agreement? If you don't have them close at hand,

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perhaps they could be provided after.

- MR. ECKERT: A: I actually do have them close at hand, and I'll correct a reference I made earlier. It's section 8.10(c)(i), where it says that "the seller is solely responsible at the seller's cost for compliance with all regulatory and other legal requirements with respect to all emissions from the seller's plant, and including greenhouse gas emissions."
- MR. QUAIL: Q: I'm just frankly having some difficulty quite grasping in my head what this means in practice in the real context. So let's -- I think this is a pretty safe assumption -- sometime between now and 2032, Canada and other nations actually bite the bullet on the Kyoto Accord, and there's serious mandatory standards having to do with greenhouse gas emissions. I know that sounds hypothetical, but you probably agree with me within that timeframe, it's not uncertain [sic] by any means.

So the scenario is that B.C. Hydro has a portfolio with all kinds of different resources producing capacity and electricity. Some produce greenhouse gas, some don't. And let's say you're facing standards where you're required to roll back your total contribution to greenhouse gases, maybe fairly drastically, over some time frame.

Proceeding Time 3:11 p.m. T22A

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1 One of those resources out of that portfolio is Duke Point spewing out its share of 2 greenhouse gas. What is your understanding of the 3 mechanism that would engage Duke Point Power 4 Incorporated's responsibility for dealing with that 5 overall problem that you've got with your portfolio? 6 7 MR. ECKERT: **A**: Well, three's two provisions. first provision is that they would be responsible for 8 greenhouse gas emissions. The second provision, the 9 follow-on to that section that I just read, provides 10 an indemnity from the seller to B.C. Hydro in the 11 event that we incurred any liability with respect to 12 any such emissions. 13 MR. OUAIL: So it would be your understanding that 14 Q: if, let's say you were forced to find offsets 15 elsewhere in your portfolio, Duke Point would have to 16 indemnify you for the added cost that that would mean 17 18 for your ratepayers, is that your understanding? MR. SOULSBY: **A**: I think one point of clarification is 19 that you described the emissions from Duke Point Power 20 as being part of B.C. Hydro's portfolio of GHG 21 liability and as Mr. Eckert said, that's not the case. 22 So when B.C. Hydro is looking to manage its portfolio 23 of GHG emissions, Duke Point Power would not be part 24 25 of that. 26 MR. QUAIL: Q: Well, that's -- I don't want to engage

MR. QUAIL:

Q:

1 in legal argument with you. There's a guestion of the perspective of the parties to the contract as opposed 2 to an environmental regulator, but anyway, maybe I'll 3 leave that for argument, but again, having some 4 difficulty understanding concretely what this 5 6 translates into. 7 MR. ECKERT: A: Well, I think it's clear in the contract that if there is a liability that's 8 associated with this plant's emissions, if those costs 9 are incurred by the seller, he is solely responsible 10 If somehow B.C. Hydro is -- if there is for them. 11 somehow some cost to B.C. Hydro with respect to 12 emissions from this power plant, there's an indemnity 13 from the seller to the buyer. 14 And I understand that. I just say I 15 MR. QUAIL: Q: 16 have difficulty concretely understanding how that's going to play through in a real life scenario. 17 18 example, if the result of such regulation means there has to be a reduction in the utilization rate of the 19 plant, is he understanding that would have any 20 implications in terms of the fixed charges that you 21 would be paying Duke Point? I mean that's the nuts 22 and bolts level these things happen. 23 Say something. Mr. Soulsby --24 MS. HEMMINGSEN: The basic --25 **A:** 

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-- is nodding his head.

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THE CHAIRMAN: Which means that the answers will come

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your panel tomorrow it will be with that reservation,

that they may need to be called back for an in camera

1 session with the panel. Proceeding Time 3:35 p.m. T25A 2 that reservation, that they may need to be called back for 3 an in camera session with the panel. 4 5 MR. SANDERSON: As you wish, Mr. Chairman, we'll make 6 them available again, or alternatively, if it makes 7 sense to do that, then -- and the panel is ready to do that, we can do that too. So whatever suits the panel 8 in that respect is fine. 9 THE CHAIRPERSON: Thank you. 10 CROSS-EXAMINATION BY MR. QUAIL (Continued): 11 Okay, we left off with Gold River 12 MR. QUAIL: Q: Information Request 1.2.11, having to do with fixed 13 This is a question punted over to you from 14 charges. I just wanted to confirm first of all, this 15 Panel 1. 16 indicates that there is a fixed charge called tendered capital charge of \$12,029.17 per megawatt per month. 17 MR. ECKERT: Α: That's correct. 18 MR. QUAIL: Q: And according to my calculation, 19 multiplied by 252 megawatts, that's a total of 20 \$3,031,350.84 per month. 21 That's my math too. 22 MR. ECKERT: **A**: All right, so we did have somebody with 23 MR. QUAIL: Q: 24 a calculator and have resolved that problem. I had also raised the question whether 25 26 there were other fixed costs. Already, I think, in

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- 16 MR. ECKERT: cover the things like the labour cost for the 17 18 operation of a plant, and those costs would escalate 19 with time. And the tender allowed bidders to escalate that at some percentage of CPI, subject to a floor of 20 zero, and I can't recall what the cap was. 21
  - Another issue that I raised in MR. OUAIL: Q: Okay. passing with Panel 1 but was directed to you instead has to do with the expected life, economic life of the And I assume that you've got a copy of the Vancouver Island Generation Project decision handy?

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coincidence, is it?

I don't think we arrived at the 25-year 1 MR. ECKERT: **A:** term because the useful life of a gas turbine is 25 2 3 years. So a 25-year project that you put 4 MR. QUAIL: Q: forward yourselves last year, 25-year term of the 5 6 agreement that was part of the term of the Call For 7 Tenders, 25-year contract, this is just pure coincidence that these -- this number pops up in those 8 three places. Is that what you're saying? MS. HEMMINGSEN: It is. **A**: 10 All right. Now, turning to page 42. 11 MR. QUAIL: Q: Of the decision? MS. HEMMINGSEN: 12 **A:** 13 Proceeding Time 3:40 p.m. T27A MR. OUAIL: 0: This is of the Vancouver Island 14 Generation Project decision of September 8th, 2003. 15 16 The first full paragraph: "VIGP would be a relatively efficient 17 18 generating plant, but this advantage is likely to decline over the 25-year life of 19 the facility. For example, the next 20 generation of General Electric turbines, the 21 7FB model, will be more efficient than the 22 23 unit chosen for VIGP. VIEC acknowledged 24 that the difference in efficiency is significant. Moreover, VIGP will also 25 26 compete with more efficient gas-fired co-

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1 generation facilities, with generation that is not gas-fired, and with resources like 2 wind and tidal power we do not have the fuel 3 cost. All of these factors are likely to 4 cause some erosion of utilization of VIGP." 5 I put it to you that the same general 6 7 principle will apply predictably with this plant as well. 8 MR. SOULSBY: I apologize. Thank you for reading 9 **A:** that out, but you said page 42 of the decision? 10 That is that given that this plant 11 MR. QUAIL: Q: Yes. is expected to be dispatched on an opportunistic 12 basis, and assuming that during the 25-year life of 13 the -- at least the initial term of the agreement, 14 technology will continue to evolve. Today's latest 15 16 thing is, you know, next decade's dinosaur. be overstating it a little. But it will be competing 17 18 with increasingly efficient new technologies. 19 that correct? That's quite predictable, is it not, Mr. O'Riley? 20 A: Yeah. 21 MR. O'RILEY: 22 I see you nodding your head. MR. QUAIL: Q: And we tested that scenario with our 23 MR. O'RILEY: **A:** 24 lower electricity price forecast, which had a lower relationship between power and gas prices. 25 26 MR. QUAIL: Q: So the dispatch rate would be predicted

case.

- Page: 1578 1 to decline over the life of the 25 years, isn't that right? 2 3 MR. O'RILEY: **A:** It would -- well, we've recorded a number of -- we've talked about, and I won't repeat 4 myself, a number of reasons why the dispatch rate 5 6 would change, and it's similar to what we've shown 7 here. It would also be competing with cleaner MR. QUAIL: Q: 8 alternate available resources over that period of 9 time, as well as more efficient ones. Isn't that 10 11 correct? Yes, and those -- cleaner resources 12 MR. O'RILEY: **A:** are included in the Henwood model, which we're using 13 for part of our price forecasting process. 14 You'd agree with me that your models do 15 MR. QUAIL: Q: 16 not indicate a drop-off in the utilization rate of the plant during the 25-year term of the initial 17 18 agreement, do they? 19 MR. O'RILEY: **A:** We're not indicating a profile over 20 time, but there is a substantially lower utilization in our 25 percent or so-called 25 percent recovery 21
- 23 MR. QUAIL: Q: Assuming that it's running more than 80
  24 percent of the time, and if in the latter part of the
  25 years it's running less, then it must follow that
  26 you expect in the first several years it would be

1 running all the time. Isn't that right? I think we covered that off. 2 MR. SOULSBY: **A:** Yesterday Mr. O'Riley covered off why it doesn't run 3 as much as you might expect in the first few years, 4 and I can confirm, just to make sure -- yes, no longer 5 confidential, that under IR 133.2 the dispatch of the 6 7 plant actually does decrease slightly over time, starting from about a peak in year 2014 decreasing 8 thereafter. 9 But assuming opportunistic dispatch --MR. QUAIL: Q: 10 I'll repeat the question. If it's predictable that 11 the rate of opportunistic dispatch is going to decline 12 as years pass, it must follow that this plant is 13 expected to be running full out all the time in the 14 first 10 or 15 years of its existence. Is that what 15 16 you're expecting? MR. SOULSBY: **A**: No, as I said, Mr. O'Riley explained 17 18 yesterday that there's a reason why the plant does not dispatch as much as you're suggesting it will in the 19 20 first few years, and that's due to an overbuild in the 21 reason. 22 MR. QUAIL: How do you get 80 percent plus Q: Yes. average capacity factor over 25 years, given that 23 24 dynamic? That seems to defy common sense. I note a long delay on the record in 25

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responding to that one.

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- 1 MS. HEMMINGSEN: A: I guess what we don't have is these 2 facts and figures right at our ready right now.
- 3 MR. SANDERSON: I was just going to say --
- 4 MS. HEMMINGSEN: A: So we're trying to find out how to answer your question as fast as we can.
- 6 MR. SANDERSON: Mr. Quail, when you finish this crossexamination we'll put you up and see how quick you are
  at responding to finding stuff in here. I'm not sure
  I've seen any counsel or any witnesses very capable of
  quickly moving through this, including, with great
  respect, yourself.
- MR. QUAIL: Q: Actually I wasn't eliciting any facts or figures. It actually is a matter of common sense. I put it to you it's a matter of common sense.

