

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 17, 2005

PROCEEDINGS AT HEARING

BEFORE:

R. Hobbs, **Chairperson**

L. Boychuk, **Commissioner**

VOLUME 6

APPEARANCES

G.A. FULTON
P. MILLER

Commission Counsel

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

B. C. Hydro

L. KEOUGH

Duke Point Power Limited

C.B. LUSZTIG
A. CARPENTER

British Columbia Transmission Corporation

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.
D. GATHERCOLE

BCOAPO
(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
T. HACKNEY

GSX Concerned Citizens Coalition
B.C. Sustainable Energy Association
Society Promoting Environmental Conservation

R. MCKECHNIE

Himself

R. YOUNG

Gabriola Ratepayers' Associations

K. STEEVES

Himself

CAARS

VANCOUVER, B.C.

January 17th, 2005

(PROCEEDINGS RESUMED AT 8:30 A.M.)

THE CHAIRPERSON: Please be seated.

Good morning. My name is Robert Hobbs, and with me is Commissioner Boychuk.

This is a hearing to review an electricity supply contract that was filed by B.C. Hydro on November the 19th, 2004, pursuant to Section 71 of *The Utilities Commission Act*.

Commission counsel for this proceeding will be Gordon Fulton and Paul Miller.

On November the 29th, 2004 I identified the staff that were involved in this proceeding. Since then, John Hunter has become involved as contract staff with respect to issues arising from the design of the CFT and the terms and conditions of the EPA. There have been no other staff changes.

The Hearing Officer will be Hal Bemister.

I will not take the time to describe the record as it stands today, other than to identify the proceeding days. On November the 29th, 2004 a procedural conference was held to hear submissions regarding the appropriate scope of this proceeding, and confidentiality. On November the 30th, 2004 the

1 Commission provided its determination with respect to
2 the scope of this proceeding. On December the 17th,
3 2004 the Commission Panel heard submissions regarding
4 an application by B.C. Hydro seeking relief from
5 responding to certain Information Requests. On
6 December the 22nd, 2004 the Commission Panel heard two
7 applications by GSX CCC regarding a reasonable
8 apprehension of bias. Further submissions were also
9 made regarding confidentiality. On January the 15th,
10 2005 there was a town hall meeting in Nanaimo.

11 By letter dated January the 14th, 2005 Exhibit C20-29,
12 counsel for GSX CCC *et al* request reconsideration of
13 decisions by this Panel. I will hear submissions
14 regarding the appropriate process for that application
15 when we finish today, at approximately 4:00 p.m.

16 By letters dated January the 14th, 2005,
17 counsel for B.C. Hydro, the JIESC and GSX CCC
18 requested that certain evidence from the VIGP
19 proceeding be admitted in this proceeding. The three
20 requests were approved, subject to any determinations
21 that I may make during this proceeding as to the
22 ultimate relevance of that evidence to the issues in
23 this proceeding.

24 **Proceeding Time 8:48 a.m. T02**

25 It is my intention to hear objections with
26 respect to relevance as they may either arise during

1 the proceeding or in final argument. However, if it
2 is suggested by counsel that it will be more efficient
3 to hear issues arising from that evidence prior to
4 cross-examination, then I may hear submissions in that
5 manner.

6 By letter dated January 13th, 2005, Exhibit
7 A-38, the Commission Panel circulated a proposed
8 schedule for this hearing. As stated in that letter,
9 I intend to chair this meeting so that the evidentiary
10 portion of this proceeding concludes by next Friday,
11 January 28th, 2005. The proposed schedule allocates
12 time to the various panels, with consideration of the
13 VIGP proceeding and decision, the Commission letter
14 dated January 23rd, 2004, and the materials filed to
15 date in this proceeding.

16 At the commencement of B.C. Hydro Panel 1
17 and Panel 3, I will ask the first intervenor to cross-
18 examine whether or not there has been an allocation
19 amongst the intervenors of the allocation of time. If
20 there has not been, I will allocate the available time
21 amongst the intervenors. If there has been an
22 allocation of time, I expect that I will expect that
23 allocation.

24 I will conclude my opening remarks
25 regarding the schedule by noting a submission by Mr.
26 Wallace at Exhibit C19-15 where he states at page 7:

1 "The counsel who will be appearing before
2 you are regulars before the BCUC and do not
3 have a reputation for asking repetitious,
4 redundant or irrelevant questions. They and
5 their clients should be given the respect
6 that this process requires."

7 Mr. Wallace, I agree. However, I also
8 intend to run this proceeding in a manner that I
9 believe is appropriate, and I expect my decisions,
10 whether participants agree with them or not, to be
11 followed. I will remind you of comments that I made
12 on November 30th, 2004 in Volume 2 of the transcript at
13 page 315 at line 8,

14 "And I will close..."

15 And this is closing the end of the comments with
16 respect to scope,

17 "...by acknowledging that the scope of the
18 review is beyond the scope anticipated by
19 B.C. Hydro and Duke Point. However, the
20 Commission Panel also intends to issue a
21 decision with respect to the EPA filing
22 within 90 days of its filing, and intends to
23 balance the need to avoid a violation of
24 planning criteria, arising from the zero
25 rating of the HVDC line, with the need for a
26 full and complete record on the issues

1 identified for this proceeding. And I will
2 expedite the process as necessary so a
3 decision is issued by February the 17th,
4 2005."

5 Of course, as I have already frequently
6 been reminded during this proceeding, my decisions are
7 reviewable by the Court of Appeal.

8 For the record, I should note that Exhibit
9 A-38 was first circulated and posted with an error
10 that has since been corrected. That's the schedule
11 itself. The error appeared on the schedule under the
12 column for January 20th, 2005. The second reference to
13 the B.C. Hydro Panel was to Panel 1 and it has been
14 corrected so that the reference is now to Panel 4. If
15 you have the earlier circulated copy, please change it
16 accordingly.

17 There are two revisions that I will now
18 make to the schedule. On Thursday we will take a two-
19 hour lunch break at 1:15, and you can expect that we
20 will sit longer than 4:00 p.m. on Thursday. The
21 second is to change the order the panels. The BCTC
22 Panel and the DPP Panel will be reversed in order so
23 that DPP will appear on Friday afternoon and BCTC will
24 appear on Saturday morning.

25 I will now take appearances, first from
26 B.C. Hydro, and then Mr. Fulton will call for

1 appearances.

2 **Proceeding Time 8:40 a.m. T03**

3 When you enter your appearance, please also
4 let me know if you have questions for B.C. Hydro's
5 first and third panel. I guess I should also add, if
6 we are ahead of schedule, that will be to my surprise
7 and to everyone else's surprise, but if we are ahead
8 of schedule then the panels will be expected to appear
9 when we are ready to hear from them.

10 Mr. Sanderson?

11 MR. SANDERSON: Thank you, Mr. Chairman. C. W.
12 Sanderson for B.C. Hydro. With me at counsel table
13 today is Miss Kane, initials H. M. Also over the
14 course of the hearing, Mr. Kleefeld, initials J. C.,
15 may also be at counsel table.

16 MR. FULTON: Duke Point Power Limited Partnership.

17 MR. KEOUGH: Thank you, Mr. Chairman. Loyola Keough for
18 Duke Point Power. I do not anticipate that I will be
19 questioning B.C. Hydro's panels. I'm sure that
20 doesn't surprise anyone. Thank you.

21 MR. FULTON: British Columbia Transmission Corporation.

22 MR. CARPENTER: Good morning, Mr. Chair, Commissioner.
23 Carpenter, initial A., for BCTC. We have not fully
24 determined what the extent of our participation is
25 going to be. It may depend on some evidence which
26 comes out during the course of the proceeding. At

1 this point, we don't expect to be particularly active,
2 and there may well be times where I will not be in the
3 hearing room. Mr. Lusztig will generally be here.
4 Thank you.

5 THE CHAIRMAN: Thank you.

6 MR. FULTON: Terasen Gas (Vancouver Island), Inc.

7 MR. PERTTULA: David Perttula, for Terasen Gas (Vancouver
8 Island), Inc. I don't anticipate that we'll be asking
9 questions of panels 1 and 3.

10 MR. FULTON: Westcoast Energy, Inc.

11 MR. STAPLE: Good morning, Mr. Chair. It's Greg Staple,
12 from Westcoast Energy. We don't expect to be active
13 in this proceeding.

14 MR. FULTON: Joint Industry Electricity Steering
15 Committee.

16 MR. WALLACE: R. B. Wallace, on behalf of the Joint
17 Industry Electricity Steering Committee.

18 THE CHAIRMAN: Mr. Wallace, do you intend to ask
19 questions of either Panels 1 or 3 of B.C. Hydro?

20 MR. WALLACE: Both.

21 MR. FULTON: Norske Canada.

22 MR. BOIS: Mr. Chairman, Madam Commissioner. Charles
23 Bois, B-O-I-S, on behalf of Norske. I anticipate
24 asking questions of both 1 and 3. They may be few in
25 number, though.

26 THE CHAIRMAN: Thank you.

1 MR. FULTON: Elk Valley Coal.

2 MR. NEWLANDS: Good morning, Mr. Chairman, Commissioner.

3 David Newlands, on behalf of Elk Valley Coal, sir. We

4 don't anticipate to be asking questions of 1 and 3.

5 THE CHAIRMAN: Thank you.

6 MR. FULTON: Green Island Energy.

7 MR. WEISBERG: Good morning, Mr. Chair. F. J. Weisberg,

8 appearing for Green Island Energy, Ltd. And we will

9 have questions for both Panels 1 and 3 of B.C. Hydro.

10 Thank you.

11 MR. FULTON: Village of Gold River.

12 MR. LEWIS: Good morning. David Lewis, for the Village

13 of Gold River. I do have questions prepared; however,

14 I'll try and be diligent in ensuring if they've been

15 answered previously, my involvement might be limited.

16 THE CHAIRMAN: Thank you.

17 MR. FULTON: Sea Breeze Power Corporation.

18 Commercial Energy Consumers.

19 MR. CRAIG: David Craig, Mr. Chairman, appearing for the

20 Commercial Energy Consumers, and we'll have questions

21 for the Hydro panels.

22 MR. FULTON: British Columbia Old Age Pensioners'

23 Organization, *et al.*

24 MR. QUAIL: Good morning. James Quail appearing, and Mr.

25 Richard Gathercole will also be joining us later in

26 the proceedings. I will have some very brief

1 questions for Panel 1, a fair number of questions for
2 2, nothing for 3, possibly some for 4.

3 THE CHAIRMAN: Thank you.

4 **Proceeding Time 8:45 a.m. T04**

5 MR. FULTON: GSX Concerned Citizens Coalition, B.C.
6 Sustainable Energy Association, Society Promoting
7 Environmental Conservation.

8 MR. HACKNEY: Good morning, Mr. Chair, Madam Panel
9 Member. Thomas Hackney, appearing for GSX Concerned
10 Citizens Coalition *et al.* H-A-C-K-N-E-Y. I do
11 anticipate that we will have questions for all the
12 panels, and those questions will be asked by Mr. Bill
13 Andrews, our counsel.

14 THE CHAIRMAN: Thank you.

15 MR. HACKNEY: Thank you.

16 MR. FULTON: Mr. Chairman, I had understood that Mr.
17 Andrews was also acting for B.C. Sustainable Energy
18 Association, the Society for Promoting Environmental
19 Conservation.

20 MR. HACKNEY: Yes, Mr. Andrews is going to be speaking
21 for all those groups.

22 MR. FULTON: Thank you.

23 R. McKechnie?

24 MR. McKECHNIE: Good morning. I'm here primarily as an
25 observer, and don't expect to be asking many
26 questions. However, if I hear something that I need

1 some information on, I'll let Mr. Fulton know.

2 THE CHAIRMAN: Thank you.

3 MR. FULTON: Gabriola Ratepayers' Associations?

4 MR. YOUNG: Randy Young, Gabriola Ratepayers. I do not
5 anticipate any questions. Thank you.

6 MR. FULTON: Mary McClennan? When I spoke to Miss
7 McClennan on Saturday, Mr. Chairman, I formed the
8 impression that she would not be here, and she has not
9 responded.

10 John Hague? No response.

11 J. A. Hill? No response.

12 K. Steeves?

13 MR. STEEVES: Good morning, Mr. Chairman. Keith Steeves,
14 appearing. I'm not sure if I'll have any questions at
15 this point in time.

16 MR. FULTON: Shady Brook Farm? Jim Erkiletian? Eric
17 Anderson? Sheila Malcolmson? Vanport Sterilizers,
18 Inc.?

19 No response to that last group of
20 intervenors, Mr. Chairman.

21 Is there any intervenor here today whose
22 name I have not called?

23 No response, Mr. Chairman. That would
24 conclude the list.

25 THE CHAIRMAN: Thank you. I think that brings us to you,
26 Mr. Sanderson, if you have an opening statement.@@

1 MR. FULTON: Before Mr. Sanderson takes the mike, Mr.
2 Chairman, there is one new exhibit, which was a letter
3 from Mr. Sanderson's office yesterday, January the
4 16th, 2005, relating to responses to certain
5 confidential IRs. And if that letter could be marked
6 Exhibit B-55?

7 THE HEARING OFFICER: B-55.

8 (LETTER FROM LAWSON LUNDELL, DATED JANUARY 16, 2005,
9 WITH ATTACHED RESPONSES TO CERTAIN CONFIDENTIAL IRS,
10 MARKED AS EXHIBIT B-55)

11 THE CHAIRMAN: Thank you.

12 **Proceeding Time 8:49 a.m. T5**

13 MR. SANDERSON: Mr. Chairman, before I commence an
14 opening, there's just two procedural matters. One is
15 update to one piece of evidence, and the other is
16 something that I hope is a convenience for all
17 participants.

18 The first, which I'm going to suggest on
19 Exhibit 4 in a moment, is a revision to the direct
20 testimony of Mr. Eckert, and Mr. Eckert's testimony
21 has previously been filed as part of Exhibit B-54.
22 And so I'm going to suggest that this revision simply
23 form Exhibit B-54A, and all it is is a revision to the
24 IRs for which Mr. Eckert claims responsibility, in
25 part. So I'm going to speak more about those
26 responsibilities during my opening, but for now I

1 think I'd like to circulate 54A. And there are copies
2 of that at the back of the room. I think everybody
3 should have had access to them.

4 THE HEARING OFFICER: B-54A.

5 (1-PAGE "AMENDMENT TO DIRECT TESTIMONY OF STEVE ECKERT
6 - QUESTION 9 - RESPONSIBILITY FOR RESPONSES TO
7 INFORMATION REQUESTS", MARKED AS EXHIBIT B-54A)

8 MR. SANDERSON: The other thing that I thought might be
9 convenient is, the way that the evidence in this
10 hearing is developed, various exhibits and IRs have
11 been updated as they've either been ruled on as in
12 scope or out of scope or they've been ruled on as
13 confidential or not confidential. And the result is
14 that you can't go to one place to find the IRs. They
15 sort of have a number of exhibit numbers, which is
16 going to be challenging for everybody.

17 What we've done is prepare a concordance
18 table and so that you can follow through each
19 intervenor's IR to B.C. Hydro by exhibit number, and
20 so I thought that might help the Panel, I thought it
21 might help everybody else. So we've put again copies
22 of that Table of Concordance at the fact. I don't
23 know that it needs an exhibit number. I leave that in
24 your hands. But I think it would be useful.

25 THE CHAIRPERSON: Yes, thank you.

26 I'm not hearing from Mr. Fulton. I'll

3	Proceeding Time 8:50 a.m. T06
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5 MR. SANDERSON: Mr. Chairman, with that, if I may, I do
6 have a brief opening.

8 This is an unusual hearing. In
9 consequence, the opening is a little unusual as well.
10 I say that because normally in an opening, counsel for
11 an applicant, at least, would be charged with laying
12 out the elements that the applicant sees as being
13 required, or to determine whatever form of permit is
14 sought or authorization given, requires, and then
15 would set about identifying the evidence that would be
16 called to meet that onus, and develop the basis for
17 that application.

22 I say this case is unusual, because there's
23 no statutorily-imposed requirement for an application
24 here. Indeed, as I've stressed on a number of
25 occasions during the preliminary phases of the
26 proceeding, there is really no applicant. Rather,

1 there's a contract and a willingness and an intention
2 of a party, a private party, developer to proceed to
3 construct a project which is fully permitted and
4 certificated already, pursuant to that contract.
5 There is also a willingness and intent in a buyer,
6 B.C. Hydro, to purchase the output of that contract.
7 Or the output of that project.

8 Against that backdrop, this proceeding
9 arises because there's a residual power in the
10 Commission to declare that contract, which forms the
11 economic and financial underpinning of the project,
12 unenforceable, in whole or in part. And as long as
13 there exists uncertainty with respect to the use of
14 the Commission's powers in that respect, under Section
15 71, the project cannot practically proceed. The
16 contractual arrangements between Hydro and Duke Point
17 recognize that reality, and in consequence there can
18 be no progress towards a solution to Vancouver
19 Island's capacity problems until this proceeding
20 concludes.

21 I emphasize that this proceeding is not
22 required by the *Act*. Indeed, as I've argued
23 previously, this proceeding is unprecedented, because
24 the Commission has never before, to my knowledge at
25 least, invoked its powers under Section 71 of *The*
26 *Utilities Commission Act* to conduct an oral public

1 hearing into a contract for the supply of energy to a
2 utility, either in the gas or electric context.

3 The Commission has explained the basis for
4 taking this unprecedented step in its VIGP decision
5 and in various communications to Hydro and the parties
6 since then. This has included its various rulings
7 with respect to the scope of the proceeding over the
8 past month. In Hydro's respectful submission, it's
9 entirely appropriate for the Commission to have scoped
10 this proceeding in that way; that is, because of the
11 statutory background, it's entirely both efficient
12 and, in my respectful submission, appropriate for the
13 Commission to define what it wants this hearing to be
14 about.

15 I say it's appropriate for the Commission
16 to define the scope because, without that definition
17 there is no identification of what it is that Hydro is
18 required to demonstrate. That is, there exists a
19 contract that absent Commission intervention Hydro is
20 free to proceed with, as is Duke Point Power. The
21 Commission has said that it wishes to be satisfied of
22 certain things before it will confirm to the parties
23 that it will not interfere with that contract. It's
24 therefore for the Commission to define what those
25 things are, and for Hydro and Duke Point to do their
26 best to satisfy the Commission with respect to those

1 things.

2 On this view of the process, we're all here
3 at the invitation of the Commission to deal with the
4 Commission's issues. It's not just the master of
5 process, insofar as this proceeding is concerned.
6 It's also the master of the focus and of the
7 substance. If its concerns with respect to the public
8 interest, issues raised by the contract are confined
9 to two or three matters, it's quite free to limit the
10 scope of this proceeding to obtaining evidence with
11 respect to those matters.

12 **Proceeding Time 8:55 a.m. T7**

13 The Commission was under no obligation to
14 engage in this inquiry in the first place, and having
15 decided to engage in it, may quite properly define its
16 scope. In short, it is for the Commission and the
17 Commission alone to decide the issues on which it
18 needs to receive evidence in argument.

19 On that basis, Hydro has set out in this
20 proceeding to first anticipate the scope of the
21 Commission's inquiry, and second, supplement its
22 evidence in those areas where it failed to anticipate
23 accurately. And I need to elaborate on both aspects
24 of that proposition.

25 I think B.C. Hydro has been clear from the
26 beginning of this process, that is the CFT process

1 review, that it had interpreted the VIGP decision to
2 require it to run the CFT process so as to confirm the
3 costs of alternative projects for meeting the capacity
4 needs of Vancouver Island at or near their expected
5 values. And I refer in saying that to page 78 of the
6 VIGP decision. Thus, going into the CFT process Hydro
7 had a firm view of what it would cost for it to
8 construct a combined cycle gas turbine at Duke Point.

9 The Commission concluded that while it
10 didn't doubt the veracity of that estimate, it was not
11 persuaded that the project as identified was the most
12 cost-effective solution. It acknowledged that there
13 was no comparable level of certainty or confidence in
14 the various other solutions being mooted in that
15 proceeding, but recommended a tendering process so as
16 to enable those with alternate projects to be able to
17 come forward on a level playing field and commit, if
18 they could, to a project that was more economical for
19 B.C. Hydro and its ratepayers than Hydro's initial
20 VIGP proposal.

21 Hydro accepted the Commission's
22 encouragement and did run a CFT process. The CFT
23 process did a number of things. First, it
24 demonstrated the wisdom of the Commission's initial
25 decision, in that it led to competitive bids which
26 will cost Hydro less than it would have cost Hydro to

1 construct the VIGP project. It also provided an
2 opportunity for a significant number of diverse type
3 projects to come forward and see if they could meet
4 Hydro's criteria for a project to meet its needs in a
5 transparent, fair, unbiased environment. And the
6 result, the project that was able to meet those needs
7 most cost-effectively turned out to be Duke Point
8 Power's proposal.

9 Hydro cannot explain why Duke Point Power
10 was able to offer a bid that met its needs most cost-
11 effectively. Hydro is not a proponent of the Duke
12 Point project. From Hydro's perspective the only
13 virtue of Duke Point is that it has come forward and
14 committed to meet Hydro's needs in the manner which is
15 most cost-effective for it and its ratepayers. Hydro
16 would have been very pleased if even more cost-
17 effective solutions could have been found. It does
18 not say that Duke Point Power is the best of all
19 hypothetical projects. It does say that Duke Point
20 Power is the best project which came forward and
21 submitted a bid in the completely open and transparent
22 process that Hydro fostered. As a buyer, Hydro has no
23 ability to do anything more than that.

24 In that last comment, I want to emphasize
25 what is, I think, properly called a paradigm shift.
26 In VIGP, Hydro accepted the burden of demonstrating

1 that its project was better than anything the market
2 could offer. The Commission determined that it hadn't
3 met that burden. When Hydro then turned to the
4 market, it freed itself from the burden of
5 demonstrating particular virtues of the winning
6 project. Duke Point's virtue is that it is prepared
7 to sign an EPA which delivers the required product in
8 the required form in the most cost-effective way.

9 Based on that perspective, Hydro
10 anticipated that the primary burden upon it going into
11 the proceeding would be to demonstrate that the CFT
12 process was properly run, was open to all potential
13 parties able to meet its needs on Vancouver Island,
14 and did elicit healthy competition such that the
15 Commission could be confident that the outcome was
16 cost-effective. That was the focus of the CFT process
17 report filed on these proceedings and forming Exhibit
18 B-1.

19 The Commission has in its scope rulings
20 determined that that focus was too narrow, and that's
21 what I meant earlier when I said to some extent Hydro
22 anticipated the issues that would be within scope, and
23 it's to some extent failed. It anticipated the focus
24 on the process described in the CFT report in the
25 manner I've described. It did not anticipate some of
26 the additional areas where the Commission has

1 indicated it wishes to be satisfied that permitting
2 the contract to proceed is in the public interest.

3 In particular, it did not anticipate the
4 Commission's determination that the overarching issue
5 for this proceeding is, to quote the Commission, is
6 Tier 2, Tier 1, or the no award option the most cost-
7 effective option to meet the capacity deficiency on
8 Vancouver Island commencing in the winter of 2007-08.

9 **Proceeding Time 9:00 a.m. T08**

10 B.C. Hydro will lead its additional evidence with
11 respect to that issue, and the sub-issues that fall
12 out of it, in the four panels that I'm about to
13 describe. So, B.C. Hydro's attempt here is to
14 supplement the CFT report with the testimony that's
15 found in the direct testimony that's been pre-filed,
16 and the evidence that's about to be given, to meet the
17 specific issues the Commission has raised.

18 The first panel that it will call to do
19 that will be its policy panel, and that will consist
20 of Miss Van Ruyven, who's well known to the
21 Commission, the Senior Vice-President, Distribution,
22 for B.C. Hydro. She had executive responsibility in
23 association with the process from the fall of 2003
24 through to the present time, and will be prepared to
25 respond to questions relating to B.C. Hydro's overall
26 policy in connection with the acquisition of capacity

1 on Vancouver Island.

2 B.C. Hydro's second panel will speak to the
3 CFT process from its beginning until the completion of
4 the bidding process and the opening of the tenders in
5 the fall of 2004. And I want to be clear as I go
6 through this that from B.C. Hydro's perspective, and
7 from the way the panels are structured, there is a
8 division in process at the time the bids were opened,
9 in October of 2004. Panel 2's evidence will basically
10 stop with the opening of those bids in October, 2004,
11 and the testimony will cover the design of the process
12 and the original Call for Tender documentation issued
13 on October 31st, 2003; the development of mandatory
14 criteria that would ensure Hydro obtained bids
15 responsive to its needs; the interaction between B.C.
16 Hydro, bidders and the Commission during the CFT
17 process; Hydro's response to the Commission's January
18 23rd, 2004 letter; the suspension of the CFT process in
19 early 2004; the issuance of addendum 10; and the
20 resumption of the process in March, 2004; and the
21 prequalification and bidding process through the
22 summer of 2004.

23 The panel will also cover the evaluation
24 methodology used within the QEM for -- that is, the
25 quantitative evaluation methodology, I'll use the
26 words "QEM" for that throughout; for assessing the

1 cost to B.C. Hydro associated with each bid.

2 So the entire public bidding process, both
3 its design, its inception and its execution, will be
4 the subject matter of the testimony of Panel 2.

5 That panel will testify that the purpose of
6 the QEM was to minimize the cost of acquisition to
7 Hydro and thereby minimize the impact on its
8 ratepayers of acquiring new resources on Vancouver
9 Island.

10 The panel will be chaired by Miss
11 Hemmingsen, who is the Manager of Power Planning and
12 Portfolio Management for B.C. Hydro. Miss Hemmingsen
13 has testified most recently in the revenue requirement
14 proceeding, and she had overall responsibility for
15 managing the CFT project. Her direct testimony, filed
16 in this proceeding, elaborates her specific
17 involvement. Her testimony has a fair amount of
18 substance in it, and was stipulated along with all the
19 other testimony on January 6th.

20 Joining Miss Hemmingsen on this panel will
21 be Mr. Chris O'Riley. Mr. O'Riley is the Chief Risk
22 Officer of B.C. Hydro. Prior to that, he sat on the
23 Risk Management Committee of Hydro, and he was
24 responsible for the gas and electricity price
25 forecasts that were inputs to the QEM, so he will be
26 able to handle any questions relating to price

1 forecasting.

2 THE CHAIRMAN: Is Miss Hemmingsen still responsible for
3 load forecast? She's not the person that's the doer,
4 if you will, but is she --

5 MR. SANDERSON: She is responsible, in the sense that it
6 is her department that prepares the load forecast.

7 THE CHAIRMAN: Right.

8 MR. SANDERSON: I will come to where the load forecast
9 witness appears, which is not on Panel 2, and I will
10 explain why that's so, in just a minute. And just to
11 foreshadow that, questions with respect to load
12 forecasting, it's my hope, can be dealt with in Panel
13 4.