## Proceeding Time 3:45 p.m. T28A

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It's predictable that it's going to be running less and less of the time over 25 years. To average over that time running more than 80 percent of the time, it follows that the first ten or fifteen years it's got to be flat out every minute of every day of every week of every year. Otherwise, how do you get it running 80 percent plus over the 25 years. That's my question.

I don't think you have to look anything up anywhere on that. I'd just like an explanation.

26 MR. SOULSBY: A: I agree. And I don't have that figure

- to hand, but the IR that I sited will enable you to calculate that figure quite readily.
- MR. QUAIL: Q: Well, I don't doubt that it's going to
  be running less than a hundred percent of time over
  the first few years. That's the conundrum that I'm
  referring to. I'll leave the rest of that for
  argument.
- But I suggest to you this whole situation

  where we've got -- there's enormous pressure in this

  technology to constantly find refinements and

  evolutions for greater efficiency, isn't that correct?
- The technology has seen tremendous 12 MR. O'RILEY: **A:** 13 improvements over the last 20 years or so, and we've seen a decline in the rate of improvements, and you do 14 run up against the physics of these units and you stop 15 16 getting those large incremental gains from year to year. So there is that sort of an asymptote that we 17 would expect the efficiencies to go to. 18
- MR. QUAIL: Q: Unless there is a leap to some new paradigm that's more efficient.
- 21 MR. O'RILEY: A: Yes, and we feel we've reflected the likelihood of that in our low heat rate scenario.
- 23 MR. QUAIL: Q: Twenty-five years is a lot of time for incremental evolution, is it not?
- 25 MR. O'RILEY: A: It is.
- 26 MR. QUAIL: Q: Now, I'd suggest to you that this

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on-Island generation. The proponents came back and

said they needed long-term contracts to facilitate

financing. That seemed pragmatic and practical, and

there's every risk that prices can actual rise in the

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MR. QUAIL: Q:

1 future and that this could be a very attractively priced unit. 2 Some questions now about gas price risks 3 MR. QUAIL: Q: and especially the issue of hedging. I think gas 4 price generally is something that's been pretty well 5 trod into the ground, but you've indicated that Hydro 6 7 is developing a hedging plan or uses hedging to mitigate risk and exposure to short-term price jumps. 8 Isn't that correct? MR. O'RILEY: A: That is correct. 10 11 MR. QUAIL: Q: And any hedging plan is going to come with a cost. There's a premium that you pay to hedge 12 your gas supply, isn't that right? 13 MR. O'RILEY: Yeah, we don't really agree with that, 14 **A**: and the idea is that we don't see a bias in the 15 16 forward prices relative to the spot prices. seeing that the forward price will equal the spot 17 18 price but we don't see it biased up or down one way or 19 the other, and we are restricting our hedging to the 20 near three-year period where we are not incurring large bit aspreads [sic] or risk premiums to put on 21 these trades. So we don't think we're changing the 22 expected value of our gas cost, only the variability 23 of our gas cost. 24

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market fluctuations but not against long-term trends,

Thank you. Now, you can hedge against

isn't that correct?

- 2 MR. O'RILEY: A: That's pretty much correct, yes. I
  3 guess we can mitigate somewhat the impact of a long4 term trend but we will, given the structure of the
  5 market today, be exposed to the risk of higher prices
  6 if there is an upward ship in them over time.
- 7 MR. QUAIL: Q: Now, in performing the cost
  8 effectiveness analysis, Hydro assumes that any
  9 additional energy required under Tier 2 or the no
  10 award option will be provided from new mainland
  11 generation. Is that right?
- MS. HEMMINGSEN: A: It is. If you want to pursue this, it's better pursued on Panel 4. It deals with the cost-effectiveness test.

## Proceeding Time 3:50 p.m. T9A

- 16 MR. QUAIL: Q: All right, pleased to oblige. about transportation costs having to do with gas, 17 18 according to the Terasen Gas (Vancouver Island) 19 Resource Plan that was filed as a part of the CFT, 20 natural gas received by Terasen Gas (Vancouver Island) at its compressor station in Coquitlam, from Terasen 21 Gas, is that right? 22
- 23 MR. SIMPSON: A: Well, yes. It's used at Coquitlam,
  24 and they have other compressor stations on their
  25 system as well.
- 26 MR. QUAIL: Q: And prices are quoted for gas at

- Terasen (Vancouver Island).
- 25 MR. SIMPSON: A: Well, we did have a -- we did have a short-term contract in place.

1 MR. QUAIL: Q: Yes. You didn't have a long-term -- you

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- 2 hadn't secured your long-term cost for transporting
- gas to that plant when it went into service, did you?
- 4 MR. SIMPSON: A: No, that's correct.
- 5 MR. QUAIL: Q: And still don't have one, as I think is
- 6 clear from the evidence today.
- 7 MR. SIMPSON: A: That's correct, we don't have a long-
- 8 term agreement.
- 9 MR. QUAIL: Q: Now, to put it in the vernacular, I
- 10 suggest this resulted from Hydro's point of view in
- 11 Hydro getting hosed on the rates it's been paying for
- gas transportation, to the Elk Falls facility. Just
- to illustrate. The main issue there that's been
- 14 raised by Hydro as having been saddled, by a decision
- of this Commission, with a share of the contribution
- of the historical deficiency account that's
- 17 accumulated on the Vancouver Island pipeline. You
- felt that this was unfair, didn't you?
- 19 MR. SIMPSON: A: I think we did -- I mean, that's a
- 20 matter of record, that we did argue against being
- 21 saddled with a portion of that accumulated revenue
- 22 deficiency, yes.
- 23 | MR. QUAIL: Q: You fought it to the B.C. Court of
- 24 Appeal.
- 25 MR. SIMPSON: A: We did.
- 26 MR. QUAIL: Q: I can say that, because I was one of the

- Page: 1587
- 1 counsel involved in the case, as was my friend Mr.
- Fulton. And Hydro did this, put up this fight,
- 3 because the corporation believed that this placed an
- 4 unreasonable burden on its ratepayers, isn't that
- 5 correct?
- 6 MR. SIMPSON: A: Well, I'm not sure we felt it was an
- 7 unreasonable burden, we just felt that it wasn't an
- 8 appropriate principle for toll design.
- 9 MR. QUAIL: Q: Maybe I'll have to produce the factum
- 10 filed on your behalf in the Court of Appeal, but
- perhaps I can leave that for argument as well. And
- Hydro lost that appeal in the result, isn't that
- 13 correct?
- 14 MR. SIMPSON: A: That's correct.
- 15 MR. QUAIL: Q: And Hydro fought against the proposed --
- 16 now implement an amendment to the transportation
- tolling arrangement between Terasen on Vancouver
- 18 Island and the joint venture of major industrial gas
- users on the Island. Isn't that right? You fought
- 20 against that.
- 21 MR. SIMPSON: A: I'm not sure we fought against it. We
- 22 suggested that it should be a matter that was reviewed
- 23 by the Commission. But the government decided to
- 24 approve it.
- 25 MR. QUAIL: Q: You told the government that they
- 26 shouldn't approve it, and that it was because you did

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referred to several looming potential cost factors

proceeding.

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1 that you assume will be borne by Terasen (Vancouver Island's) core, for example the royal revenues being 2 You recall that testimony yesterday? 3 Yes, I do recall that, and what I was 4 MR. SIMPSON: **A**: trying to convey to Mr. Wallace was that those are the 5 assumptions that Terasen has made in the modelling to 6 7 come up with the toll estimates that we've used for the purpose of CFT evaluation. 8 MR. QUAIL: Q: And I put it to you that we have history 9 repeating itself with you coming forward with yet 10 another proposal for a gas-fired plant on the Island 11 and no fixed arrangement to set up -- set the tolls 12 13 you would pay to supply gas to that plant at your customer's risk. 14 MR. SIMPSON: Well, I don't believe it's necessarily 15 **A:** 16 history repeating itself. I think I did explain earlier today that as far as we can tell, the tolls 17 18 that we would pay based on the estimates that Terasen 19 has provided to us, the tolls that we would pay would more than cover their incremental expansion costs 20 associated with their long facility or any required 21 compression expansions on their system. 22 Therefore I don't think the issue is magnified, the issue of 23 24 having to pay potential underrecoveries from the core market. I don't think that's magnified by Duke Point 25

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Page: 1590 1 MR. QUAIL: Q: But similarly, you didn't expect to have the Commission make an order that saddled you with 2 part of the cost of the revenue deficiency account 3 either, dealing with Centra. Isn't that correct? 4 Life has its surprises, doesn't it? 5 6 MR. SIMPSON: **A**: Yes, it did. I quess we weren't 7 expecting that, but that's the way it worked out. But my point is that I don't think that issue is any 8 different with Duke Point proceeding than without Duke 9 Point proceeding. The potential underrecovery from 10 11 the core market is going to be there in any event. And your evidence has been that you 12 MR. QUAIL: Q: anticipate by November of this year having the deal in 13 place dealing with your capacity tolls on Vancouver 14 Island Pipeline. Is that your evidence? 15 maybe that was Mr. Soulsby's evidence. I might be 16 mistaken. Somebody testified that they expected by 17 18 November of this year, they'd expect to have that issue resolved what the tolls are going to be. 19 MR. SIMPSON: **A**: Well, I'm not sure we -- what we would 20 have expect to have by November of this year is at 21 22 least some sort of a short-term transportation agreement, perhaps similar to what we had with Island 23 24 Co-gen prior to it achieving commercial operation, and

that that would give Terasen sufficient certainty to

proceed with perhaps a smaller expansion at its LNG

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       facility, in order to provide the requirements of Duke
       Point by 2007.
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                      Well, obviously November of this year is
3
   MR. QUAIL:
                 0:
       way too late, way past the point of no return as far
4
       as the Duke Point project is concerned, isn't that
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6
       correct?
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   MR. SIMPSON:
                   A:
                        I'm not sure I can agree with that.
   MR. QUAIL:
                      By that point you're thoroughly -- I
8
                 Q:
       mean the deal's in place; you're bound by it.
9
       Assuming that the Commission were to approve it, it's
10
       way too late to slam any brakes on, November of 2005,
11
       if you discover that there's some bad news on the
12
13
       tolls that ultimately are going to be approved for
       that capacity.
14
                        Well, Mr. Quail, I think this gets
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   MR. SIMPSON:
                   A:
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       back to the development risk assessment that we did
       for gas transportation for the Duke Point Project.
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18
       And we believe that although the LNG facility may not
19
       -- if we don't make a commitment before November 2005,
       it may be difficult for Terasen to get the LNG
20
       facility in by 2007. We believe that they can get a
21
       compression expansion in by 2007, which would supply
22
       most of the requirements of Duke Point.
23
24
   MR. QUAIL:
                      Yes, I'm not suggesting that it won't be
                 Q:
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Presumably at some price, it's available. What I'm

physically possible to have the gas delivered.