14 Mr. O'Riley, as the Chief Risk Officer and
15 a member of the Risk Management Committee, can also
16 speak to the analysis within Hydro that determined
17 Hydro ought to be willing to assume a gas supply risk,
18 but was not in a position to assume the fuel supply
19 risk associated with alternate fuels. So the gas
20 supply risk issue, if I can call it that, which is, I
21 think, squarely raised in both the Commission's
22 rulings and some of the intervenor evidence, questions
23 about that should probably be addressed to Mr. O'Riley
24 on Panel 2.

25 Mr. Steve Eckert will also appear as part
26 of Panel 2, and it was the corrections to his evidence

Proceeding Time 9:05 a.m. T9

Finally on Panel 2, Mr. Graeme Simpson, who is the manager of gas supply for the Generation Business Development Unit within Hydro. He appears on this panel to deal with any issues associated with the cost of gas transportation in association with the project. So he will cover both the cost of gas

1 transportation -- not the cost of gas but the cost of
2 gas transportation; and any risks associated with gas
3 transportation issues. That is the extent of Panel
4 2's testimony.

5 Panel 3 will then provide testimony with
6 respect to the role of the independent reviewer. The
7 CFT process was subjected to a very high level of
8 independent scrutiny, and the role of the independent
9 reviewer throughout was prominent. The independent
10 review was carried out by PricewaterhouseCoopers with
11 a team that included two highly experienced
12 specialists in the independent reviewer role brought
13 in especially by PWC for that experience. The panel
14 will comprise Mr. Mark Hodson from PWC; Mr. Peter
15 Sorenson, who has extensive experience as an
16 independent reviewer, he's not directly with PWC, in a
17 broad variety of Canadian governmental and Crown
18 agency bidding processes; and Mr. Wayne Oliver, who
19 has broad experience in the independent role in the
20 U.S. and Canadian Power Contracting. Finally on that
21 panel will be Mr. Leon Cender, who is the manager of
22 decision support and analysis within Power Planning
23 and Portfolio Management Group at Hydro, and he served
24 as liaison between the independent review team and
25 B.C. Hydro.

26 The CFT process, as I foreshadowed earlier,

1 completed with the tendering of an opening -- with the
2 tendering and the opening of the bids and the final
3 report of the independent reviewer. This occurred in
4 mid-October 2004. As set out in the testimony of Ms.
5 Hemmingsen and in the CFT report itself, after the CFT
6 process was completed, Hydro undertook a final cost-
7 effectiveness analysis to ensure that it was
8 appropriate to sign the EPA. That process was
9 conducted in the latter half of October 2004, and
10 management's thinking in respect of requiring that
11 process can be elaborated by Ms. Van Ruyven in Panel
12 1, but Ms. Hemmingsen will be returning to the stand
13 to speak to what was actually done in response to that
14 request, that is the request for a further check that
15 occur in October, and that will be the subject matter
16 of the testimony of Panel 4.

17 On that panel she will be accompanied by
18 Mr. Bill Peterson, who is the manager of Program and
19 Contract Design at B.C. Hydro; and Mr. Frank Lin, who
20 is the supply investment specialist for program and
21 contract design. And they both assisted her in
22 conducting that evaluation. And finally on that panel
23 will be Mr. Ken Tiedemann, who is the manager of
24 Market Forecast, i.e. the load forecast, for Hydro.

25 A summary of their work appears as Appendix
26 J to Exhibit B-1. So that panel will be speaking, in

1 essence, to Appendix J. But Mr. Tiedemann is on the
2 panel because, as the testimony will make clear, the
3 load forecast was not employed as an input or as a
4 material influencer in the CFT process itself. That
5 is, in the QEM methodology the load forecast was not
6 an input. Rather, the needs were determined not by
7 the load forecast but rather by the Commission's
8 previous determination of what the minimum amount of
9 capacity required on the Island was. And that drove
10 the QEM.

11 **Proceeding Time 9:10 a.m. T10**

12 One of the differences between the QEM and
13 the later cost-effectiveness study was that when it
14 came to the cost-effectiveness study in October, or
15 the cost-effectiveness check, I think "study" is
16 probably putting too grand a word on it; that took
17 into account the then-current circumstance, and that
18 included the load forecast. And so Mr. Tiedeman's
19 testimony is relevant in the context of the work of
20 Panel 4, where it's not particularly relevant in the
21 context of the work of Panel 2.

22 I wanted, again, because of the
23 Commission's interest in efficiency here, to go one
24 step further in terms of defining what the witnesses
25 can speak to, and go through the Commission's issues
26 as itemized in the November 30th scoping decision, and

1 indicate where I think those issues arise, which panel
2 can best deal with them. I also will touch on the
3 issues that are sort of clearly on the table, from the
4 point of view of intervenors and attempt to give some
5 direction there in terms of which panel might be most
6 useful to them.

7 The first issue, and this is just grouped
8 generally arising from the November 30th decision, but
9 grouped a bit, and in no particular order other than
10 the order they appeared there, that the first was the
11 timing of the 230 kV transmission line. And that
12 issue does not arise, we don't believe, in the context
13 of the QEM process, because for that process,
14 transmission deferral credits will be entirely
15 eliminated in the consequence of the Commission's
16 January 23rd letter. They did, however, get
17 considered. That is, the timing of the transmission
18 line got considered in the context of the cost-
19 effectiveness study. So that's a Panel 4 issue.

20 With respect to the terms of the EPA, which
21 the Commission has determined are in scope to the
22 extent they may treat projects of different types
23 differently, Panel 2 will be able to deal with those
24 questions: Miss Hemmingsen, in terms of the overall
25 approach, Mr. Eckert in terms of the commercial
26 arrangements that Hydro was seeking to develop through

1 the EPA and, as previously indicated, Mr. O'Riley on
2 the fuel supply risk issue.

3 Performance risk, including availability
4 and reliability of risk -- sorry. Availability and
5 reliability risk, and the penalty provisions, that is,
6 the assignment of risk around that in the EPA, will be
7 the subject matter of Mr. Eckert's testimony.
8 Questions can be directed to him. But that focuses
9 only on Duke Point Power. So Mr. Eckert is prepared
10 to talk to the EPA, and the mandatory criteria in that
11 respect, as they relate to the successful project.
12 Availability and reliability risk were also considered
13 in the comparative analysis that was undertaken as
14 part of the cost-effectiveness study, and so for the
15 comparative questions, those are best addressed as
16 part of Panel 4.

17 Mr. O'Reilly, on Panel 2, can also deal
18 with gas supply risk issues, which were identified as
19 a separate matter in the Commission's scoping ruling,
20 along with my previous indication that he can deal
21 with electricity and gas price forecasts as well.

22 Gas transportation costs and risks, as I've
23 indicated, are all Mr. Simpson on Panel 2.

24 Load forecasting, as I've indicated, is a
25 Panel 4 issue, and can be dealt with by Mr. Tiedeman.

26 The CFT criteria, including mandatory

1 criteria and QEM criteria, are, in terms of rationale
2 and application, within the CFT process the subject
3 matter of Mr. Eckert's testimony. He chaired the
4 technical subcommittee of the evaluation subcommittee,
5 so will speak to all technical aspects of the issue.
6 To the extent that the issue of the relative merits of
7 different solutions with -- was revisited in the cost-
8 effectiveness study, Panel 4 can deal with that in --
9 at least in the context of the Tier 2 and no award
10 scenarios.

11 **Proceeding Time 9:15 a.m. T011**

12 I think I've probably caught, or I
13 certainly intended to catch, all of the in-scope
14 issues that the Commission identified. There are some
15 sub-sets that fall within that, that intervenors have
16 raised. The first of those that I'll highlight is the
17 value of energy. In the cost-effectiveness study the
18 value of the different amounts of energy, that the
19 different solutions could produce, is clearly in
20 issue. With respect to the value of energy that can
21 be produced from Duke Point, there are both Panel 2
22 and Panel 4 aspects. On Panel 2, Mr. O'Reilly can
23 speak to the assumptions with respect to gas and power
24 prices, as I've already discussed, and Mr. Soulsby
25 will speak to the application of those assumptions
26 within the QEM.

1 So to the extent there's questions about
2 "how did the price forecast influence the evaluation
3 within the QEM," that can be dealt with by the
4 combination of Mr. O'Reilly and Mr. Soulsby on Panel
5 2. The impact of those same inputs on Tier 1 and no
6 award were not considered as part of the QEM, but were
7 considered as part of the cost-effectiveness study.
8 And so the comparative evaluation between the three
9 scenarios, Tier 1, Tier 2 and no award, in respect of
10 the value of energy produced, can be addressed to
11 Panel 4.

12 And just to summarize that, the input
13 assumptions on the price forecasts come from Mr.
14 O'Reilly on Panel 2. Their application in the
15 comparative work should be pursued in Panel 4.

16 There's also some interest apparent in the
17 intervenor evidence with respect to non-price
18 portfolio comparisons; that is, the relative
19 reliability of the different scenarios. And again,
20 questions concerning the terms of the mandatory
21 criteria, and the provisions of the EPA should be
22 addressed to Panel 2. However, to the extent that
23 parties wish to address the non-price comparison
24 across the different scenarios, and in particular
25 address Hydro's evidence relating to relative
26 reliability, which was filed as part of an attachment

1 to Exhibit B-54, those questions should be addressed
2 to Panel 4.

3 Greenhouses gases is also been raised as an
4 issue by at least one intervenor. And that -- Hydro's
5 position on greenhouse gases is really a product of
6 its view of the assignment of responsibilities within
7 the EPA, and so that's the place to address that, that
8 is, Panel 2 with Mr. Eckert, who is able to explain
9 how the EPA assigns responsibility for any costs
10 associated with greenhouse gas emissions.

11 The load forecast is clearly an issue.
12 I've dealt with that, and that's Panel 4.

13 Payments under the VIGP transfer agreement
14 are raised by one intervenor, at least. With respect
15 to the application of that payment, in the valuation
16 of the bids, that is, within the QEM model, the
17 questions should be addressed to Miss Hemmingsen, on
18 Panel 2. However, with respect to the effect of this
19 payment in the cost-effectiveness study, and also for
20 its analysis -- an analysis of its effect in the
21 context of future rates, questions should be addressed
22 to Mr. Petersen on Panel 4.

23 And finally, Norske's DSM proposal has also
24 attracted interest of intervenors. Any questions
25 relating to it from Hydro's perspective should be
26 addressed to Panel 4, because that proposal was not

1 bid in to the CFT process and thus form no part of the
2 evaluation that Panel 2 will speak to.

3 As I foreshadowed that I would, I wanted to
4 say a little bit more about the assignment of IRs. We
5 made an attempt, when we filed the direct evidence on
6 January 6th, to assign the IRs by witness. As the
7 number of IRs grew, and the line-up of witnesses
8 evolved, there had been changes to those
9 responsibilities. I'm going to ask the Commission and
10 parties' indulgence, we just haven't had the
11 opportunity to true up the final allocations of IR
12 responsibilities on a witness-by-witness basis.
13 Guidance can be given by what's in the direct
14 testimony but, as I'll develop in my direct of that
15 testimony, I don't want to be taken to say that that's
16 precisely accurate and parties ought to feel free to
17 address their questions on particular IRs to whoever
18 it's becoming apparent is best able to deal with their
19 concern. And use what we offer there as a guide, but
20 a guide only.

21 Hopefully, what I have just indicated in my
22 opening remarks is a general sort of subject matter
23 guide that will be of assistance to parties in scoping
24 and directing their questions as well.

25 **Proceeding Time 9:20 a.m. T12**

26 There is also one other point I should

1 clear up on the record, and that is that the
2 Commission has indicated it intends to issue a
3 decision by February 17th. Under the terms of the EPA,
4 either party has the right to terminate the contract
5 if this process is not concluded by February 14th,
6 2005. I don't think the Commission has ever been
7 apprised of that.

8 To accommodate the Commission's timetable,
9 the parties have agreed to delay the termination right
10 until February 18th, 2005. So that that amendment has
11 been agreed to in principle between the parties. DPP
12 will still be required to meet its performance
13 commitments as of March 1.

14 So the real date if you want is the March 1
15 date in terms of the performance. And what the two
16 weeks gave was Duke time to get organized once it knew
17 the outcome, and it's agreed to that date being
18 extended to February 18th. And once that amending
19 agreement is nailed down, which it isn't quite yet,
20 it'll be filed.

21 So absent any more introductory questions,
22 Mr. Chairman, I think that completes my opening and
23 I'm ready to call the first panel.

24 THE CHAIRPERSON: Please proceed.

25 MR. SANDERSON: Thank you. If I could call Ms. Van
26 Ruyven then, please, to the stand.

1 **B.C. HYDRO PANEL 1 - POLICY**
2 **BEVERLEY RAE VAN RUYVEN, Affirmed:**
3 **EXAMINATION IN CHIEF BY MR. SANDERSON:**
4 MR. SANDERSON: Q: Good morning, Ms. Van Ruyven. I
5 wonder if I could ask you to state your name.
6 MS. VAN RUYVEN: A: Beverley Rae Van Ruyven.
7 MR. SANDERSON: Q: And your position with B.C. Hydro?
8 MS. VAN RUYVEN: A: I'm the senior vice-president of
9 Distribution.
10 MR. SANDERSON: Q: How long have you held that
11 position?
12 MS. VAN RUYVEN: A: Since November, 2003.
13 MR. SANDERSON: Q: And what were your previous
14 positions with Hydro?
15 MS. VAN RUYVEN: A: I was the vice-president of Power
16 Smart, and prior to that, the manager of Key Count
17 Management.
18 MR. SANDERSON: Q: And before you joined Hydro?
19 MS. VAN RUYVEN: A: I held several management positions
20 with Canada Post Corporation between 1982 and 1997.
21 MR. SANDERSON: Q: Have you previously testified before
22 this Commission?
23 MS. VAN RUYVEN: A: Yes, I have in the VIGP hearing and
24 the revenue requirements hearing.
25 MR. SANDERSON: Q: And with respect now to the CFT
26 process that's the subject matter of this hearing,

1 what role have you played in connection with that
2 process?

3 MS. VAN RUYVEN: A: That question is answered in the
4 direct testimony of Panel 1, which I understand is
5 filed as Exhibit B-35 under the heading "Direct
6 Testimony of the Policy Panel".

7 MR. SANDERSON: Q: Right, and since you've referred to
8 that exhibit and that testimony, do you adopt that
9 direct testimony as your own in this proceeding?

10 MS. VAN RUYVEN: A: I do.

11 MR. SANDERSON: Q: Do you have any changes or
12 amendments to it?

13 MS. VAN RUYVEN: A: No.

14 MR. SANDERSON: Q: Does that complete your testimony?

15 MS. VAN RUYVEN: A: Yes, it does.

16 MR. SANDERSON: Q: Thank you.

17 Ms. Van Ruyven is ready to accept questions
18 and cross-examination, Mr. Chairman.

19 THE CHAIRPERSON: Thank you. I think that brings us to
20 you, Mr. Wallace.

21 Mr. Wallace, has there been an allocation
22 of the time allotted amongst the intervenors with
23 respect to cross-examination of this panel?

24 MR. WALLACE: Not that I'm aware of, Mr. Chairman.

25 THE CHAIRPERSON: Then I will do so now. I count eight
26 that wish to cross-examine this panel, including

1 Commission counsel. I will give the two first
2 intervenors to cross-examine twenty minutes each, and
3 then everyone else fifteen minutes. And when the
4 intervenors finish cross-examination, I will give
5 consideration to the allotted time for Mr. Fulton.

6 MR. QUAIL: Mr. Chairman, James Quail appearing. I will
7 only require five minutes with this panel, so I am
8 pleased to donate my other ten minutes to Mr. Wallace.
9 I anticipate he'll be covering some territory that
10 otherwise I would have covered. It would be much more
11 efficient to proceed in that manner.

12 THE CHAIRPERSON: I appreciate that and I'm sure Mr.
13 Wallace does as well.

14 MR. WALLACE: Well, actually I may not need much time.
15 But yes, I do, if I need it, thank you.

16 MR. BOIS: Mr. Chairman, I too don't have very many
17 questions for Ms. Van Ruyven, just a couple, so I
18 don't expect that I'll need the full twenty minutes at
19 all.

20 THE CHAIRPERSON: Okay. Mr. Wallace, my impression is
21 that you have in the order of forty minutes if you
22 wish it.

23 MR. WALLACE: Thank you, Mr. Chairman. I will ask my
24 questions and we'll see where we are at the end of
25 forty minutes, or before.

26

Proceeding Time 9:25 a.m. T13

1 **CROSS-EXAMINATION BY MR. WALLACE:**

2 MR. WALLACE: Q: Ms. Van Ruyven, you indicate in the
3 pre-filed evidence that senior management provided
4 general direction throughout the process, but did not
5 have specific responsibility for any particular
6 section. I guess my question is, did senior
7 management provide direction in any specific areas?

8 MS. VAN RUYVEN: A: Yes, I think we set the guidelines
9 at the very beginning for the project management team
10 to follow as they set the terms and conditions of the
11 Call for Tender. I have filed an opening statement
12 and in there, I do talk about four particular
13 guidelines that we set.

14 First, we needed a process that would
15 result in a competitive outcome, and that would
16 achieve the capacity shortfall that we had on
17 Vancouver Island. So we wanted to make sure that that
18 was an overriding principle around reliability, that
19 we would get something in place in addition by
20 November of 2007.

21 We also wanted to be as consistent as
22 possible with the Commission recommendations, both
23 through the VIGP decision as well as the January 23rd
24 letter, and that was also a guiding principle. We
25 believed by doing so, would minimize more regulatory
26 delay.

1 Third, we wanted a process that was not
2 only fair and transparent, but also credible to the
3 independent power producers, so that we would have a
4 robust competition and we would get many sources of
5 supply bid in, and that we would have a good
6 competitive process that had credibility. And
7 finally, we required the solution to be cost-
8 effective.

9 So from a management oversight perspective,
10 we set those guiding principles up front. We set a
11 project management framework structure with a Call for
12 Tenders steering committee. I was the executive
13 sponsor on that steering committee, and the director
14 of the project management office reported to me, and
15 then we oversaw, through the process, key milestones.
16 We had regular reports, both to the steering
17 committee, the executive management committee, to the
18 Board over about a year period of time. And we're
19 involved in some key decisions through that.

20 MR. WALLACE: Q: Okay, thank you. Did -- and I guess
21 those are very general goals. My concern is, did
22 senior management provide direction with, for example,
23 fuel price risk?

24 MS. VAN RUYVEN: A: We talked about fuel price risk,
25 because that was obviously a key decision to make,
26 whether or not we would take the fuel price risk, and

1 that was discussed at the steering committee level,
2 which consisted of four of the executives on the
3 executive committee, was the CFO, the Chief Risk
4 Officer, myself, and the Executive Vice-President of
5 Generation. So we discussed from a policy perspective
6 about gas price risk.

7 MR. WALLACE: Q: Okay. And did you issue instructions
8 with respect to taking the gas price risk, for
9 example, but not taking the oil price risk in a dual-
10 fired facility or not taking an alternative fuel risk?

11 MS. VAN RUYVEN: A: We discussed that from a high-level
12 perspective. Really, again, around some overriding
13 principles. We talked about the fact that we felt we
14 were in a better position to take that gas price risk.
15 We talked about the fact that taking the gas price
16 risk, if a gas-fired project was successful, would
17 allow us some flexibility in dispatching it as part of
18 an integrated system. And we also talked about trying
19 to make this a competitive process where lots of
20 projects bid in. By taking the gas price risk we knew
21 we would have smaller gas projects who were not able
22 to take on that price risk bidding in, so that we
23 would have a better chance to have a portfolio that
24 aggregated with small projects to the minimum of 150.

25 So from a high-level perspective, those
26 were the things that we talked about at the steering

1 committee meeting, which ultimately led to the project
2 management team making the decision to take the gas
3 price risk.

4 MR. WALLACE: Q: Okay, so the decision in the end was
5 with the project management committee?

6 MS. VAN RUYVEN: A: That's correct.

7 MR. WALLACE: Q: Was there any direction with respect
8 to it? And again, I'm concerned -- did you talk at
9 the senior level about the fact that, if you took the
10 gas price risk, that may make other projects with
11 different fuels, or dual fuels, not competitive and
12 may -- they may not bid in, even though you're
13 encouraging small gas projects to bid in?

14 MS. VAN RUYVEN: A: No, we didn't talk about that.

15 MR. WALLACE: Q: Okay. Contract duration. Partway
16 through the CFT, the bidders were told that instead of
17 bidding for ten years, they had to -- the term of the
18 contract would be 25 or 35 years at B.C. Hydro's
19 option. And you're familiar with that?

20 MS. VAN RUYVEN: A: I'm familiar with that, but again,
21 that was not a decision that the steering committee
22 took.

23 MR. WALLACE: Q: Okay. And with respect to the use of
24 forecast data for gas and electricity prices, did
25 senior management give any direction with respect to
26 that?

1 MS. VAN RUYVEN: A: Yes, again, through the steering
2 committee. We had several meetings where we ran the
3 gas price scenarios against our six gas price
4 scenarios. What ultimately ended up coming out of
5 that was the average of our six gas price scenarios,
6 very much was close to the EIA gas price scenario,
7 which is what we used in the QEM, and a decision was
8 made at that steering committee level to -- for
9 simplification reasons, for the QEM, to go with that
10 EIA average price forecast.

11 **Proceeding Time 9:30 a.m. T14**

12 MR. WALLACE: Q: So the Executive Committee didn't make
13 the decision to use the one EIA forecast?

14 MS. VAN RUYVEN: A: Yes, they did.

15 MR. WALLACE: Q: And in doing that, did you look at all
16 at how EIA had done in its previous gas forecasts?

17 MS. VAN RUYVEN: A: Well, this was undertaken over a
18 month of work when we had basically taken a break from
19 the terms and conditions of the CFT, and there were
20 many meetings. I was not involved in all of them, but
21 there were meetings through that month where we were
22 redoing the terms and conditions before we re-released
23 the CFT where that would have been discussed.

24 MR. WALLACE: Q: Well, I'm just wondering, is it input
25 that was used by you in -- or by the Executive
26 Committee in looking at the choice of EIA? Did you

1 look at information as to how accurate EIA had been in
2 the past?

3 MS. VAN RUYVEN: A: I didn't personally. We knew that
4 EIA was a credible third party forecast, and from that
5 perspective we were confident that we were using a
6 forecast methodology that was credible and verifiable
7 by third parties.

8 MR. WALLACE: Q: Okay. Now, I want to refer to
9 criticisms of that forecast. Would I be better to
10 direct those to the project team, Panel 2?

11 MS. VAN RUYVEN: A: Yes, Panel 2 is prepared to answer
12 all your detailed questions.

13 MR. WALLACE: Q: Okay. Did management ever ask that
14 the QEM model or the cost-effectiveness model be
15 tested against future gas and electricity prices to
16 see how those compared with the results you were
17 getting under your forecasts?

18 MS. VAN RUYVEN: A: Well, the cost-effectiveness tests,
19 we did ask to have that run against a high gas
20 scenario/low electricity price. On the QEM, we ran a
21 number of price forecasts and decided, for
22 simplification, to land on one that was the average of
23 those six, and the closest to that was the EIA.

24 MR. WALLACE: Q: But my question was, did you give any
25 direction or did you ever request that market, futures
26 market gas and electricity prices be used to check how

1 your results compared to what you were getting under
2 your forecasts?

3 MS. VAN RUYVEN: A: Only in the terms of the cost-
4 effectiveness test at the end, to run it against that
5 high gas price scenario.

6 MR. WALLACE: Q: And that was again a forecast, not a
7 market price.

8 MS. VAN RUYVEN: A: That was a forecast, a high
9 electricity -- a high gas, low electricity forecast.

10 MR. WALLACE: Q: Okay. And did you ever request that
11 the results you were getting under the QEM be tested
12 by back-casting to see if they would get the revenues,
13 the margin that you expected to develop under prices
14 that had existed in the market over the last two to
15 five years?

16 MS. VAN RUYVEN: A: We never made that request, but
17 again that would be a question for Panel 2 to see if
18 they did that work.

19 MR. WALLACE: Q: Thank you. Now I'd like to go to the
20 approval process if I could. JIESC 1.6.0(e), if you
21 can -- I don't know if you need it, but if you can be
22 provided with it.

23 As I understand it from that, what the
24 executive team had to look at was the CFT portfolio
25 sheets, the cost-effective analysis, and what looks
26 like might have been a three-page Power Point

1 presentation.

2 MS. VAN RUYVEN: A: Yes, on October 14th the Steering
3 Committee met and for the first time saw the results
4 of the outcome of the Call for Tender, and that was
5 with the independent reviewer, and that was looking
6 for the first time at the actual bid prices and,
7 having populated the QEM, seeing the outcome. Out of
8 that October 14th meeting there was a request -- yeah,
9 I have that now, I have the IR.

10 There was a request to take one more look
11 to see if there was any compelling reason that we as
12 an Executive Management Committee and the Steering
13 Committee should reject the successful outcome of the
14 Call for Tender process. And that work was done over
15 a series of days and then presented to the Steering
16 Committee, along with Bob Elton, our CEO, on the
17 morning of October 19th. And that is the IR that you
18 were looking at.

19 So this is the high-level outcome of the
20 cost-effectiveness test, cost-effectiveness test that
21 was put to senior management to ultimately accept the
22 outcome of the Call for Tender.

23 **Proceeding Time 9:35 a.m. T15**

24 MR. WALLACE: Q: Okay. And if the margins on
25 electricity sales that had been assumed under the cost
26 -- the QEM, and then the cost-effectiveness test,

1 turned out badly flawed, it would be fair to assume
2 that senior management might have ruled differently?
3 MS. VAN RUYVEN: A: Well, we asked for them to test
4 against high gas and to have a look at how the outcome
5 looked against a Tier 2 award, which would have been
6 the two smaller projects and a curtailment and the no
7 award, and they came back with this initial analysis,
8 saying that it was a slight premium for an expected
9 best case. Now based on that slight premium, we still
10 were confident that we had a good outcome, it was the
11 outcome of a competitive process, and we were willing
12 to live with that small premium.

13 Now when they refined that analysis in
14 actual fact, Tier 1 shows to be more cost-effective,
15 so we never had that discussion about whether or not
16 we would stress-test it against a larger premium,
17 because we -- that was never presented to us.

18 MR. WALLACE: Q: Okay. And if it turned out that there
19 was a very substantial premium to be paid, then
20 presumably management may well have made a different
21 decision?

22 MS. VAN RUYVEN: A: If there was a substantial premium,
23 I think we would have had to have asked some more
24 questions, there's no doubt about it.

25 MR. WALLACE: Q: Okay, thank you. And with that JIESC
26 response that I just referred you to, there is three

1 pages which, as I say, look like a Power Point
2 presentation. Can you tell me what those documents
3 are?