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1 talking about is the tolls that you'll have to pay to for that service. 2 MS. HEMMINGSEN: Well, I guess we're satisfied that 3 **A:** there's sufficient options that we can avail ourselves 4 of, of other paths, including where we directly paid 5 6 for the compression as we did with ICP, and/or pursue 7 direct delivery, and/ or another of measures. Proceeding Time 4:00 p.m. T31A 8 MR. QUAIL: What other measures? 9 Q: Well, there's opportunities for 10 MS. HEMMINGSEN: **A**: 11 dual fuel, and other measures as well. There's a range of options for us to avail ourselves of, and 12 13 that's why we're satisfied that our assessment of the transportation risk is appropriate. 14 So other measures, you're talking about 15 MR. QUAIL: Q: the potential for LNG deliveries to the plant? 16 that one of the possibilities you're referring to? 17 MS. HEMMINGSEN: **A:** Mr. Simpson can speak to those 18 19 measures. MR. SIMPSON: Well, there are some proponents that 20 **A:** have come forward and say they can have direct 21 delivery LNG to Vancouver Island by 2007. Now, we're 22 a little skeptical that it can be done that quickly. 23 24 I think the most likely option is either if we have a

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long-term agreement with Terasen, shortly after the

conclusion of this proceeding, and the Duke Point

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1 project goes ahead, then there's a very good chance they could have their LNG expansion in place. 2 don't have a long-term agreement, I think as long as 3 we have a short-term agreement by November of 2005 we 4 could get a compression expansion in place. 5 So either way, we're going to be able to 6 7 meet the requirements of the Duke Point project in 2007. 8 MR. QUAIL: Why are you skeptical, I'm not 9 Q: suggesting I'm disagreeing with you, about the 10 possibility of bulk deliveries of LNG to the site by 11 2007. Could you please explain why that's unlikely? 12 I think we're -- the reason we're 13 MR. SIMPSON: **A**: skeptical is that that is a fairly new technology, if 14 you like. We're not aware of that being done 15 16 elsewhere, and although they make representations that they can achieve it within that timeline, there's 17 18 always the unexpected, particularly when you're dealing with something new. 19 MR. QUAIL: Q: And given that Duke Point is also the 20 site of a B.C. Ferries terminal, I assume you're not 21 contemplating that LNG would be off-loaded at Duke 22 Point. 23 24 MR. SIMPSON: **A:** Well, I'm not sure we want to get into the details of this, but some of the proponents have 25

indicated that they don't necessarily have to get

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right into the shore, that they can do it via an offshore pipeline.

MR. QUAIL: Now, Mr. Chairman, I had a series of questions about the selection, and open, competitive process that's been thoroughly traveled ground. But I do have something that might actually be useful that I produce, which is a chart that, I think, explains some territory that people were trying to make clear. This lays out, I think fairly clearly, with references to the material, to the number of bids at different stages, and people dropping out of the picture.

So what I'll do is, I'll put this to the panel, and if it does look like a -- I don't think you've got that one. So what this shows, just to explain it, in the -- lists the various stages of the CFT on the column on the left. So Stage 1 is prequalified bidders, tenders, projects, 11 bidders with 22 projects, and there's the reference, main report page 8. Of those natural gas projects were 20 and 8 were Vancouver Island gas or generation project type projects, and with the reference there. So you can see through the five stages the sort of drop-off of numbers.

It notes one anomaly, which probably isn't particularly material for present purposes, but it appears that Stage 1 there were 8 VIGP-type projects,

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(TABLE ENTITLED "B.C. HYDRO CFT PROJECTS", MARKED AS

MR. ANDREWS:

1 EXHIBIT C3-12) Mr. Chairman, the one thing I would ask 2 MR. SANDERSON: is -- I'm fine with this, but I think the panel should 3 be given the opportunity overnight to just confirm 4 that the numbers are in fact correct in here and 5 populate this table with the correct numbers if 6 7 they're not. MR. QUAIL: Yes. It's intended as an aid and not really 8 as evidence in its own right, but it might facilitate 9 some of the things we've been tossing around. 10 11 And those are the questions I have for you, thank you very much. 12 MR. FULTON: GSX Concerned Citizens Coalition. 13 THE CHAIRPERSON: I might add that if you thought it 14 would be helpful to attempt to what do Mr. Quail did 15 16 but differently, I'd be interested in looking at that too. I had the same challenge that Mr. Quail did and 17 18 I actual admire his thoroughness in pulling all of 19 this together. If it can be improved upon, I guess, is maybe my suggestion, I would suggest that you do 20 21 so. 22 So if you want to create another document that is trying to accomplish what Mr. Quail is 23 endeavouring to accomplish then I think that would be 24 a good idea too. 25

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Mr. Chairman, Madam Commissioner, Members

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of the Panel, my cross-examination will be based in part on two documents that I might as well identify now so that you can have them ready. One is the DPP response to the GSX CCC IR.

THE CHAIRPERSON: Mr. Andrews, before you begin, you need to advise me as to whether or not you wish to ask any questions about the QEM model.

MR. ANDREWS: I don't propose to ask any questions regarding the mechanics of the QEM model. There is one area that may touch on something that I don't think deals with the mechanics but deals with the QEM itself.

13 THE CHAIRPERSON: Please proceed.

MR. ANDREWS: The second document that I'll be referring to, and this may require a bit of explanation, there is an Exhibit B-57 which is a letter from Lawson Lundell on behalf of B.C. Hydro to me. It's a two page letter. The exhibit itself is only the letter and I understand not an attachment which is referred to in the letter. My understanding is that this is counsel for Hydro's attempt to assist the Commission by providing me with responses to the written questions that I posed to B.C. Hydro which we are referring to as the second round of GSX CCC IRs. His responses are in writing here, by definition, but they are not in the format of an IR response and he has

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hopefully identified that we may chose to simply accept the information provided and do nothing further with it, we may cross-examine on it, we may ask him to provide the answers in writing in the form of formal IR responses.

And I can say that many of the answers here will be in the first category. We'll simply take them as information. Some we will ask to be confirmed in writing and I don't need to raise them with the panel at this time. There are a few points in here that I will ask the witness panel about and I suppose we can get to it when we go there.

## Proceeding Time 4:10 p.m. T33A

The question remaining is what to do with what I would suggest be a witness aid rather than an exhibit, because I understand that Mr. Sanderson did not intend this to be an exhibit, but since I'm going to be referring to it, the slippery slope is that it would end up being an exhibit unless we are clear that it is not in the first place.

MR. SANDERSON: Mr. Chairman, with Mr. Andrews having told me he was going to do that, the witnesses have this, and my suggestion was he can ask the questions framed around the answers that are here and just confirm from the witnesses they are true and then it's on the record. Then as I understand it, there's only

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MR. SANDERSON:

Page: 1599 some of these he needs to do that with and then if he 1 wants to ask for follow up or whatever, he can do 2 So it may be a bit labourious but if he would 3 just put the question in a form that he thinks based 4 on this he can obtain agreement from. 5 My hope is that's a lot more expeditious 6 7 than it would have been if we hadn't provided him with these anticipated answers. 8 THE CHAIRPERSON: Mr. Sanderson, just so that I 9 understand, are these a set of the supplemental 10 11 responses that you mentioned yesterday that you made available to counsel in response to the second round 12 of IRs that were in a form that you didn't want to 13 file but that were made available to counsel so that 14 15 they could ask questions about those and at a later 16 time it might have been filed but wasn't necessarily going to be so? 17 Quite. Exactly so. MR. SANDERSON: 18 THE CHAIRPERSON: And now we have these, if you will, 19 entered as an exhibit when yesterday you mentioned 20 that you didn't intend them to be. 21 No, I don't understand them to be 22 MR. SANDERSON: entered as an exhibit at the moment. 23 THE CHAIRPERSON: 24 Okay.

exhibit, but I don't believe you're supposed to have

My cover letter is entered as an

- Page: 1600 1 an attachment to it and the record ought not to have an attachment to it. 2 THE CHAIRPERSON: Yes, I do. 3 Oh. Well, that's an error. 4 MR. SANDERSON: Thank you. Yeah, the intent was as you described it as distinct 5 6 from -- and as I described it yesterday as distinct 7 from what appears to have happened. THE CHAIRPERSON: Thank you. Mr. Andrews, I need you to 8 give your first document reference, please. 9 Excuse me, I didn't hear the question. MR. ANDREWS: 10 You said you had two documented 11 THE CHAIRPERSON: references. I have one of them. 12 13 MR. ANDREWS: The first one is the DPP response to GSX CCC information request and I don't offhand know what 14 the exhibit number would be for that. 15 THE CHAIRPERSON: I need that exhibit number. I've read 16 the responses but I need the exhibit number. 17 you're going to refer to it. 18
- 19 MR. ANDREWS: Thank you. C17-12

## 20 CROSS-EXAMINATION BY MR. ANDREWS:

MR. ANDREWS: Q: Ms. Hemmingsen, I'm going to first ask you about the extension of the completion date for the electricity purchase agreement. We heard yesterday that it had been extended from February 14<sup>th</sup> to February 18<sup>th</sup>, 2005, is that correct from your perspective?

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- 1 MS. HEMMINGSEN: A: My understanding of what we outlined is we were going to make that amendment to
- 3 true up the dates that a decision would be rendered
- 4 with contract terms.
- 5 MR. ANDREWS: Q: Do you see any obstacles in the way of
- 6 that happening?
- 7 MS. HEMMINGSEN: A: I haven't had a chance to talk to
- 8 Duke Point about executing that. Yes, but I don't
- 9 see any obstacles.
- 10 MR. ANDREWS: Q: All right, from B.C. Hydro's
- 11 perspective, are you operating on the assumption that
- if you and Duke Point Power were to agree, the
- completion date for the EPA could be extended further?
- 14 MS. HEMMINGSEN: A: That's not our position. We're
- running up against the eleven hour and Duke Point
- needs to get active in building the facility and
- ensuring that it's delivered by May 2007.
- 18 MR. ANDREWS: Q: Well, that in response to why you
- 19 would prefer not to, but if you had reason to want to
- 20 keep the EPA alive, is it not correct that between you
- and DPP with their consent, you could mutually agree
- 22 to extend the completion date for the EPA?
- 23 MS. HEMMINGSEN: A: Well, you can always mutually
- 24 agree. We also have an option to our favour to extend
- for another 90 days. We'd be very concerned about
- doing that in light of the timing crunch that we're

1 running up against. Have you turned your mind to the --2 MR. ANDREWS: Q: whether you would take as what you need to begin 3 completion of the contract and work towards achieving 4 the COD date? 5 Proceeding Time 4:15 a.m. T34 6 7 Have you turned your mind to whether a decision by this Panel, without reasons, would be sufficient? You 8 appreciate the distinction between a decision with 9 reasons and a decision without? Maybe I'll ask that 10 11 first. MS. HEMMINGSEN: Oh, and obviously it depends on 12 **A**: what that decision is. 13 Right, well let's assume that the 14 MR. ANDREWS: decision was not to disallow any of the terms of the 15 16 EPA, but with reasons to follow. Would you consider that sufficient certainty to allow you to proceed with 17 18 implementation, or would you want to wait until you 19 had the reasons so as to be able to presumably evaluate the prospect of success of an appeal or 20 whatever? 21 22 MR. ECKERT: **A:** I think the terms of the agreement are fairly specific in Section 3.1 of the EPA, and that is 23 24 if within the 90-day period we have an order that is not adverse to either party, that there is a 25

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determination under the terms of this agreement.