4 MS. VAN RUYVEN: A: This just formed some speaking
5 points for the -- for Mary Hemmingsen, who is the
6 director of the project management office, to bring to
7 the senior executive, based on our request to do one
8 more test to see if there was a compelling reason to
9 reject the outcome of the competitive process. These
10 just formed a backdrop for the discussion that took
11 place on the morning of October 19th. And it took
12 place in Mr. Elton's office. And it really was a
13 discussion around cost-effectiveness, around risk,
14 around a management decision to accept the outcome of
15 the Call for Tender, or were there compelling reasons
16 to reject it.

17 MR. WALLACE: Q: And on the first page, there's a -- at
18 the bottom of the page, a statement: "However, if a
19 one-year delay...", Is that a one-year delay in the Duke
20 Point project?

21 MS. VAN RUYVEN: A: No, I believe that was a one-year
22 delay in the cable. The 230 kV cable.

23 MR. WALLACE: Q: Oh, if it could be kept in service for
24 an additional year.

25 MS. VAN RUYVEN: A: If the cable was delayed one year
26 off its expected in-service date, then I believe --

1 MR. WALLACE: Q: Well, the 230 cable --
2 MS. VAN RUYVEN: A: Yes, that's right.
3 MR. WALLACE: Q: -- this is the new cable coming in.
4 MS. VAN RUYVEN: A: That's right.
5 MR. WALLACE: Q: Okay. And on the second page, there
6 are some sections that have been blanked out. Does --
7 do they still remain confidential in light of recent
8 rulings, or has that changed?
9 MR. SANDERSON: They're privileged, Mr. Chairman, is the
10 basis for those redactions, as distinct -- they're
11 confidential, but they're also privileged.
12 MR. WALLACE: In what sense of privilege? Is this legal
13 privilege? Or --
14 MR. SANDERSON: I'm sorry, I'm invoking legal privilege.
15 The other considerations that are referenced there are
16 -- disclose legal advice that was being provided.
17 MR. WALLACE: And I think Mr. Sanderson's providing the
18 lawyer later, so maybe we can talk to him as a
19 witness. We'll leave that, then.
20 MR. WALLACE: Q: Now, in the pre-filed evidence, you
21 are asked:
22 "Do you believe that there were any
23 portfolios that comprise projects willing to
24 enter into an EPA on terms more cost-
25 effective than Duke Point Power EPA
26 available to B.C. Hydro to provide reliable

1 capacity on Vancouver Island?"

2 And you say:

3 "No, B.C. Hydro believes the CFT process
4 encouraged an active competition among all
5 projects and bidders with projects that
6 could meet the mandatory criteria.
7 Specifically, B.C. Hydro is not aware of any
8 long-term dependable electrical capacity in
9 the form of new generation employing proven
10 technology and located on Vancouver Island
11 with an aggregate of 150 to 300 megawatts
12 and a commercial operation date of May 1st,
13 that could enter into an EPA on terms more
14 cost-effective than Duke Point Power."

15 And I wanted to ask you about the reference on long-
16 term dependable electricity capacity. If you didn't
17 provide direction that it had to be 25 or 35 years --
18 35 versus 10 years, why are you emphasizing long-term
19 dependable electricity capacity here? Couldn't you
20 have accepted medium-term?

21 **Proceeding Time 9:40 a.m. T16**

22 MS. VAN RUYVEN: A: Well, we always were trying to
23 resolve a long-term problem on Vancouver Island. We
24 are looking for a long-term solution to meet our
25 capacity shortfalls, to replace a long-term asset that
26 we've had there for some 50 years. So we always were

1 looking long term. We were never looking for a short-
2 term solution.

3 MR. WALLACE: Q: Okay, well, you have a short-term
4 immediate problem until the 230 kV replacement line
5 comes in place?

6 MS. VAN RUYVEN: A: We have a problem in 2007 and I
7 think I have to sort of context this. I look at the
8 Island in the long term, and I don't look at the 230
9 kV cable as a competing project to the successful
10 outcome of this Call for Tender in a 252 megawatt
11 plant. Over the next 20, 30, 40 years there will
12 continue to be additions of on-Island generation along
13 with cable replacements or additional cables, so that
14 the Island can have the same reliable services as the
15 Lower Mainland.

16 So we have a solution that is in place for
17 2007, it's the outcome of a competitive process, and
18 we are looking for a long-term solution. We always
19 said that.

20 MR. WALLACE: Q: Okay. I won't get into a debate of
21 whether you always said that or not. I think we could
22 be here for much more than my time if we did that.

23 But I suggest to you that you have an
24 immediate capacity problem for 2007 to 2008, possibly
25 2009.

26 MS. VAN RUYVEN: A: Yes, we do.

1 MR. WALLACE: Q: And beyond that, capacity will be
2 provided by a -- or once the 230 kV line goes to
3 Vancouver Island, there will be an abundance of
4 capacity for some time into the future?

5 MS. VAN RUYVEN: A: No, I don't think that's true. Our
6 system overall is reaching what I would consider a net
7 balance on capacity, and we will have to make new
8 capacity additions on the Mainland to serve our
9 growing load on our entire system. It's not that we
10 have an enormous abundance of capacity and energy in
11 British Columbia. We are reaching a net zero balance
12 in that.

13 So there would have to be additional
14 capacity additions on the Mainland at some point in
15 time, not only to serve Vancouver Island but for the
16 rest of the system.

17 MR. WALLACE: Q: Okay, but for Vancouver Island itself,
18 once the 230 kV line is in place you will have the
19 capacity to get electricity to the Island. At that
20 point it will be a system-wide requirement for
21 capacity?

22 MS. VAN RUYVEN: A: Depending on when the cable goes
23 in. We may have to have made an addition for capacity
24 to serve the whole system or not, depending on what
25 in-service date that cable --

26 MR. WALLACE: Q: But once that 230 kV line is in, you

1 will have the capacity on the Island?

2 MS. VAN RUYVEN: A: We will be able --

3 MR. WALLACE: Q: The capability to deliver the --

4 MS. VAN RUYVEN: A: We will have the capability to
5 provide capacity to the Island.

6 MR. WALLACE: Q: And at that point you don't want to
7 pay a premium for capacity, or for Vancouver Island
8 over anywhere else. You want to pay the lowest price
9 you can for the capacity you need.

10 MS. VAN RUYVEN: A: Well, when we add new supply, we
11 always look at cost-effective supply. It's not just
12 about least cost. It's about making sure the supply
13 is there when you need it. And so we would look for
14 cost-effective supply for the entire system.

15 MR. WALLACE: Q: And after 2008 or 2009 when the 230 kV
16 is on, then you are looking at generation for
17 Vancouver Island, generation on the Mainland, on the
18 same cost-effective basis.

19 MS. VAN RUYVEN: A: Well, we have to look at
20 reliability aspects as well. I mean, as I said
21 before, over the long run, the Island to serve its
22 needs will be a combination of on-Island generation as
23 well as cables going forward. We will do, for
24 example, an open system call, and I anticipate some of
25 that new generation will be on-Island.

26 MR. WALLACE: Q: But once you have the 230 kV lines in

1 place, from a reliability planning point of view, the
2 Vancouver Island will not require any premium for
3 generation. It should be treated the same as
4 generation anywhere else.

5 MS. VAN RUYVEN: A: Well, with that cable replacement
6 we have the ability to do open calls and to serve the
7 Island as their needs grow, to a certain point in
8 time, and then there may be required an on-Island
9 addition for capacity that we would potentially have
10 to pay a premium or build another cable.

11 **Proceeding Time 9:45 a.m. T17**

12 MR. WALLACE: Q: But that's way down the road, right?
13 When you put that 230 kV in, that's not the situation.

14 MS. VAN RUYVEN: A: Well, way down the road in utility
15 planning, 20 years is not that far away. We have to
16 think in those kinds of timeframes.

17 MR. WALLACE: Q: The 230 kV can be doubled, and that
18 will continue to take care of your growth for a
19 considerable period.

20 MS. VAN RUYVEN: A: Yes, potentially for a 20 or 30-
21 year period, that cable will certainly help us, and we
22 need it to ensure reliability for the Island going
23 forward because the load continues to grow.

24 MR. WALLACE: Q: So you're not going to pay a premium
25 for generation on the Island past 2008-2009 when the
26 230 kV is there, until you again hit a crisis, if you

1 do?

2 MS. VAN RUYVEN: A: Well, one is assuming we're paying
3 a premium today, and I guess maybe that's why I'm
4 hesitating to answer your question, Mr. Wallace,
5 directly, in that we do open calls, market calls.
6 This happened to be a capacity call on Vancouver
7 Island and we're paying a market rate for the outcome.
8 You could context it as a premium. I would say it's a
9 cost-effective solution based on the other
10 alternatives that we compared it to.

11 MR. WALLACE: Q: Okay, but if you were to compare the
12 costs -- well, I'll leave it at that. You paid --

13 MS. VAN RUYVEN: A: No, well, I would suggest if we did
14 an open call on our system today for capacity we would
15 get similar expected values per megawatt than we did
16 in this call. And if you look around North America at
17 capacity products, capacity products generally, for
18 capacity are more expensive than energy only, so we're
19 not really able to fairly compare the outcome of this
20 process to our other energy calls because those are
21 non-firm products. And we've not done a system-wide
22 capacity call, so I can't answer the question that
23 we've paid a premium until we test that against a
24 system call, which we may have a capacity call as part
25 of this next call that we do, and then we'll be able
26 to test that premise as to whether or not we paid a

1 premium.

2 MR. WALLACE: Q: Thank you. I'd like to turn to
3 another subject, then, and that is your comments at
4 the end of your evidence with respect to the negative
5 impact of disallowing this, the EPA. You say:

6 "Second, we completely concur with Ms.
7 Hemmingsen that a negative outcome of this
8 process will significantly hamper B.C.
9 Hydro's future efforts to competitively
10 procure energy -- or procure electricity."

11 You're not suggesting if the Commission thinks this is
12 the wrong choice for the future, it should approve the
13 EPA, are you?

14 MS. VAN RUYVEN: A: No, what that is suggesting is that
15 we had a bid that was completely compliant, it met all
16 of the tests of a rigorous process, it is the
17 successful outcome of a market-driven competitive
18 process. Now if there's a compelling reason to
19 overturn that, then that's the Commission's wisdom and
20 decision to make. But for us to overturn that
21 decision, we think it jeopardizes future competitive
22 processes. We're relying on the independent power
23 producers in the private sector to give us new energy
24 and capacity going forward, and they have to have
25 confidence that we can run fair processes and that we
26 can have binding outcomes. That's what my comment is.

1 MR. WALLACE: Q: Ms. Van Ruyven, apparently I have
2 limited time, and I thought my question was a simple
3 one. You're not suggesting if the Commission thinks
4 that the EPA is the wrong choice for the future that
5 it should approve it because of these considerations?

6 MS. VAN RUYVEN: A: The Commission has full
7 jurisdiction under Section 71 to disallow this EPA.

8 MR. WALLACE: Q: And the bid documents that provide
9 that B.C. Hydro may accept one bid, more than one bid,
10 or none of the bids, the CFT process?

11 MS. VAN RUYVEN: A: Could you repeat that question?

12 MR. WALLACE: Q: The CFT documents provided in advance
13 to all the bidders warning that B.C. Hydro might
14 accept one of the bids, more than one of the bids, or
15 none of the bids at all?

16 MS. VAN RUYVEN: A: Yes, and we needed some flexibility
17 in that process to be able to do that. We had not set
18 a ceiling price, for example, on this bid, and we were
19 concerned that potentially an outcome could be a per
20 megawatt cost that was completely prohibitive. So we
21 had to have some kind of exit clause in case that
22 happened, to be able to exit out of what would have
23 otherwise been a binding outcome.

24 MR. WALLACE: Q: So bidders were aware of that right
25 from the start, obviously?

26 MS. VAN RUYVEN: A: Yes, those terms were set at the

1 beginning.

2 MR. WALLACE: Q: And they were also aware that
3 Commission approval was required?

4 MS. VAN RUYVEN: A: Yes, they were.

5 MR. WALLACE: Q: And they were aware that it wouldn't
6 be a rubber stamp given the controversial nature of
7 this project?

8 MS. VAN RUYVEN: A: Yes, they were.

9 MR. WALLACE: Q: The risk of negative impacts of this
10 EPA will be borne by the customers, as will the risk
11 of gas price and utilization?

12 MS. VAN RUYVEN: A: Could you clarify the risk of a
13 negative outcome to ratepayers?

14 **Proceeding Time 9:50 a.m. T18**

15 MR. WALLACE: Q: Well, if it turns out that the energy
16 margins, for example, aren't as you have -- as B.C.
17 Hydro has forecast them, then the customers are going
18 to be at risk for that shortfall?

19 MS. VAN RUYVEN: A: Yes, and the customers are at risk
20 in all the supply risk we carry. For example, 90
21 percent of our system is hydro, and our customers bear
22 the risk of low water. And they bear the risk of the
23 rest of our gas portfolio, which is about 10 percent,
24 and so they do that today, and this is no different.

25 MR. WALLACE: Q: Did you give any consideration to --
26 on gas price, requiring gas bidders to submit two

1 bids, one where they took the risk, and one where you
2 took the risk?

3 MS. VAN RUYVEN: A: Again, I wasn't part of the
4 decision-making there, and that would be a question
5 for Panel 2, whether they considered that.

6 MR. WALLACE: Q: Okay. Was there ever any
7 consideration the shareholder would take on gas price
8 risk, or utilization risk?