1 So if that order -- say there was -- I don't know what you mean by "with reasons". I am 2 interpreting your question to mean that that means 3 there is no changes to the agreement that would be 4 adverse to either party. Is that correct? 5 6 MR. ANDREWS: 0: No, that's not correct. My question, 7 if the Commission were to issue a decision in two parts, the first part of which contained a one-word 8 answer to a question such as that the EPA is allowed, 9 yes or no, and then the rest of the first part said 10 reasons will follow, and then at some period of time 11 later the Commission issued the full set of reasons as 12 13 to why, explain why it came to that conclusion; if that were to happen, that's what I'm describing as a 14 decision with reasons to follow. 15 16 And the question is, does that format, a decision with reasons to follow, provide the certainty 17 that you need at the time of the original decision 18 with reasons to follow, to proceed with the project? 19 MR. ECKERT: **A:** I think I interpret that as being a 20 decision that does not alter the terms of the 21 22 contract, and therefore there are no changes which could be adverse to either party, and so no 23 termination right arises. And that's --24 Well, let me make the hypothesis more 25 MR. ANDREWS: 0: defined. Let's say that the Commission's decision is 26

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that it will not disallow any provisions of the EPA 1 with reasons to follow. Now does that give you 2 sufficient certainty to proceed with the project? 3 We're required to proceed with the 4 MS. HEMMINGSEN: **A:** project. 5 6 MR. ECKERT: **A**: Yeah, I don't think we have a choice in 7 that event. I don't think a termination right arises in that circumstance, so that the contract is --8 you've essentially satisfied the condition and there 9 would be no right to terminate by either party. 10 11 MR. ANDREWS: 0: Have you turned your mind to the possibility of an appeal to the Court of Appeal? 12 13 I'm asking this from a management and planning perspective, not to the legal merits of any appeal. 14 Well, it certainly wasn't foremost 15 MS. HEMMINGSEN: **A**: in our minds when we designed the EPA contract. 16 MR. ANDREWS: No, but you're sitting here telling 17 Q: 18 the Panel that there's a very urgent need for this 19 project and you're planning all sorts of details of 20 it. I'm asking whether you've contemplated the impact of an appeal to the Court of Appeal. 21 Well, I think that's a circumstance 22 MR. ECKERT: **A**: that's not addressed within the four corners of this 23 EPA, and so --24 Well, I'm not asking you if it's 25 MR. ANDREWS: 0:

addressed to the EPA. I'm asking have you, in terms

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Would that

of your level of decision-making at B.C. Hydro, 1 contemplated this issue? And if the answer is no, so 2 be it. 3 MR. SOULSBY: I think that the answer is that it's 4 **A:** contemplated in the context of the contingency plans 5 which we have been working on, which we have shelf-6 7 ready. And as I think I testified yesterday, whether or not we decide to invoke any contingency plans based 8 on a negative decision, for example, with reason, if 9 there were reasons to follow, would depend on what 10 those reasons are. But as Mr. Eckert --11 The most recent hypothesis was a 12 MR. ANDREWS: Q: 13 positive from Hydro's perspective, decision with reasons to follow. 14 As we've said, there's no basis for 15 MS. HEMMINGSEN: **A**: 16 us not to proceed with the contract at that point. Proceeding Time 4:20 p.m. T35A 17 18 MR. ANDREWS: Q: And that's my question is, have you 19 turned your mind to the effect of an appeal in that circumstance? 20 MS. HEMMINGSEN: Well, there's --21 **A**: MR. ANDREWS: 22 Q: You would not at that point have had

MS. HEMMINGSEN: Well, what you appear to be asking

not leave you somewhat concerned that your -- the

an opportunity to review the decisions.

certainty that you might hope for is not --

**A**:

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1 me is whether I have a legal opinion as to whether or
2 not --

MR. ANDREWS: Q: Absolutely not, and I made it very clear. I was asking you from a management, planning perspective whether you have contemplated the -- in terms of the certainty that you require, whether a reason with decisions -- a positive -- from Hydro's perspective, decision with reasons to follow would provide the certainty that you need to go forward. And my -- it sounds to me so far, tell me if I'm wrong, that your answer is no, that you haven't turned your mind to that.

13 MS. HEMMINGSEN: A: Well, I think what is --

MR. SANDERSON: Just -- Ms. Hemmingsen, excuse me just a moment. It seems to me that there's two parts to this. You've got the answer to the part that I think is germane. Mr. Eckert has said that insofar as he understands, from his perspective the rights of the parties, the appeal situation wasn't contemplated within the four corners of the agreement. So that in terms of the design of the process and its outcome, there is no contemplation of that particular event.

What would happen if that occurs is to ask Hydro then to hypothesize about its relationships, its future relationships with Duke, which I'm hesitant to have done on the record. What you can -- what you've

- obtained, and what is the fact, is that the existing contractual arrangements don't deal with that situation.
- You can make of that in argument what you will, but I'm not sure that you can require Hydro to disclose whatever strategy it may have, moving forward, should that circumstance arise, in terms of its dealings with Duke or with anyone else.
- 9 MR. ANDREWS: I'm not -- if that was an objection to a line of questioning, I'm not sure there --
- 11 MR. SANDERSON: It was.
- 12 THE CHAIRMAN: It's an objection to the hypothesis that

  you're putting to this panel. You've asked -- Mr.
- Sanderson has said, you've established the record with
- respect to the EPA, and the design. Both did not
- 16 contemplate the hypothesis that you're making.
- MR. ANDREWS: The hypothesis is stated in a Commission, either Order or letter.
- 19 MR. SANDERSON: No.
- 20 MR. ANDREWS: Contemplating a decision with reasons to
- 21 follow. There's nothing --
- 22 MR. SANDERSON: I'm sorry, it's not.
- 23 MR. ANDREWS: -- abstract about it.
- 24 MR. SANDERSON: Now --
- 25 MR. ANDREWS: I'll indulge my friend's interruption, if
- 26 he would like.

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MR. SANDERSON: Well, the reason for the interruption is that the confusion confused the witnesses first, and now it's starting again.

There are two different propositions that have been put. One proposition is, there's a decision without reasons. The second, which is entirely within Mr. Andrews' control, if he's speaking of his own client, is whether there's appeal. And I rose, and his questions for the last five minutes were on the question of appeal, which have nothing to do with anything the Commission has said, it has to do with whether or not the agreement contemplated that Mr. Andrews or another party might launch an appeal seeking judicial intervention in this process after it was done. That's been answered, on the record.

MR. ANDREWS: Can I just explain. The two are very, very different. But they're not unrelated, because in terms of certainty and the -- certainty that Hydro would require to begin the work on the project, the connection is that Hydro would have no ability to evaluate the likelihood or possible success of an appeal until it sees the reasons. And until -- and so from that point of view, if I were to get an answer that said "No, we're not going to go ahead with the project until we get the reasons," then that affects the timing of the project, and the timing of the

1 panel's decision and reasons. It seems to me it's an extremely practical 2 and legitimate question. 3 I guess I would suggest that the 4 MR. ECKERT: **A:** contract is not -- there's no excuse for B.C. Hydro to 5 terminate if there's an Order which does not set aside 6 7 a term or condition of the contract that's adverse to B.C. Hydro based on the reasons that support the 8 decision. So there is no -- there's no right that arises out of the reasons, it arises out of the -- an 10 adverse condition that's attached to the Order. 11 So just so that I --12 MR. ANDREWS: Q: Mr. Andrews, I'm not finding this very 13 THE CHAIRMAN: helpful. You should move on. 14 Proceeding Time 4:25 p.m. T36A 15 16 MR. ANDREWS: Q: Ms. Hemmingsen, if I understood you correctly earlier today, you acknowledged that only 17 18 gas-fired projects were evaluated by the portfolio spreadsheets, is that correct? 19 20 MS. HEMMINGSEN: A: That's the only tendered projects that passed the mandatory criteria and could be 21 assembled into portfolios. 22 23 MR. ANDREWS: Q: And so the answer is yes? MS. HEMMINGSEN: 24 **A**: Yes. And in response to a series of 25 MR. ANDREWS: Q:

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questions from a number of the previous questioners

MS. HEMMINGSEN:

**A:** 

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1 about the gas price risk, my understanding of the conclusion of it all is that what you are saying is 2 that the gas price risk being taken by B.C. Hydro 3 benefited non-gas projects as well as gas projects and 4 the reason that it did so was that non-gas projects 5 could be combined with gas projects and thereby be 6 7 evaluated in a portfolio spreadsheet which, absent the leg up to the gas-fired component of that portfolio, 8 they would not be eligible to enter into. Is that the 9 essence of your --10 11 MS. HEMMINGSEN: **A**: That's the concept. And what happened is, unfortunately one of those proponents was 12 non-compliant. Otherwise they would have been 13 assembled into said portfolio. 14 So in the result, Hydro taking the gas 15 MR. ANDREWS: Q: 16 price risk favoured gas-fired projects and might have favoured or helped to assist a non-gas-fired project, 17 18 but it didn't turn out to actually happen that a nongas-fired plant -- project rather, was combined so as 19 to be evaluated. 20 MS. HEMMINGSEN: So the design supported 21 **A**: Right. that and the outcome because a bidder chose to submit 22 a non-compliant bid, did not serve that. 23 different issues. 24 25 MR. ANDREWS: Q: Well, you are --

We can't be responsible for --

- MR. ANDREWS: Q: I'm not sure why you deflecting this
  to a non-compliant bid. You expect to have -- the
  process is designed for compliant bids and your
  response was that the -- I'm not -- are you changing
  the response?
- 6 MS. HEMMINGSEN: A: The process is designed to attract
  7 bidders to submit compliant bids. To the extent a
  8 bidder submits a non-compliant bid, that's not B.C.
  9 Hydro's issue, it's the bidder's issue.
- 10 MR. ANDREWS: Q: None of my questions related in the