9 MS. VAN RUYVEN: A: Again, you'd have to ask Panel 2 if
10 that discussion took place.

11 MR. WALLACE: Q: Okay. But not at the executive level?

12 MS. VAN RUYVEN: A: I was not aware of that discussion,
13 no.

14 MR. WALLACE: Q: Thank you. That completes my
15 questions, Mr. Chairman.

16 THE CHAIRMAN: Thank you.

17 MR. BOIS: Mr. Chairman, I just have a few questions.
18 Mr. Wallace has canvassed most of the issues as I
19 thought he might, so.

20 **CROSS-EXAMINATION BY MR. BOIS:**

21 MR. BOIS: Q: Ms. Van Ruyven, I just have a couple of
22 quick questions.

23 On page one of the CFT report, at lines 9
24 to 12, B.C. Hydro comments, and refers to the
25 Commission's decision in VIGP, and a comment that it
26 makes with respect to that, it says something along

1 the lines of -- and I've misplaced my page one.
2 Essentially, it talks about the BCUC's decision and it
3 says that -- this is at lines 9 to 12, I don't know if
4 you want to refer to it. But I can paraphrase it.
5 The BCUC was talking about the economic -- was talking
6 about load shedding, and B.C. Hydro makes the comment
7 that the Commission also believes that the economic
8 consequences of load shedding, other than in
9 exceptional circumstances, are not acceptable.

10 Now, I'm just wondering what would
11 management of B.C. Hydro consider to be an exceptional
12 circumstance?

13 MS. VAN RUYVEN: A: Can you reference -- is it page
14 nine?

15 MR. BOIS: Q: It's page one.

16 MS. VAN RUYVEN: A: Page one.

17 MR. BOIS: Q: Lines 9 through 12.

18 MS. VAN RUYVEN: A: And this is on the --

19 MR. BOIS: Q: CFT report.

20 MS. VAN RUYVEN: A: Okay.

21 MR. BOIS: Q: In the background section. Do you have
22 it?

23 MS. VAN RUYVEN: A: I have it.

24 MR. BOIS: Q: Okay.

25 MS. VAN RUYVEN: A: I'm just re-reading it.

26 I think what that means, and I didn't write

1 it, so again you might want to confirm with Panel 2,
2 is that economic consequences of lost production and
3 potentially lost jobs is what they're referring to.

4 MR. BOIS: Q: Okay, but, now, let's look at it from a
5 policy perspective, which I think you're addressing.
6 What would B.C. Hydro's management philosophy be with
7 respect to that? In terms of exceptional
8 circumstances.

9 MS. VAN RUYVEN: A: Well, load shedding we look at very
10 much as a short-term, stop-gap measure, as you move
11 towards long-term firm resources. So that's our
12 policy perspective on load shedding, is that there are
13 times when it is useful, and we would use it. We have
14 a tariff in our existing tariffs that allows us to
15 sign large industrial customers to load shedding.
16 It's Tariff 1852. So we do recognize that it is often
17 used when -- for example, when we have an emergency
18 situation or when we are working to put a long-term
19 firm resource into place and need a short-term stop-
20 gap. From a public policy perspective, that's how we
21 look at load shedding.

22 MR. BOIS: Q: Now, would you consider demand-side
23 management initiatives offered by your customers
24 similar to a load shedding program?

25 MS. VAN RUYVEN: A: No. We do demand-side management
26 where we do capital investment that reduces the load

1 generally for a very long period of time, if not
2 forever. So there are demand-side management programs
3 that you can run that are temporary or more
4 behavioural in nature, or that can reduce load for a
5 period of time. That's not how we've designed our
6 demand-side management programs. We've designed our
7 demand-side management programs so that that energy is
8 reduced off the system forever.

9 MR. BOIS: Q: And that's through your PowerSmart
10 program, right?

11 MS. VAN RUYVEN: A: That's through our PowerSmart
12 program.

13 MR. BOIS: Q: And what happens when you -- what's
14 management's philosophy when a customer comes forward
15 with an initiative? Such as the Norske proposal.

16 MS. VAN RUYVEN: A: Well, we're interested in the
17 Norske proposal. We've always been interested in that
18 proposal, in that we weren't sure of the outcome of
19 this Call for Tender. It looked highly likely at one
20 point in the Call for Tender that the outcome would be
21 a portfolio much closer to 150 megawatts. That still
22 left us with a very big gap. And we think Norske's
23 proposal for a short-term stop-gap measure was a
24 viable proposal, if we had to fill that gap.

25 **Proceeding Time 9:55 a.m. T19**

26 MR. BOIS: Q: So, could you explain to me then -- now,

1 you were at a meeting, I think, on July 15th with
2 Norske and other members of B.C. Hydro's executive,
3 correct?

4 MS. VAN RUYVEN: A: I've been at many meetings with
5 Norske, so --

6 MR. BOIS: Q: Okay.

7 MS. VAN RUYVEN: A: -- I'll assume I was there.

8 MR. BOIS: Q: And this proposal was presented at that
9 point. Norske presented its demand management
10 proposal. Do you recall?

11 MS. VAN RUYVEN: A: Well, Norske -- I've been at
12 several meetings where Norske has presented proposals
13 over the last three years, and --

14 MR. BOIS: Q: Right.

15 MS. VAN RUYVEN: A: -- I'm going to assume I was at
16 that meeting. I believe it was in my office, and Mr.
17 Elton was also there.

18 MR. BOIS: Q: I believe Mr. Elton was also there. Do
19 you know whether anything -- what management did or
20 said with respect to Norske demand-side management
21 proposal? Once it was presented?

22 MS. VAN RUYVEN: A: Well, it was a load curtailment
23 proposal, we said it's very interesting and we may
24 need it because we don't know the outcome of the Call
25 for Tender process, and we won't know it till the
26 fall. At that point in time, we had a number of

1 bidders who had made it through the pre-qualification
2 stage, although they hadn't bid yet. There were
3 approximately 11 bidders pre-qualified, and 22
4 projects, of which it looked highly likely that a
5 portfolio close to 150, because we were evaluating it
6 on a straight MPV basis, with no system or
7 transmission deferral benefits, was very likely the
8 outcome of the Call for Tender. We said we appreciate
9 your proposal, because we may need it.

10 The gap is looking like it's a lot closer
11 to 260 megawatts, and that's a pretty big gap to close
12 if we only get 150, and so we said to Norske we
13 appreciate that, and we think you should develop your
14 proposal further.

15 MR. BOIS: Q: So you knew at the time of this meeting
16 that the gap was approaching 260? I thought from your
17 counsel's opening statement that that didn't become
18 apparent until later on in the process.

19 MS. VAN RUYVEN: A: It became apparent last January,
20 when we had cold weather. And at that point in time,
21 we thought the gap was about 180, and then we worked
22 hard to produce a new load forecast and, as that gap
23 started to look larger, it factored into our risk
24 analysis going forward, although we didn't change the
25 parameters of the Call for Tender based on the load
26 forecast. I think that's what our counsel is saying.

1 We kept the minimum at 150, despite the fact that we
2 needed a load forecast looked like it was
3 significantly higher.

4 MR. BOIS: Q: So would that have influenced your
5 discussions or any kind of directions that you would
6 have given your staff at Hydro to deal with the Norske
7 proposal?

8 MS. VAN RUYVEN: A: No. Not -- none whatsoever. Other
9 than, we knew we potentially could have a gap.

10 MR. BOIS: Q: Okay. Now, can you tell me what
11 directions or activity management initiated as a
12 result of receiving the Norske proposal?

13 MS. VAN RUYVEN: A: I believe we said it's probably not
14 appropriate to be discussing it through the Call for
15 Tender until we know the outcome, and I -- if my
16 memory serves me correctly, we said let's wait to see
17 what the outcome is. We think you should develop it
18 further. And I believe they went to talk to BCTC to
19 do that, and then we said we'll see what the outcome
20 is, and we'll see whether or not it's appropriate to
21 look at load curtailment as an alternative or as a
22 stop-gap measure.

23 MR. BOIS: Q: So as I understand it, then, you have a
24 privative clause that allows you to go forward with a
25 Tier 1, Tier 2 or no award option. And as I
26 understand your answer, you asked Norske to go forward

1 with a bit more information, and they presented that
2 information, and they filed it with the BCTC Capital
3 Plan. Now -- but what I haven't heard you say is
4 whether you've asked anybody in Hydro as a management
5 initiative to develop an understanding of the Norske
6 proposal relative to the costs of this project?

7 MS. VAN RUYVEN: A: No, because we didn't need to
8 exercise the privative clause, we had a perfectly
9 acceptable cost-effective outcome. And the only way
10 we would exercise the privative clause was if we
11 hadn't had an outcome in Tier 1.

12 MR. BOIS: Q: But if you got a proposal that would
13 eliminate the need for an award, why wouldn't you
14 consider that as part of your no award option?

15 MS. VAN RUYVEN: A: Well, it is considered part of the
16 no award -- and again, you can talk -- ask Panel 4.
17 The no award is a load curtailment with peaker plants
18 to serve the gap.

19 MR. BOIS: Q: Okay. So the panel, you're saying that
20 management didn't direct anything in that regard. You
21 didn't consider it at all.

22 MS. VAN RUYVEN: A: No, we were waiting for the outcome
23 of a competitive process. And we had no reason to
24 exercise the privative clause to drop down into Tier 1
25 or a no award situation.

26 MR. BOIS: Q: Okay. Thank you. Now, you mentioned

1 earlier in your comments to Mr. Wallace that you
2 received a proposal that resulted in a project that
3 wasn't prohibitive in terms of cost. From a
4 management perspective, what would be a prohibitive
5 cost?

6 MS. VAN RUYVEN: A: Well, I think we were very much
7 managing to the VIGP benchmark for megawatt cost,
8 which was something closer to \$72 a megawatt, and this
9 project was significantly less expensive.

10 **Proceeding Time 10:00 a.m. T20**

11 Now not having set a price ceiling, we were
12 worried that potential bids could come in and they
13 would be higher than the VIGP benchmark price, and we
14 didn't want to be stuck in the situation of having a
15 binding outcome and having to contract despite having
16 a higher per megawatt cost.

17 MR. BOIS: Q: So there was a lot of debate about the
18 VIGP benchmark and the rates that B.C. Hydro thought
19 the power was going to cost, versus what the
20 intervenors thought the power was going to cost during
21 the VIGP hearings, correct?

22 MS. VAN RUYVEN: A: We completely accepted the
23 Commission's benchmark price and used that.

24 MR. BOIS: Q: So you're saying that this proposal
25 doesn't result in a cost greater than the VIGP
26 benchmark?

1 MS. VAN RUYVEN: A: That's correct.

2 MR. BOIS: Q: Okay, thank you.

3 Now I just want to confirm another point
4 that's made in the context of this from a policy
5 perspective. B.C. Hydro makes judgments every day
6 about its capacity and its system, is that correct?

7 MS. VAN RUYVEN: A: We don't make judgments. They're
8 well thought out and supported by our load forecast.
9 We operate our system on a daily basis, understanding
10 what the load will be on a daily basis and what our
11 resource capabilities are, and that's done through
12 Generation, who does the short-term operations of the
13 system.

14 MR. BOIS: Q: But would you agree with me that you have
15 discretion with respect to the rating of systems in
16 terms of how long a line is going to last or how long
17 its transmission system is going to last?

18 MS. VAN RUYVEN: A: Yes, that's why we employ
19 professional engineers who have years of experience
20 and generally have managed the asset, who can make
21 those kinds of judgment calls.

22 MR. BOIS: Q: But it's really a discretionary call on
23 your part?

24 MS. VAN RUYVEN: A: It's a professional, well-thought-
25 out, risk-adjusted judgment call.

26 MR. BOIS: Q: Which you've indicated is supposed to

1 comply with, I think, the Western Electricity
2 Coordinating Council Guidelines and also the NERC
3 Guidelines, is that correct?

4 MR. SANDERSON: Before the witness answers that, Mr.
5 Chairman, if I'm understanding the drift of these
6 questions, we're now looking at issues around rating
7 or de-rating transmission lines, which I thought you'd
8 clearly ruled were out of scope if we're talking about
9 the HVDC line. If that's what this is about, it's in
10 my submission out of scope.

11 MR. BOIS: Well, actually I'm not asking questions about
12 de-rating it so much as I am about the timing of the
13 need for this plant, because it's geared towards the
14 time -- B.C. Hydro has stated on the record that this
15 plant is required for in-service dates of 2007, hence
16 it's used that whole exercise and that whole date
17 timeline to rationalize the timeline that we're now
18 here before the Commission and requiring a decision
19 for under this EPA.

20 I'm not asking questions about the rating,
21 I'm asking questions about the schedule. And B.C.
22 Hydro has made that comment in this application that
23 it's expecting the HVDC line to be out of service.
24 That's all I'm asking.

25 MR. SANDERSON: Precisely so, and that's based on a
26 decision made by this Commission accepting that

1 position in the VIGP hearing, and a subsequent
2 determination by this Commission that it's not going
3 to revisit that issue.

4 MR. BOIS: Well, actually in the VIGP hearing and in this
5 decision on page 8 of the decision, this Commission
6 acknowledged that B.C. Hydro has discretion in setting
7 those dates. And I just wanted to confirm that that's
8 exactly what we're talking about here, is a
9 discretionary decision.

10 THE CHAIRPERSON: Mr. Sanderson is correct. Move on.

11 MR. BOIS: Okay. Thank you, Mr. Chair.

12 MR. BOIS: Q: Now, I just want to ask one more question
13 from a policy perspective, and I think it's again --
14 B.C. hydro has proceeded with the CFT on the basis
15 that the Commission in the VIGP decision suggested
16 that on-Island generation was the solution, and that
17 other solutions might be more desirable. And you'll
18 recall, I think, that the Commission also found that
19 the 230 kV line was probably the most preferable in
20 the decision.