  11 least to a non-compliant bid. That's why I'm

  12 wondering why you've inserted that into the

  13 discussion.
- MS. HEMMINGSEN: A: Well, it does because that's the reason that you didn't get the outcome that you're pointing to.
- 17 MR. ANDREWS: Q: Okay. Let me put it to you again
  18 since you seem to not --
- MS. HEMMINGSEN: A: The process wasn't flawed. The process wasn't flawed. It allowed those bidders to tender in.
- MR. ANDREWS: Q: You've offered the explanation that
  Hydro taking the gas price risk did not unfairly
  benefit gas-fired projects because -- and this I
  acknowledge is a stretch for many people, but the
  rationale is that it benefited non-gas-fired projects

because they could be combined together with a 1 benefited gas-fired project and evaluated. And my 2 question is but as it turned out, that didn't happen, 3 is that right? 4 Yeah, for a different reason than 5 MS. HEMMINGSEN: A: 6 the design of the process. 7 MR. ANDREWS: Q: Thank you. Load shedding. Hydro sees demand management as a permanent reduction in 8 electrical load. Is that a fair statement? 9 MS. HEMMINGSEN: A: Those are the programs that Hydro 10 11 has pursued under PowerSmart to date. Temporary load reduction is not within 12 MR. ANDREWS: Q: Hydro's portfolio of what it considers to be 13 acceptable responses or facilities except in 14 exceptional circumstances, is that also correct? 15 At this point we don't envision 16 MS. HEMMINGSEN: A: relying on them to meet long-term reliability 17 18 standards. MR. ANDREWS: Q: All right. That was a fairly nuanced 19 20 answer. Would you care to elaborate on that? Are you referring to the N minus 1 WECC requirements? 21 MS. HEMMINGSEN: That's right. And BCTC made a 22 **A**: 23 preliminary evaluation of Norske's proposal and 24 outlined the steps that they would take to prove that up, whether in fact it could be relied on for 25

reliability purposes.

1 MR. ANDREWS: Q: So my question is, is it correct that B.C. Hydro does not consider temporary load reduction 2 to be within its portfolio of acceptable facilities or 3 options? Not whether it meets WECC N minus 1 4 criteria. That's an interesting and separate issue. 5 Proceeding Time 4:30 p.m. T37A 6 7 MS. HEMMINGSEN: Α: We're currently not pursuing that as a long-term reliability option, no. 8 MR. ANDREWS: Q: The environmental assessment 9 certificate, and other environmental permits. 10 confused, frankly, by the evidence that's emerged so 11 far as to whether those -- let's talk about the 12 environmental assessment certificate in particular; 13 has in fact been transferred from VIGP to DPP, or 14 whether it is anticipated that it will be transferred. 15 16 Can you -- anyone on the panel clarify that? MR. ECKERT: I can clarify that. The environmental 17 **A**: certificate -- or the environmental assessment 18 certificate is in the name of Vancouver Island Energy 19 Corporation. And those -- and the shares in VIEC will 20 be transferred to Duke -- DPPLP at the closing of the 21 VIGP asset transfer agreement. So when the -- so 90 22 days after execution of the agreement, that's when --23 absent no ruling by the Commission or an adverse 24 ruling by the Commission, there would be a closing and 25 26 that -- and the shares in VIEC would be transferred.

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- Page: 1614
- 1 MR. ANDREWS: Q: And to continue, the shares in VIEC
- 2 are transferred, and what, with respect to the
- 3 environmental assessment certificate --
- 4 MS. HEMMINGSEN: A: They -- they get the rights to
- 5 those --
- 6 MR. ECKERT: A: Well, VIEC -- I'm sorry.
- 7 MS. HEMMINGSEN: A: Transferring the shares conveys
- 8 those assets within VIEC to Duke Point Power.
- 9 MR. ANDREWS: Q: Your position is that the mere
- transfer of the shares transfers an environmental
- assessment certificate from one holder to another?
- 12 MR. ECKERT: A: Well, Duke -- DPLP would own the shares
- in VIEC, which would -- which is the holder of the
- 14 environmental certificate.
- 15 MR. ANDREWS: Q: Oh. So in -- you're not contemplating
- transferring this -- the environmental assessment
- certificate at all. You're selling VIEC to DPP. Is
- 18 that right?
- 19 MR. ECKERT: A: That's correct.
- 20 MS. HEMMINGSEN: A: Yes.
- 21 MR. ANDREWS: Q: Okay. So all of the mention, all the
- 22 talk about transferring the permits is not -- is not
- 23 correct. You're talking about selling VIEC and
- 24 permits in its name would go -- follow as a matter of
- 25 course.
- 26 MR. ECKERT: A: Any assets to VIEC would remain with

1 VIEC. That certainly clarifies a 2 MR. ANDREWS: Q: Thank you. number of questions. Why, Mr. Eckert, did you say 3 that DPP had given notice -- had declared that it had 4 met all material permits? Or in this context, now, 5 6 what material permits would it have, if it's acquiring 7 all its material permits by the acquisition of VIEC? MR. ECKERT: The election that DPP made is that upon **A:** 8 the closing of the VTA, they would have all material 9 permits. 10 11 MR. ANDREWS: Q: So when you said earlier that they had -- they had declared it in the present tense, that 12 wasn't -- I didn't understand that correctly. You 13 mean to say that they will declare that if and when 14 the EPA closes? 15 16 MR. ECKERT: **A:** They declared in their tender that they -- there was a special -- it was a special term and 17 18 condition, in the last Appendix of the EPA, I believe, 19 and that was an election that they could make, and 20 that election specifies, as I recall, that at the closing of the VTA they would have all material 21 22 permits. And --They would have that because they 23 MR. ANDREWS: Q: would have, upon closing, acquired VIEC. 24 MR. ECKERT: That's correct. 25 **A:** 

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Proceeding Time 4:35 p.m. T38A

Page: 1616 1 MR. ANDREWS: Q: Okay. Dual fuel capability. like to refer you to Hydro's response to BCUC IR 2 And while you're at it, there's a 2.47.11. 3 You have those? Just look at 2.47.11 first. 4 5 MS. HEMMINGSEN: **A:** Well, I don't have that one. 6 have 47.9. 7 MR. ANDREWS: Q: It's two pages later in my version. This question has to do with gas supply to Duke Point 8 9 and possible limitations on it. And in the context of answering that question and explaining how Hydro would 10 go about getting gas to Duke Point, Hydro says that it 11 is investigating dual fuel for Duke Point. Are we on 12 13 the same page? Is that correct? Okay, well, if it's not on the page then let me ask you --14 Okay, it says, and maybe you can 15 MS. HEMMINGSEN: **A:** 16 point me to the paragraph, it says: "If B.C. Hydro can secure dual fuel 17 18 capability at Duke Point..." 19 Does it say B.C. Hydro is securing dual fuel 20 capability? Is B.C. Hydro investigating dual fuel 21 MR. ANDREWS: Q: 22 capability? Well, this IR points to if we can 23 MS. HEMMINGSEN: **A:** 24 secure it, it's another way that we can meet the gas

This one that you

requirements to operate Duke Point.

referred me to, 47.9, says:

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1 "B.C. Hydro also intends to investigate the option of implementing dual fuel capability 2 at Duke Point." 3 All right, and are those answers 4 MR. ANDREWS: Q: correct? 5 6 MS. HEMMINGSEN: Α: Yes. 7 MR. ANDREWS: Q: Does Hydro currently intend to investigate the option of dual fuel at Duke Point? 8 9 MS. HEMMINGSEN: **A:** Well, we are waiting to hear the outcome of this hearing and further negotiations and 10 11 discussions with Terasen. It is an option for us to 12 pursue. 13 MR. ANDREWS: Q: And the mechanism would be that if you don't get the terms that you want to get from Terasen, 14 you would pursue dual firing with Duke Point? 15 16 MS. HEMMINGSEN: **A**: It's one of the options that we have, yes. 17 18 MR. ANDREWS: Q: And have you looked at the -- this is 19 an option that you have in order to be able to achieve 250 megawatts from Duke Point on a reliable 24 hour a 20 day basis, when called upon in 2007-08? 21 In the event that we cannot reach a 22 MS. HEMMINGSEN: **A:** solution with Terasen. 23 24 MR. ANDREWS: Q: Okay, so the idea that the rationale for the Duke Point plant is to provide reliable power, 25

among other periods of time, in the winter of 2007-08.

MR. SANDERSON:

1 And what you're indicating here is that you may not have enough gas to fire Duke Point so as to produce 2 252 megawatts for 24 hours a day, and you're saying 3 that your contingency is -- if you don't get what you 4 want, you will pursue dual fire -- dual fuel for DPP? 5 6 MS. HEMMINGSEN: Α: Our preferred course of action is 7 to negotiate an arrangement with Terasen to provide that. In the event that we cannot complete an 8 arrangement with Terasen, we have a number of options. 9 This is one of them. 10 11 MR. ANDREWS: Q: Have you gone any farther than identifying it as an option? Have you considered, for 12 13 example, how long it would take you to get regulatory approval of a change like that? 14 MS. HEMMINGSEN: We've made some preliminary 15 **A:** 16 estimates of that. We're familiar with the process, with ICP that was recently fitted with dual fuel 17 18 pursuant to its contract. Proceeding Time 4:40 p.m. T39 19 20 MR. ANDREWS: Q: And what was the conclusion that you came to as to how long it would take to get regulatory 21 22 approval? I don't have that information 23 MS. HEMMINGSEN: **A:** 24 handy. Will you undertake to provide that? 25 MR. ANDREWS: 0:

So you want to know whether there has

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Page: 1619 January 18, 2004 Volume 7 1 been any conclusions with respect to how long it will take -- what an estimate for the regulatory process 2 is. If there is such a conclusion, yes, we can 3 4 provide that. Information Request 5 6 MR. ANDREWS: Well, the witness said that there had been 7 a conclusion reached based on -- at least -- well, so the record will show and nothing hinges on it, but --8 MR. ANDREWS: Q: I asked you how long you thought it 9 would take to get regulatory approval, and you said 10 you'd looked at information based on ICP's experience. 11 And I've asked you now if you would provide the 12 13 conclusion that you came to in terms of how long you would expect regulatory approval to take. 14 And I think Mr. Andrews did fairly state 15 MR. SANDERSON: the testimony of the witness, that is, there were 16 preliminary investigations made. What I said was, if 17 18 those resulted in a conclusion as the second half of 19 his submission implied, and we don't know whether they did or they don't, but if they did we'll produce it. 20 MR. ANDREWS: Thank you. 21 22

Now, I just wanted to confirm that the MR. ANDREWS: Q: capacity deficiency which Hydro is proposing this plant to address, is that deficiency on Vancouver Island between the time of the zero rating of the HVDC system and the in service date of the proposed 230

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- 1 kilovolt transmission line, is that correct? Not
- 2 stating what those dates are, but that's a way to
- 3 describe the duration of the capacity deficiency.
- 4 MS. HEMMINGSEN: A: Yes, the deficiency is driven by
- 5 the de-rating of the cable.
- 6 MR. ANDREWS: Q: And ends when the 230 kV line comes
- 7 into service?
- 8 MS. HEMMINGSEN: A: Correct.
- 9 MR. ANDREWS: Q: Thank you.
- 10 The cost of the capacity which Hydro is
- 11 proposing to purchase to meet this deficiency is \$35
- million per year net present value. Is that roughly
- accurate? And I'm going to refer you to the DPP
- 14 answer if you want further.
- 15 MS. HEMMINGSEN: A: I'll get Mr. Eckert to confirm
- 16 that.
- 17 MR. ANDREWS: Q: You're pausing. I'll point you --
- this isn't a trick question. The DPP answer to IR
- from GSX CCC on page 10, question 1.10.2. Do you see
- the question there?
- 21 Proceeding Time 4:43 p.m. T40A
- 22 MS. HEMMINGSEN: A: I see the question and Mr. Eckert
- can confirm whether that's the charge per year.
- 24 MR. ANDREWS: Q: Perhaps you could read the question
- and give the answer for the record, Mr. Eckert.
- 26 MR. ECKERT: A: "Please confirm that the costs

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8 percent for 25 years to 2004."