21 MS. VAN RUYVEN: A: No, that's not how I read the
22 decision. I clearly read the decision that the
23 Commission suggested that the most appropriate next
24 resource addition would be on-Island generation, and
25 to proceed with the Call for Tender to see if a more
26 cost-effective solution for on-Island generation could

1 be found.

2 MR. BOIS: Q: Well, do you recall the study that you
3 provided in VIGP that talked about the extended -- the
4 amount of customer curtailments that would result as a
5 result of shortfalls in capacities?

6 MS. VAN RUYVEN: A: No, I don't remember that study.

7 MR. BOIS: Q: You don't. Okay. I believe that that
8 study was referred to as the EENS study, and it showed
9 that the least number of customer shortfalls would be
10 resulting from the 230 kV line, even including VIGP.
11 Do you recall that at all?

12 MS. VAN RUYVEN: A: No, and I think that really is a
13 better question for Panel 4.

14 MR. BOIS: Q: Okay, thank you.

15 Now I just want to ask one more question.
16 From the point of view of meeting your needs on
17 Vancouver Island, why hasn't B.C. Hydro talked to BCTC
18 about expediting the 230 kV line as opposed to this?

19 **Proceeding Time 10:05 a.m. T21**

20 MS. VAN RUYVEN: A: We have talked to BCTC about the
21 earliest possible in-service date, and they have
22 stated that that is 2008.

23 MR. BOIS: Q: And that's 2008?

24 MS. VAN RUYVEN: A: That's correct.

25 MR. BOIS: Q: So if you were to look at that from a
26 planning perspective, I think you said earlier that

1 you're planning from a utility perspective for 20, 25
2 years out as a long-term perspective. Three or four
3 years would be considered a short-term perspective,
4 wouldn't it?

5 MS. VAN RUYVEN: A: Well, I think it's important to
6 context it in -- again, to my comment to Mr. Wallace,
7 is that these are not competing projects. Vancouver
8 Island has a capacity shortfall that must be met by
9 2007. We have a cost-effective project that is going
10 to do that. It doesn't completely close the gap,
11 based on our new load forecast, and that load
12 continues to grow, so there will have to be another
13 resource addition.

14 Now, whether the 230 kV cable is the next
15 appropriate addition, that will be the subject of a
16 CPCN application to this Commission, and that will
17 have to be debated, and decided whether or not it is
18 the most appropriate next resource addition to serve
19 the Island.

20 MR. BOIS: Q: Well, I think I'll leave it there for my
21 question, because the rest of my questions will
22 probably get into the more technical aspects of the
23 proposal, so I'll leave it till Panel 4. Thank you,
24 Ms. Van Ruyven. Thank you, Mr. Chair.

25 THE CHAIRMAN: That brings us to Mr. Weisberg. We'll
26 hear from you, Mr. Weisberg, and I'll give you 15

1 minutes, and then we will take our morning break.

2 MR. WEISBERG: Q: Am I to interpret that, Mr. Chair,
3 that the 15 minutes will be all I'm given?

4 THE CHAIRMAN: Yes.

5 **CROSS-EXAMINATION BY MR. WEISBERG:**

6 MR. WEISBERG: Q: Ms. Van Ruyven, in senior
7 management's perspective, the guiding principles that
8 you referred to in your opening statement, would you
9 agree that within those guiding principles, senior
10 management would support that the process should have
11 been fair to all bidders?

12 MS. VAN RUYVEN: A: Yes, that was one of the principles
13 that we set, and one of the reasons we hired an
14 independent reviewer to ensure that it was fair.

15 MR. WEISBERG: Q: Also that it create a level playing
16 field for all bidders?

17 MS. VAN RUYVEN: A: That's correct.

18 MR. WEISBERG: Q: And that it attract as large a group
19 of qualified bidders as possible?

20 MS. VAN RUYVEN: A: Yes, that was also a guiding
21 principle.

22 MR. WEISBERG: Q: Thank you. Are you aware -- you and
23 senior management aware that certain bids were pre-
24 qualified in the CFT process, met all mandatory
25 criteria, but were never evaluated by Hydro, using the
26 QEM?

1 MS. VAN RUYVEN: A: It was a two-stage process. There
2 was a pre-qualification stage, and then a tender
3 phase. The pre-qualification stage pre-qualified the
4 23 bidders that started in the process against some
5 technical and financial criteria, of which 11 of those
6 bidders made it through to the pre-qualification. At
7 that point, the QEM model was not used. It wasn't
8 until the tender phase.

9 MR. WEISBERG: Q: Right. But at the tender phase, you
10 are aware that some bidders that made it that far were
11 not evaluated under the QEM?

12 MS. VAN RUYVEN: A: The tenders that were evaluated
13 under the QEM were compliant bids. So some -- I
14 believe six bidders tendered, and two of those bidders
15 were not compliant, so they were not -- their price
16 information and other information was not populated
17 into the QEM. It was only compliant bids that were
18 looked at.

19 MR. WEISBERG: Q: Was Green Island's bid evaluated
20 under the QEM?

21 MS. VAN RUYVEN: A: Yes it was.

22 MR. WEISBERG: Q: In combination with what? Or by
23 itself?

24 MS. VAN RUYVEN: A: Again, I think better asked on
25 Panel 2. I know there's some confidentiality issues
26 around releasing information on bidders and pre-

1 qualifications, so they're better prepared to speak to
2 things that should -- that are in the public domain as
3 opposed to the *in camera* session. And I just don't
4 want to sort of overstep my bounds there and say
5 something that I shouldn't. So Panel 2's quite
6 prepared to answer those questions.

7 MR. WEISBERG: Q: And is it your view that it's
8 reasonable that IPPs should be invited to participate
9 in a process, in some cases meet all the mandatory
10 criteria, and yet not be evaluated?

11 MS. VAN RUYVEN: A: I think any bidder who's bid into
12 other competitive processes in North America would
13 understand that if they don't submit a compliant bid,
14 they won't be put into a final evaluation.

15 MR. WEISBERG: Q: Senior management is aware that the
16 -- what has been called the cost-effective analysis,
17 used a different set of criteria than the QEM to
18 evaluate the outcome. You're fully aware of that, of
19 course?

20 MS. VAN RUYVEN: A: Well, it was a very different tool
21 for a very different purpose. The QEM was part of an
22 evaluation tool, in a legally-binding competitive Call
23 for Tender process. The cost-effectiveness test was a
24 high-level request by management to see if there was
25 any compelling reason, from a high-level perspective,
26 to not accept the successful outcome of a market-

1 driven process. Two very different things.

2 **Proceeding Time 10:10 a.m. T22**

3 MR. WEISBERG: Q: Your opening statement also refers to
4 a concern about -- or a principle that the process
5 appear credible to the IPP community. Has B.C. Hydro
6 canvassed IPPs since the bids were submitted, up to
7 date --

8 MS. VAN RUYVEN: A: Well, I don't think we --

9 MR. WEISBERG: Q: -- to determine what perceptions are
10 out there for IPP?

11 MS. VAN RUYVEN: A: I don't think we've sent a survey
12 out to them asking that, but we have heard comments
13 back that they thought it was a fair, well-run
14 process. And as far as I know, I did not receive any
15 comments to make me believe anything but that. We
16 were complimented by some of the bidders that didn't
17 make it through to the end, that they felt it was a
18 very well-run, rigid process, but fair and open and
19 transparent. And we worked very hard to try to do
20 that.

21 MR. WEISBERG: Q: Has B.C. Hydro actually sought such
22 feedback or --

23 MS. VAN RUYVEN: A: Again that's a good question for
24 Panel 2, who was involved in the Call for Tender
25 process. There was lots of feedback mechanisms. We
26 did many workshops with the bidders early on. We took

1 their input to help us set the actual terms and
2 conditions of the Call for Tender. Unprecedented, I
3 think, anywhere in North America is that we gave them
4 the actual evaluation methodology at the start, so
5 that every bidder knew how they would be evaluated
6 against other bidders. That's very unusual in any
7 kind of Call for Tender process, and I think leading
8 edge from an open transparency perspective.

9 MR. WEISBERG: Q: Can you tell me specifically what
10 gave rise to B.C. Hydro senior management's belief
11 that there might be compelling reasons to reject the
12 competitively determined Tier 1 outcome?

13 MS. VAN RUYVEN: A: Well, stress tested against the
14 high gas low electricity prices, for example, we're
15 trying to bookend what potentially that might look
16 like as far as a range of expected values. So we
17 wanted one more test to step back to say, "Is this
18 cost-effective compared to other options that we
19 possibly could have had by dipping into -- dropping
20 down into a Tier 2 or exercising the privative clause
21 to not accept the outcome?"

22 I think that's a prudent thing for
23 management to do, and it wasn't just about lowest
24 cost. It was about the risk we faced, and looking at
25 all the factors, we wanted to take one more look at
26 it, and I think that's a prudent thing for an

1 executive management team to do.

2 MR. WEISBERG: Q: In your testimony this morning and in
3 the direct testimony that's been filed, you have
4 stated and the testimony states several times that the
5 analysis was driven by a request to determine whether
6 there were compelling reasons to reject the outcome.
7 But it's been characterized as a cost-effectiveness
8 analysis.

9 Given that direction, looking for
10 compelling reasons to reject the outcome, might it not
11 have been broader than in fact it was?

12 MS. VAN RUYVEN: A: No, and we never intended a broad
13 approach at the end of this Call for Tender process to
14 then test it against every other possible option. We
15 knew we were doing this Call for Tender in the absence
16 of a total resource test or a resource plan or an
17 integrated electricity plan, and so we never
18 envisioned that we would test it to the nth degree
19 against every other resource option. This was simply
20 one more chance to step back and say, "Is this the
21 right thing to do, to accept the outcome of a
22 competitive process?" And we felt that perhaps we
23 were paying somewhat of a premium for the Tier 1
24 outcome. When we looked at the first cut at that
25 cost-effectiveness test, it was a very small premium
26 but it was in the range of seven to \$26 million, and

1 risk adjusted we felt that there was no reason to
2 reject the outcome.

3 MR. WEISBERG: Q: So senior management in requesting
4 the analysis had in mind no particular compelling
5 reasons to reject the outcome?

6 MS. VAN RUYVEN: A: Unless it was hundreds of millions
7 of dollars more expensive, I think that would have led
8 us to ask for some more analysis. But it wasn't. It
9 came back between seven and \$26 million, and in our
10 perspective that was not a compelling reason to go
11 back and do more analysis. We needed to get on with
12 moving forward with what we thought was a perfectly
13 good solution for Vancouver Island and the outcome of
14 a competitive process.

15 MR. WEISBERG: Q: Did senior management, in considering
16 what compelling reasons might be, consider the impact
17 of the disqualification of Calpine's bid, both on that
18 project and other projects by virtue of the portfolio
19 that it effectively excluded?

20 **Proceeding Time 10:15 a.m. T23**

21 MS. VAN RUYVEN: A: No. The outcome of the process was
22 the outcome, and that bid was disqualified for very
23 good reasons, and at the end of the day there weren't
24 enough portfolios that added to the 150 minimum. We
25 knew that. It was part of the requirement of how we
26 set up the terms and the conditions of the call. So

1 we didn't feel that we had any ability to do anything
2 other than accept that outcome because it was cost-
3 effective and it met all of our criteria. There was
4 no other portfolio that met the mandatory criteria of
5 how we set up the terms.

6 MR. WEISBERG: Q: In light of the implications of the
7 disqualification of Calpine's bid, would it not have
8 been prudent to look at again why it was disqualified,
9 if anything could have been done and to see if that
10 constituted a compelling reason to reject the outcome?

11 MS. VAN RUYVEN: A: Calpine did not submit a compliance
12 bid, and with a rigid process and a rigid Call for
13 Tender process, and we've followed this every time
14 we've done competitive calls to acquire new energy,
15 the rules are black and white. Calpine knew that they
16 would be disqualified if they didn't submit a
17 compliant bid. They chose not to. Therefore they
18 were disqualified, and it was as simple as that.

19 So there was no way through the Call for
20 Tender process for us to go back and consider it,
21 because it was not a compliant bid.

22 MR. WEISBERG: Q: If I want to pursue, in terms of
23 identifying exactly how Calpine's bid was non-
24 compliant, can I do that with you, or was that
25 appropriate to take up with another panel?

26 MS. VAN RUYVEN: A: It's better for Panel 2 to answer

1 that question.

2 MR. WEISBERG: Q: Thank you.

3 MR. SANDERSON: And again, I'll reserve on whether or not
4 that's an appropriate line of questioning until we
5 hear those questions.

6 MR. WEISBERG: Q: Did Green Island's bid satisfy all
7 CFT criteria for reliability and timing?

8 MS. VAN RUYVEN: A: I believe it would have had to
9 because it made it through the prequalification.

10 MR. WEISBERG: Q: Is that also true for Epcor's
11 Ladysmith peaker project?

12 MS. VAN RUYVEN: A: Yes, all of the eleven bids that
13 made it through to prequalification met technical and
14 financial criteria, and the technical criteria was
15 around timing certainty. That was one of the many
16 criteria that they looked at.

17 MR. WEISBERG: Q: The cost-effectiveness analysis, if I
18 understand it right from the direct testimony, it's
19 simply summarized in Appendix J, is that correct?

20 MS. VAN RUYVEN: A: Appendix J is the summary of the
21 cost-effectiveness test. That's not what senior
22 management looked at on October 19th. October 19th was
23 the JIESC IR slides that Mr. Wallace cross-examined me
24 on.