Do you agree with that answer?

change is \$308,251,331 at a discount rate of

I'd have to do the math to do that and 1 MR. ECKERT: **A**: I can't discount that in my head, quite frankly. Not 2 -- and I don't trust my calculator skills quite well 3 4 enough to --MR. ANDREWS: Q: Could you undertake to provide that 5 6 number? 7 MR. ECKERT: A: Sure. MR. ANDREWS: Q: Thank you. 8 **Information Response** 9 Ms. Hemmingsen, you said earlier MR. ANDREWS: Q: 10 today, "We've looked..." and this is my notes and 11 correct me if I'm wrong; when you were asked what 12 13 would happen if the EPA were disallowed you said, "We've looked at contingency plans, and we have them 14 shelf-ready to pursue if the Commission doesn't allow 15 the EPA." Is that the gist of your evidence? 16 Proceeding Time 4:46 p.m. T41A 17 18 MS. HEMMINGSEN: **A**: Yes, we have a number of 19 contingency options, all of which we consider to be less reliable than Duke Point. 20 MR. ANDREWS: Do you have contingency plans in 21 Q: addition to those that are articulated as the no-award 22 23 option? 24 MS. HEMMINGSEN: **A:** What we've represented in the noaward option is the most reliable and what we consider 25

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to be the most cost-effective of a range of

- 1 contingency options which might be available to us.
- 2 MR. ANDREWS: Q: So when you made that no-award
- 3 portfolio, did you, for example, consider the
- 4 Ladysmith project?
- 5 MS. HEMMINGSEN: A: No, we didn't consider the
- 6 Ladysmith project because we were including a no-award
- 7 situation, so no new generation on a long-term basis.
- 8 It would be short-term bridging opportunities.
- 9 MR. ANDREWS: Q: You did include one or more 23
- megawatt units that were not bid into the CFT,
- 11 correct?
- 12 MS. HEMMINGSEN: A: They were temporary generators, so
- they'd only be available to us on a temporary basis
- until the cables were in service.
- 15 MR. ANDREWS: Q: So the contingency plans that you have
- 16 limited themselves to temporary measures, and excluded
- possibilities because they would be permanent or
- 18 longer-term.
- 19 MS. HEMMINGSEN: A: No, no, because another of the
- 20 contingency options was Tier 2, which included two of
- 21 the projects that bid into the CFT process, both of
- 22 which were long-term, and then the backfill with a
- 23 Norske type of proposal, and any balance that was
- 24 remaining with temporary generators.
- 25 MR. ANDREWS: Q: My question relates to no award, and
- 26 not to Tier 2.

1 THE CHAIRMAN: Excuse me. Mr. Andrews, let's take a tenminute break. 2 Thank you. 3 MR. ANDREWS: (PROCEEDINGS ADJOURNED AT 4:48 P.M.) 4 (PROCEEDINGS RESUMED AT 5:00 P.M.) **T42A** 5 6 THE CHAIRPERSON: Please be seated. MR. ANDREWS: Q: 7 When we left I was asking the panel about their selection of facilities or options for the 8 new aware portfolio and I believe the answer was that 9 you had chosen the Norske management project plus the 10 11 23 megawatt temporary units and you were just explaining that you didn't look at the Ladysmith 12 13 project and am I right that you were about to say that it was because the Ladysmith project was not 14 15 temporary? 16 MS. HEMMINGSEN: **A:** No, because we looked at a mix of long-term options and short-term bridging measures in 17 18 the Tier 2 alternative that was also evaluated in the 19 cost effectiveness analysis and perhaps it would be better if we pursued these issues in Panel 4, because 20 that's what we've set up to speak to them. 21 22 MR. ANDREWS: So did the people on your panel have Q: any involvement with the selection of the items that 23 were within or outside of the no award portfolio. 24 Well, Mr. Chairman, the whole panel to 25 MR. SANDERSON:

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deal with what was in or out or how the cost

1 effectiveness study was done certainly includes Ms. Hemmingsen, so the answer is yes, but we have 2 suggested that these are most efficiently dealt with 3 4 on Panel 4. MR. ANDREWS: Well, I think my question is at a fairly 5 6 high level here. 7 THE CHAIRPERSON: It may be, but can it not wait until Panel 4? 8 MR. ANDREWS: I don't want to be told by Panel 4 that 9 they had been directed to populate the no award option 10 in a certain way. There's a management level decision 11 here that said we should limit ourselves in designing 12 13 the no award portfolio only to temporary measures for some reason, but there's no logical reason why a 14 contingency plan should be deliberately crippled from 15 16 the start to be only temporary, when there are longerterm solutions that could conceivably been part of the 17 18 no-award scenario. And that's a management level 19 issue. MR. SANDERSON: Mr. Andrews can indulge his worst 20 nightmares with what managerial interference with 21 Panel 4. Ms. Hemmingsen is common to both and is the 22 senior person, in terms of this process, on both and 23 so will be able to deal with those nightmares. 24 Proceeding Time 5:03 p.m. T43A 25 26 MR. ANDREWS: Q: It is said in the call for tenders

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Your answer is: "Confirmed". Is that --

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MR. ANDREWS:

Q:

1 MS. HEMMINGSEN: **A:** Are you referencing an IR? I'm referencing the January 17<sup>th</sup> letter 2 MR. ANDREWS: Q: from Lawson Lundell to me with the attachments, and 3 I'll refer you to page 5 of the witness aid, 2.7.7 at 4 the top of the page. 5 6 MS. HEMMINGSEN: A: Confirmed. 7 MR. ANDREWS: Q: I would like you to invite you to change your view of that, because I submit to you that 8 in the context that this \$50 million figure is being 9 used that it is actually best treated as a sunk cost 10 and not a fair market value. 11 MS. HEMMINGSEN: 12 **A:** Well, I'm not treating it as a fair 13 market value or a sunk cost. It's a cash receipt for B.C. Hydro that is related to the Duke Point project. 14 Proceeding Time 5:06 p.m. T44A 15 16 MR. ANDREWS: Q: Let me ask then the next question: "If the \$50 million payment for the VIGP 17 18 assets is a fair market value figure, then please confirm that it is not relevant to an 19 NPV comparison of the VIGP benchmark and the 20 DPP." 21 It is relevant because we're 22 MS. HEMMINGSEN: **A**: receiving the \$50 million cheque from Duke Point 23 Power. And it's not relevant for the VIGP benchmark 24 because it wouldn't be received under the VIGP option. 25

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Now let me break that answer into two

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Page: 1628 1 parts if I may. The first answer is that it's not relevant because B.C. Hydro is receiving a \$50 million 2 cheque. But I put to you that if indeed the \$50 3 million is a fair market value, then by definition 4 Hydro has transferred a \$50 million asset. 5 received a \$50 million cheque and gave away a \$50 6 7 million asset. It could just as easily, if it is indeed fair market value, it could just as easily have 8 sold that \$50 million asset to somebody else down the 9 block. Correct? 10 MS. HEMMINGSEN: Well, I guess our estimation, if it 11 **A:** was sold to someone else down the block as on a 12 liquidated basis of salvage, it would be worth 14 13 million. And that's the amount we would net against a 14 non-VIGP portfolio. 15 Does that not meet the definition of a 16 MR. ANDREWS: 0: sunk cost? If you can't use it for anything but one 17 18 purpose, it's sunk. It's not a fair market value if I 19 say, "Sell it to the person down the street," and you say, "Well, we can't." It has no fair market value. 20 Well, I think I just outlined that 21 MS. HEMMINGSEN: **A**: we can. We can sell it for \$50 million, which we did 22 to Duke Point Power, and we'll receive a cheque for 23

cheque for that.

that, or we can sell it for \$14 million and receive a

1 what you're saying is that there's a market for it as salvage for which the value is \$14 million. 2 the answer is, its fair market value was \$14 million. 3 You put a price on it of \$50 million, but that is not 4 a fair market value because there is no market for it, 5 as you tell me. You can't sell it for \$50 million to 6 7 anybody except DPP. Clearly there is because a number MS. HEMMINGSEN: **A:** 8 of bidders proposed to buy it. 9 Well, if it is worth \$50 million, then MR. ANDREWS: Q: 10 11 you could have sold it to another bidder. And so you gave up a \$50 million asset and you got a \$50 million 12 13 cheque back, so how did that benefit Hydro? MS. HEMMINGSEN: I don't understand your logic. 14 **A**: Okay, I'll leave it at that. 15 MR. ANDREWS: Q: 16 refer you to 2.7.11: "Please provide the NPV of the greenhouse 17 18 gas costs embedded in the energy charge in the VIGP benchmark." 19 MR. SOULSBY: **A:** This can be calculated by multiplying 20 the dollar per megawatt hour GHC cost based on a \$10 21 22 per tonne figure by the dispatch energy from the QEM, 23 and taking the present value of that stream at 8 24 percent because the QEM does a monthly dispatch. This approach assumes a uniform dispatch pattern intra-25 26 year, which is not the case. The NPV is \$88 million

MR. ANDREWS:

Q:

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The question is, do you agree that by

1 the chain -- by changing from the structure of VIGP benchmark, with embedded greenhouse gas costs, to the 2 DPP structure, 88 million dollars of net present value 3 has been eliminated? Let's start there. 4 5 MR. SOULSBY: **A**: I don't agree with that, and I have no 6 way of knowing what Duke Point Power bid into their 7 prices. So to the extent -- and we've covered the ground that they are responsible, they're liable for 8 GHG costs. They, I'm sure, have a view of what the 9 GHG costs are and those have been presumably embedded 10 in their bid. But I can't -- I have no opinion as to 11 12 what. 13 MR. ANDREWS: The -- I've asked Hydro Panel 1 if Q: they had a -- if Ms. --14 MR. SOULSBY: Van Ruyven? 15 **A:** 16 MR. ANDREWS: Q: Van Ruyven, exactly; had an explanation for how the VIGP benchmark could have been 17 18 so much higher than DPP. And she didn't have a ready 19 explanation, except that there was a -- that DPP has 20 proposed, through a competitive process. And I would suggest to you that one of the major possibilities is 21 that where the pencils got sharpened was to do with 88 22 million dollars in greenhouse gas liabilities. 23 is your comment? 24 **A:** My comment is that B.C. Hydro included 25 MR. SOULSBY: 26 the 88 million dollars, with a 10 dollar per tonne

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- figure, into the VIGP benchmark calculation based on
  the direction from the Commission. And once again, I
  have no view of what -- how Duke Point Power has
  reflected their liabilities in their bid.
- 5 MR. ANDREWS: No further questions.
- 6 MR. FULTON: Mr. Hill.

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## CROSS-EXAMINATION BY MR. HILL:

- MR. HILL: Q: Okay. Just a couple of real quick ones, 8 in manner of explanation. The costs associated with 9 transporting and storage of gas, liquid natural gas, 10 pressure looping, et cetera; understanding there's 11 some mechanism to recover the costs of the 12 facilitation. How is the energy cost for converting 13 and unconverting to liquid natural gas shown in the 14 whole scale of economies here? In other words, it 15 16 costs energy, you know, if the guy in Chetwynd, if he phones up and says "I'm sending you ten cubic feet," 17 18 and you say, "Well, you know, by the time we get it 19 converted and unconverted, because we've got to store it for peaks, we only got eight left." Is that, like, 20 do you pay for eight -- you know, there's a difference 21 in the energy there. I'm just wondering where that 22 comes from. You know. 23
  - MR. SIMPSON: A: Are you -- sorry, I'm just trying to get some clarification. Are you referring to if we were to try to move gas on the Terasen system, and

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in total, for a combined use for compressors as well

won't be me.

1 as the LNG facility, about 5 percent of the gas that we would provide at the Huntington receipt point would 2 not be delivered to us at Duke Point, because it would 3 be consumed somewhere on the Terasen system. 4 don't -- if that helps you. 5 6 MR. HILL: Q: Well, that -- yeah. So that gas is then 7 -- so you pay for gas you didn't receive, is that right? 8 Well, you pay -- you have to pay the 9 MR. SIMPSON: **A:** cost of the gas that is required either to operate the 10 11 compressors on the Terasen system or, if it's going to go into LNG storage, there's certain gas gets consumed 12 in liquefying the gas, and a certain amount gets 13 consumed when it's subsequently vaporized. 14 gets -- all gets rolled into one single fuel ratio for 15 16 the whole system. MR. HILL: So that's shown in the heat rate? 17 0: MR. SIMPSON: **A:** No, it's in the -- I think within the 18 19 QEM there is a ratio specified which is like a loss factor. So if we delivered -- if we want to get 45 20 terajoules delivered to Duke Point, then we must 21 22 provide at Huntington 45 over 1 point -- 45 times 1.05, in order to account for the loss factor. 23 Okay. I'll buy it. I'm sure somebody 24 MR. HILL: Q: else will figure out what's wrong with it, and it 25

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- 1 Subject to the assets, I want to thank you for -- I think I have a better understanding now of 2 how the political economics works in regard to the 3 energy sector. It sounds like -- I don't know if I'm 4 wrong here, but were Duke Point to get to that asset 5 you're talking about, they'd have about a hundred 6 7 million bucks in it, would they? If they were to start again to do what you're selling them for 50, 60, 8 70 million. MS. HEMMINGSEN: Pardon me? **A**: 10 11 MR. HILL: Q: If they were to do again, to get to that asset of 70 million, how much would they have in it? 12 Like, how much have you guys got in that asset? 13 MS. HEMMINGSEN: Well, we spent 70 million dollars 14 **A**: 15 developing VIGP. Part of that cost, approximately 20
- developing VIGP. Part of that cost, approximately 20 million dollars, was for progress payments towards a gas turbine, which we ended, and exited, so there was no asset underlying that 28 million dollars. So that portion does truly represent sunk costs.
- 20 MR. HILL: Q: So B.C. Hydro has 70 million bucks spent now on this project, is that right?
- 22 MS. HEMMINGSEN: A: Approximately.
- 23 MR. SANDERSON: I think the number in the deferral account is 67.3, the last time that I looked.
- 25 MS. HEMMINGSEN: A: Mm-hmm.
- 26 MR. HILL: Q: Okay. So -- so how it works now is that

Page: 1636 1 you sell to Duke Point, ten bucks for ten bucks, and then they sell it back to you for ten bucks, and you 2 quys -- it's some -- or you -- they sell it back to 3 you for some undisclosed amount, somewhere in their 4 bid. And then you imply a credit somewhere. Okay. 5 6 MS. HEMMINGSEN: Α: Is that a question? 7 MR. HILL: Q: No, I'm just trying to get it in my head how that's working, and it just -- it's not going to 8 be easy. It sounds like there's -- I'm missing 9 something somewhere. But hopefully somebody will 10 still have that figured out. 11 I've understood there was about 100 million 12 13 dollars spent getting to this position. Proceeding Time 5:20 p.m. T47A 14 Yeah. As Mr. Sanderson outlined, I 15 MS. HEMMINGSEN: **A**: 16 think the correct figure is --MR. HILL: It's only 67. 17 Q: MS. HEMMINGSEN: **A**: -- 67 million. 18 19 MR. HILL: Q: Okay. You were talking to Mr. Quail. 20 You suggested that the long-term nature of this may have been driven by the bidders and their needs for 21 22 financing? MS. HEMMINGSEN: That was one of the considerations. 23 **A**: 24 The other consideration was the direction that we got

out of the VIGP decision to pursue on-Island

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generation.

1 MR. HILL: Q: Okay, well, what -- just regarding those

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- 2 bidders, what bidders would be looking for that long
- 3 term? You know, what type of bidder would be looking
- 4 for that long-term situation?
- 5 MS. HEMMINGSEN: A: Typically any bidder that was
- 6 looking to construct a new facility would be looking
- 7 for financing, and they would be looking to allocate
- 8 that financing and the repayment of that financing
- 9 over the longest term possible.
- 10 MR. HILL: Q: So you couldn't identify that --
- 11 MS. HEMMINGSEN: A: So they would like a secure cash
- 12 flow for as long as possible.
- 13 MR. HILL: Q: So you couldn't identify that as to what
- type of bidder would need that longer-term financing.
- 15 Like would smaller projects meet it or bigger
- 16 projects?
- 17 MS. HEMMINGSEN: A: Well, our experience with bidders
- is most of them need that.
- 19 MR. HILL: Q: Okay. Thank you.
- 20 MR. FULTON: Mr. Steeves.
- 21 MR. STEEVES: Good afternoon, Mr. Chairman. First of
- 22 all, my apologies to the Panel Commission. I got
- 23 caught up in a traffic snarl today and I didn't meet
- 24 the roll call.
- 25 CROSS-EXAMINATION BY MR. STEEVES:
- 26 MR. STEEVES: Q: So with that, I'd like to take your

1 commission to make a presentation, and in my presentation I would like to first start off by saying 2 to the delegates here that I'm sort of an outsider 3 here, and I'm caught up in a catch-up mode because I 4 haven't had time and also inclination to go through 5 all the material. And hence I spend most of my time 6 7 just going through the download material that's been coming through the e-mail, and hence I haven't covered 8 everything. So I have to rely on you a little bit to 9 get the appropriate information. 10 And with that in mind, I would like to 11 start off by following up on a question I proposed to 12 Ms. Bev --13 MS. HEMMINGSEN: 14 **A**: Van Ruyven. Yes, yesterday. This is in regards to 15 MR. STEEVES: Q: 16 a statement that she said that -- to just quote very quickly from my own statement here, it's in regards to 17 18 the technical review, reviews done for this project to 19 get through the pre-qualification stage. And she first also mentioned that there was an independent 20 reviewer, R.W. Beck. Is that an individual or --21 It's a firm. 22 MS. HEMMINGSEN: **A:** A consulting engineering firm. 23 MR. STEEVES: Q: they specialize in this particular technical area? 24 They specialize in making 25 MS. HEMMINGSEN: **A**:

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assessments of projects.

- 1 MR. STEEVES: Q: What type of projects?
- 2 | MS. HEMMINGSEN: A: A full range of projects. Mr.

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- 3 Eckert can speak to their qualifications.
- 4 | MR. ECKERT: A: They're a fairly large consulting
- engineer in the energy sector, and they would work on
- 6 all series of projects -- coal plants, gas plants,
- 7 renewable plants, hydro plants.
- 8 MR. STEEVES: Q: So they're consulting engineers. They
- 9 have the technical expertise with regards to turbine
- 10 systems, for example?
- 11 MR. ECKERT: A: They would have somebody in their
- practice that would have that expertise, yes.
- 13 MR. STEEVES: Q: Okay. Now let's see. I guess I'll
- throw out a general question, which is what I gave
- yesterday was in what areas were these technical
- analyses conducted? Again that's going back to this
- pre-qualification stage. What was done in that area?
- 18 Okay, please elaborate.
- 19 MR. ECKERT: A: Well, we had a fairly specific list of
- 20 mandatory criteria at the pre-qualification stage. If
- 21 you bear with me.
- 22 MS. HEMMINGSEN: A: We're just looking for an
- 23 information request that outlined the process that was
- 24 followed.
- 25 Proceeding Time 5:25 p.m. T48A
- 26 MR. ECKERT: A: I can answer it with what I've got

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I've got a -- the mandatory criteria, we applied two sets of mandatory criteria. There was a financial mandatory criteria which I'm not as familiar with. On the technical side we had criteria that applied to the bidder. So one of the criterias was that the bidder had to demonstrate that they had sufficient experience to actually construct the facility that they were proposing. So we would look to see whether or not there were members of the bidders team that had experience or whether the bidder was indeed in fact a firm that had constructed a similar facility. So we had criteria around that, around having an experienced bidder. With respect to the mandatory criteria --MR. STEEVES: Q: Excuse me. Just to interrupt here. Now you are saying this bidder in the technical aspect or technical end would be a person who, in their submission of their bid is putting in an application where they are like a consolidating agent who brings in the various equipment and expertise from outside and basically puts it together. He consolidates this information into the project, is that correct? MR. ECKERT: Well, what we did is we tried to be as **A:** flexible as we could. So recognizing that you could have -- you may have a company that had never built

in that terms.

**A:** 

MS. HEMMINGSEN:

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1 that project but they had a member on their team, a key member that they had employed that had previous 2 experience with a previous employer, we would accept 3 If a developer didn't have the expertise 4 internal, they could contract with a party and they 5 could demonstrate that they had that expertise through 6 7 their relationship with an engineering firm or a construction firm or somebody else. So we tried to 8 give us much latitude as we could around bidder 9 experience. 10 11 MR. STEEVES: Q: So in a sense you are relying on the, so to speak, the subcontractors in the projects that 12 are involved. 13 MR. ECKERT: That was one way in which they could 14 **A**: satisfy that criteria. It's fairly well outlined, I 15 16 think in there's an IR, BCUC IR 1.19.1 which lays out the specific criteria probably more exhaustively than 17 I would off the top of my head. 18 MR. STEEVES: Q: Okay, so just to quickly summarize on 19 this point then, both B.C. Hydro and the direct 20 applicant would not have technical expertise or 21 knowledge in detailed technical aspects per se, they 22 have to rely on the subordinate subcontractor type 23 people involved. That's a possibility. Let's put it 24

There's potentially two issues that

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Page: 1642 you are raising. One is B.C. Hydro accessed experts to help it in its assessment of the technical capabilities of the projects that bid in. So that's what the R.W. Beck role was. Bidders were required to demonstrate that they had their own technical experts to meet that mandatory criteria and deliver the project. MR. STEEVES: Okay. All right. Now, to follow up Q: on comments that were made earlier this afternoon by Mr. William Andrews, he brought up the subject of dual fuel systems and from my quick sort of investigation on the weekend, I came across a B.C. Hydro document. I was in a bit of a hurry and I didn't quite get the source where it came from, all I have here is on page 73 of B.C. Hydro document which gave a description of either it was VIGP project proposal or it's the Duke Point proposal, and in it they give the principle equipment which is a one gas turbine/generator and they list the manufacturer as General Electric model PG7241 FA. Is this the same equipment that is being used or proposed by Duke Point or has another model come in? Can you provide the model number again? MR. ECKERT: **A**:

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- Proceeding Time 5:30 p.m. T01B 24
- MR. STEEVES: It's PG 7241FA. 25 Q:
- 26 MR. ECKERT: **A:** That's the model turbine that they have

- Page: 1643
- included in their description of the project, which is an attachment to the EPA.
- 3 MR. STEEVES: Q: That's Duke Point you're referring to.
- 4 MR. ECKERT: A: That's the Duke Point -- that's the contract with Duke Point Power.
- 6 MR. STEEVES: Q: Well, what's disturbing here is, under
  7 the description of function, they list this turbine as
  8 a natural gas-fired only turbine. Not a dual fuel
  9 turbine. Only a natural gas fuelled turbine. Can you
  10 comment on that?
- Well, that's -- this project was 11 MR. ECKERT: **A:** actually tendered as a natural gas fired tolled 12 13 facility, and I'm not sure as to the document you're referring to that specifies it as only -- as gas only, 14 but the way they've tendered this, it's -- it was 15 16 tendered as gas-fired only. It's not the tender that's going forward. 17
- natural gas turbine, it is a natural gas turbine

  powered generator. Gas turbine. It is not designed

  for a dual fuel system, correct? This is the

  equipment that B.C. Hydro has sold or has proposed to

  sell --

So the equipment that we have, this

24 MS. HEMMINGSEN: A: No --

Q:

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MR. STEEVES:

25 MR. ECKERT: A: No, no, we've not sold -- we've
26 actually -- we're not selling the steam -- we're not

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selling a gas turbine to Duke Point Power. What we're selling to them is a steam turbine, and actually they're procuring all the other equipment that they would need. That's the only hard asset that we've provided to them is the steam turbine. So this is the

gas turbine that they've specified in their tender.

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- 7 MR. STEEVES: Q: Okay. So their tender does specify this particular gas turbine, this model.
- 9 MR. ECKERT: A: That's correct.
- 10 MR. STEEVES: Q: Which presumably is a gas-fired only turbine.
- 12 MS. HEMMINGSEN: A: That's right. That's what the
- MR. STEEVES: Q: And you have stated earlier that you are in negotiation with Terasen to secure fuel for a dual fuel arrangement.
- MS. HEMMINGSEN: A: No, I don't think that's quite what
  I said. I said we're in discussions with Terasen to
  secure the gas transportation that we require for a
  natural gas facility --
- 21 MR. STEEVES: Q: And if you don't get that, you need a dual fired turbine.
- MS. HEMMINGSEN: A: No, if we don't get that, one of our options is to pursue dual fuel at Duke Point's facility. It's currently not configured for that dual fuel option.

- 1 MR. SOULSBY: **A:** I don't think that document you're referring to there, which I understood to be a B.C. 2 Hydro document -- when it says it's a natural gas 3 fired only, I don't think it's conclusive in that the 4 design of that machine is only for natural gas. It so 5 happens, as Mr. Eckert has pointed out, that Duke 6 Point Power has tender -- has submitted a tender which 7 is currently -- which is only for natural gas. 8 -- neither is that conclusive that the design of the 9 machine is only for natural gas. 10
- MR. STEEVES: Q: Okay. I take it then that with the
  contractual -- the EPA that has been configured, has
  been written so far, is it going to remain only a
  natural gas or will it be natural gas and dual
  fuelled, or dual fuel?
- 16 MR. ECKERT: A: The contract that's been executed with
  17 Duke Point Power is for -- it's for a natural gas
  18 tolling dispatchable project. So any agreement to
  19 change that would be subject to the mutual agreement
  20 of B.C. Hydro and Duke Point Power, and subject to a
  21 negotiation between the parties.
- 22 MR. STEEVES: Q: And do you have any plans to change it?
- 24 MS. HEMMINGSEN: A: Not until we confirm what the status is with Terasen.
- 26 MR. STEEVES: Q: Okay. All right. Now, my second

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MR. STEEVES:

Q:

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question goes back to earlier this morning. it was Mr. Bois, he was saying that -- he brought up the issue of the two transmission lines going over to Vancouver Island. If one went down, tripped, the other would have to bear the load, and a figure of say, one hour, was possible. And then they would have to rely on the proposed Duke Point turbine system. And then later in the afternoon, Mr. Jim Quail brought up the issue of -- let's see. He was saying that the issue of the reliability and operating capacity was something like 97 percent. And you had a three percent maintenance downtime, is that correct? Proceeding Time 5:35 p.m. T2B MR. ECKERT: Yeah, that's actually not correct. **A**: There's a three month window within which the seller is entitled to schedule their scheduled maintenance. They've tendered a certain number of hours for scheduled maintenance, and they are required to be available 97 percent of any time when they are not experiencing a properly scheduled maintenance, and failure to achieve 97 percent availability on a monthly basis results in adjustments to their capacity charge. So there are penalties if they fail to meet the 97 percent availability on a monthly basis.

All right now, from my understanding,

1 this is a peak power plant. We are only supposed to be operating it for a certain period of time during a 2 period of -- during the year. Is that correct? 3 MR. ECKERT: I think there's evidence that we've 4 **A:** submitted that suggests that the plant -- we expect 5 the plant to operate over 80 percent of the time. 6 7 MR. STEEVES: Q: Eighty percent of being the turbine could be turned on in a sense and would be running in 8 idle without any load and is just turning --9 No, it would operating at full load for MR. ECKERT: **A:** 10 11 80 percent of the hours in the year. Okay. Well, going back to what Mr. 12 MR. STEEVES: Q: Bois said earlier in the morning about the one line 13 tripping and then having to rely on the single line 14 for one hour, I have it from capable sources that a 15 turbine system, that is an industrial gas turbine 16 takes a considerable length of time, say hours, as 17 18 opposed to maybe like a turbo fan jet engine on an 19 aircraft which only takes minutes. If the line trips, and it goes beyond say, 20 one hour, and if the turbine system is in maintenance, 21 what do you do after one hour? 22 I think the misconception we need to 23 MR. SOULSBY: **A:** 24 clear up here is that it's only this turbine which is providing the N minus 1 capability for the Island. 25 26 It's the system as a whole and so in any given hour we

1 must in fact -- in fact it's the BCTC that's operating the transmission system, we must maintain the N minus 2 1 criteria such that if the single largest element of 3 that system were to fail, the system would still 4 continue to run. So in the event that you are talking 5 about, the transmission line fails and the system for 6 7 the turbine is down, what do you do after one hour? MS. HEMMINGSEN: **A:** You go to operational measures. 8 MR. ECKERT: A: Yes, so my point is that they still 9 would have -- in order for that turbine to be down, 10 11 they still would have needed to be meeting the N minus 1 criteria in that hour. So again, the single largest 12 13 contingency needs to be met even when the unit is down. 14 That's all I have. 15 MR. STEEVES: Q: Okay. All right. 16 Thank you very much. THE CHAIRPERSON: I think that leaves you, Mr. Fulton. 17 MR. FULTON: It does, Mr. Chairman. 18 THE CHAIRPERSON: Let's sit until 6 o'clock. 19 20 MR. SANDERSON: Mr. Chairman, it has been a long day. Subject to Mr. Fulton's estimate, and bearing in mind 21 22 the scheduling issues for tomorrow, I'm wondering if I can ask you to reconsider that. If Mr. Fulton is on 23 24 track to be done in the morning, I'm wondering whether the next twenty minutes, given the length of today is 25

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the best use of the time.

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Information Requests from Duke Point Power filed it.

For some of the individuals, the e-mails keep bouncing

1 back as non-deliverable because of the attachments. Now, I just wanted to put on the record that if anyone 2 is experiencing that difficulty, we will provide them 3 with a hard copy. It just does not seem to want to go 4 on the e-mail. 5 Thank you for the indulgence, Mr. Chairman. 6 7 THE CHAIRMAN: Thank you. Now we have one more before we adjourn. 8 MR. BOIS: Mr. Chairman, I'm sorry. I don't have a 9 question for any of the panel, and I'm sure that they 10 would love to go home, so if you want to take a brief 11 second to excuse them, I'm at your leisure there. 12 THE CHAIRMAN: There's --13 MR. BOIS: But I just wanted to set on the record --14 15 THE CHAIRMAN: You're excused. Please proceed, Mr. Bois. 16 MR. BOIS: I just wanted to set on the record to make a correction. We could do this in the preliminary 17 18 matters, but I wanted to do it while it was fresh in 19 my mind. I earlier made the comment that Norske did not get the QEM model. I was mistaken. They did get 20 the QEM model. So just for the record. 21 22 THE CHAIRMAN: Okay. 23 MR. BOIS: Thank you, Mr. Chairman. 24 THE CHAIRMAN: Is there anything else before I adjourn? We are adjourned. 25

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(PROCEEDINGS ADJOURNED AT 5:41 P.M.)

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