25 MR. WEISBERG: Q: And the cost-effectiveness analysis
26 itself, has that been produced in this proceeding?

1 MS. VAN RUYVEN: A: Yes, it's Appendix J in the
2 application.

3 MR. WEISBERG: Q: The reason I'm asking, Ms. Van
4 Ruyven, is that in the direct testimony of the Policy
5 Panel beginning on line 27, it says:

6 "In response to this request, we've provided
7 a cost-effective analysis that is summarized
8 in Appendix J."

9 And I'm just trying to chase if there was another
10 document other than Appendix J perhaps providing more
11 information or more detail.

12 MS. VAN RUYVEN: A: No.

13 MR. WEISBERG: Q: Is that the case?

14 MS. VAN RUYVEN: A: No. The detail is contained in
15 Appendix J, and Panel 4 is prepared to speak to any
16 questions you might have on that.

17 MR. WEISBERG: Q: You had a discussion with Mr. Wallace
18 about the expression "long term". In the context of
19 power planning activities, is 20 years long term? Is
20 that fair to say?

21 MS. VAN RUYVEN: A: We do our integrated electricity
22 planning based on a 20-year plan. Some could argue
23 that that's not a long enough planning horizon, that
24 in the utility business perhaps 40 years is better,
25 but 20 I think is reasonable and a period of time that
26 most utilities do plan to.

1 MR. WEISBERG: Q: Mr. Wallace also quoted from the
2 direct testimony of the Policy Panel. It's at lines
3 41 through 46 of that evidence and I will read it very
4 quickly:

5 **Proceeding Time 10:20 a.m. T24**

6 "B.C. Hydro is not aware of any long-term
7 dependable electrical capacity in the form
8 of new generation..."

9 And for the sake of saving time, I will leave the
10 quote with the reference through line 46.

11 Is B.C. Hydro aware of Green Island's Gold
12 River power project, Epcor's Ladysmith peaker and
13 Calpine's Campbell River co-gen project?

14 MS. VAN RUYVEN: A: Are we aware of the projects?

15 MR. WEISBERG: Q: Yes.

16 MS. VAN RUYVEN: A: We're aware of the projects,
17 because they bid into the Call for Tender.

18 MR. WEISBERG: Q: Yes, they did. And doesn't a
19 portfolio of those three projects meet or exceed every
20 criterion in the statement I've just referred to?

21 MS. VAN RUYVEN: A: We don't know, because they didn't
22 aggregate to a portfolio of 150, and therefore they
23 weren't evaluated.

24 MR. WEISBERG: Q: Isn't that a compelling reason to
25 perhaps at least consider rejecting the Tier 1
26 outcome, because there were qualified bids that were

1 not even evaluated, when the Commission has indicated
2 previously that a portfolio as low as 115 megawatts is
3 perhaps something that should be considered?

4 MS. VAN RUYVEN: A: No. Because we had a cost-
5 effective outcome, that was Tier 1, and we had no
6 reason to exercise the privative clause to even look
7 at other projects, and Calpine's project was a non-
8 compliant bid, and therefore we would not be able to
9 look at it, and the other two projects did not
10 aggregate to the 150 minimum that we had set in the
11 terms and conditions.

12 THE CHAIRMAN: Two more questions, Mr. Weisberg.

13 MR. WEISBERG: Q: Pardon me?

14 THE CHAIRMAN: Two more questions.

15 MR. WEISBERG: Q: Would you agree that a broadly-held
16 perception that CFT design had created resource option
17 bias would be a negative outcome of this process?

18 MS. VAN RUYVEN: A: I don't believe there was any bias
19 in the process. Had there been a suggestion of bias,
20 then I think yes, that would have had a negative
21 impact on our reputation, for example, and it would
22 have had a negative impact on the bidders' confidence
23 in the outcome of the whole process.

24 MR. WEISBERG: Q: And would you agree that the failure
25 to evaluate an otherwise qualifying portfolio, and I
26 did say "otherwise qualifying," due to a contingent

1 uncertainty about the last three years of the 25-year
2 lease, involving just one of three projects in that
3 portfolio, would also be a negative outcome of this
4 process?

5 MS. VAN RUYVEN: A: No, I disagree. That was a non-
6 compliant bid, and I can't state it any more simply
7 than that. And in every Call for Tender process that
8 has a binding outcome, bidders must be compliant. If
9 they hand their bid in at 4:01 p.m., it is non-
10 compliant, and it gets disqualified. This was a non-
11 compliant bid and it had terms and conditions that
12 were changed, that were mandatory. And it's as simple
13 as that.

14 MR. WEISBERG: Mr. Chair, I'll abide by your direction,
15 I'd like the record to reflect that I have not
16 finished the questions that I would like to ask.

17 THE CHAIRMAN: The record is so recorded.

18 We'll take a 15-minute adjournment.

19 **(PROCEEDINGS ADJOURNED AT 10:23 A.M.)**

20 **(PROCEEDINGS RESUMED AT 10:42 A.M.)** **T25**

21 THE CHAIRPERSON: Please be seated.

22 Mr. Lewis, you will also have 15 minutes.

23 MR. LEWIS: Thank you very much. Well, that takes care
24 of any desire I had to ring the opening bell at the
25 NYSE.

26 **CROSS-EXAMINATION BY MR. LEWIS:**

1 MR. LEWIS: Q: Ms. Van Ruyven, does senior management
2 object to Mr. Sanderson's opening remarks about the
3 process as far as with regards to the scope of it and
4 how it should be limited?

5 MS. VAN RUYVEN: A: No, we don't object to Mr.
6 Sanderson's opening remarks.

7 MR. LEWIS: Q: On page 13 of the Select Standing
8 Committee on Crown Corporations notes, there's a
9 statement in there. It says:

10 "It's very important that there be a BCUC
11 process that gives everybody the
12 satisfaction of one more chance to say what
13 happened, how did it happen, was this fair,
14 was this open, was this done properly? We
15 believe it was, and we're very comfortable
16 with whatever process the BCUC proposes to
17 examine now."

18 That was your president and CEO, Bob Elton.

19 Who was senior management as referred to in
20 Q1?

21 MS. VAN RUYVEN: A: In Q1, what do you mean by Q1?

22 MR. LEWIS: Q: Question 1 of your evidence. Who is
23 senior management?

24 MS. VAN RUYVEN: A: That would be the Executive
25 Management Committee, and more specifically the
26 executives on the Steering Committee, and ultimately

1 Mr. Elton as well.

2 MR. LEWIS: Q: Thank you. Who developed the analytical
3 method used in the cost-effectiveness analysis?

4 MS. VAN RUYVEN: A: That would have been Mary
5 Hemmingsen's team, and we have witnesses prepared to
6 answer questions in Panel 4.

7 MR. LEWIS: Q: Thank you. You state that the senior
8 management received the recommendations of the QEC in
9 mid-October. Would that have been October 14th?

10 MS. VAN RUYVEN: A: The morning of October 14th, the
11 Steering Committee saw for the first time the outcome
12 of the bid process.

13 MR. LEWIS: Q: Thank you. Earlier you stated the GIE
14 proposal was evaluated under the QEM. I'm going to
15 ask you a similar question. Although GIE was a
16 qualified bidder and according to your legal counsel
17 it had the legal right to have the QEM applied to it,
18 was it evaluated using the QEM under the CFT process?

19 MS. VAN RUYVEN: A: I don't believe it was because
20 there were no bids that allowed it to aggregate to the
21 150 megawatt minimum. But again, that's a better
22 question for Panel 2.

23 MR. LEWIS: Q: Thank you. The cost-effectiveness
24 analysis was presented to senior management on October
25 19th?

26 MS. VAN RUYVEN: A: That's correct.

1 MR. LEWIS: Q: Or to the board, sorry, on October 19th.

2 MS. VAN RUYVEN: A: No, it was presented to the CFT
3 Steering Committee as well as Mr. Elton on the morning
4 of the 19th.

5 MR. LEWIS: Q: So considering that the 16th and 17th fell
6 on a weekend, who was tasked -- I know who was tasked
7 with the responsibility now, but how much time did
8 they spend to actually develop it, evaluate it,
9 prepare a report, and then present it?

10 MS. VAN RUYVEN: A: They would have started that on the
11 14th and they presented the outcome on the 19th. It was
12 meant to be a high-level analysis that would
13 directionally give us some information to help us
14 context the outcome of the Call for Tender process.
15 It was not meant to be months and months of analytical
16 work. It was a simply stress test.

17 **Proceeding Time 10:45 a.m. T26**

18 MR. LEWIS: Q: It was simple, thank you. How much time
19 did the QEM take to be developed, implemented and
20 evaluated?

21 MS. VAN RUYVEN: A: Better question for Panel 2.

22 MR. LEWIS: Q: Thank you. How much money did it cost?
23 Not budgeted, but cost.

24 MS. VAN RUYVEN: A: Again, Panel 2 can help you with
25 that.

26 MR. LEWIS: Q: Thank you. Another quote from Mr. Elton

1 on page 22 of the Select Standing Committee
2 transcripts.

3 "When we set up the Call for Tender process,
4 we struck a balance between reliability and
5 cost and environmental issues."

6 Can you please describe what, if any, specific
7 direction other than overall B.C. Hydro objectives
8 senior management gave with regards to environmental
9 issues?

10 MS. VAN RUYVEN: A: I'm unable to remember that we gave
11 any specific over-riding, -guiding principles on
12 environmental issues.

13 MR. LEWIS: Q: Other than your overall objectives?

14 MS. VAN RUYVEN: A: Well, other than overall corporate
15 objectives around the commitment to 50 percent of
16 clean energy. Going forward, we felt that this in no
17 way jeopardized meeting those goals over a 10-year
18 period. We'd just purchased 3300 gigawatt-hours of
19 clean energy.

20 MR. LEWIS: Q: Thank you. That's fine, thank you.

21 On page five of those same transcripts, Bob
22 Elton states:

23 "It would be relatively easy, I think, to
24 achieve good reliability at low cost and
25 neglect the environment. We don't want to
26 do that."

1 Can you explain to me how you aren't neglecting the
2 environment with your Tier 1 result?

3 MS. VAN RUYVEN: A: Well, Mr. Elton and B.C. Hydro have
4 released some long-term goals, and one of our long-
5 term goals is, no net environmental impact. There's
6 no doubt about that. This process was started a year
7 and a half ago, and set up without the context of that
8 long-term goal.

9 Now, having said that, this project must
10 meet all the requirements of the *Environmental*
11 *Assessment Act*, and has been awarded an environmental
12 assessment certificate. So legally they are required
13 to follow all of the provincial government's laid-out,
14 set-out, legislated environmental requirements and the
15 proponent must do that, because they must follow and
16 abide by the certificate that they've been awarded.

17 MR. LEWIS: Q: Okay. So it's safe to understand that
18 the CFT process does not live up to the current
19 objectives of B.C. Hydro with regard to minimizing
20 environmental impacts?

21 MS. VAN RUYVEN: A: We didn't set the CFT process up
22 with that in mind, because that goal did not exist at
23 the time --

24 MR. LEWIS: Q: Thank you.

25 MS. VAN RUYVEN: A: -- a CFT process was set last
26 October.

1 MR. LEWIS: Q: Thank you. So then, B.C. Hydro isn't
2 planning to offset the impacts because it wasn't a key
3 component of the CFT?

4 MS. VAN RUYVEN: A: Well, we'll have to look at the
5 impacts of this plant in the context of our new long-
6 term goal, and remember, it's a 20-year goal. We've a
7 lot of work to do to understand that, and I think the
8 appropriate place to have that discussion is in our
9 integrated electricity planning process. We need to
10 ask stakeholders what they value, and what trade-offs
11 they're willing to make as far as environmental
12 aspects, and potentially what they're willing to pay
13 for that. And we're undergoing a very good
14 stakeholder process now, moving towards a 2005 IEP,
15 and that is one of the topics that we are discussing
16 at length.

17 MR. LEWIS: Q: Thank you. So it's reasonable to
18 understand that the CFT process did not evaluate
19 those, but there may be -- for future costs, as a
20 result of this decision.

21 MS. VAN RUYVEN: A: That's correct. The CFT process
22 did not evaluate the environmental aspects --

23 MR. LEWIS: Q: Thank you.

24 MS. VAN RUYVEN: A: -- but going forward, that's
25 something that we certainly will look at.

26 MR. LEWIS: Q: So the public could understand, then,

26 MR. LEWIS: Q: Thank you. So although B.C. Hydro is

1 committed to offset the environmental impacts of new
2 generation, it's discharged itself of any right or
3 responsibility to do that in this case, under the *EPA*?
4 MS. VAN RUYVEN: A: In this case, the liability for GHG
5 is the proponents.
6 MR. LEWIS: Q: Thank you. I'm going to read you
7 another quote from the Select Standing Committee
8 transcripts.
9 MR. SANDERSON: I've been trying to keep up with those,
10 Mr. Lewis. Perhaps you could give me a cite for them.
11 MR. LEWIS: Sure. They are entered as evidence on behalf
12 of the Village of Gold River.
13 MR. SANDERSON: No, it's just the page reference.
14 MR. LEWIS: Oh, okay.
15 MR. SANDERSON: I haven't been able to find the ones
16 you've been giving me so far.
17 MR. LEWIS: Page 27 for this current one. I believe I've
18 referenced each and every one of them with a page.
19 MR. SANDERSON: Thank you.
20 MR. LEWIS: Q: "With respect to clean, renewable
21 energy I think two things. The first is
22 that when we buy energy, you could say that
23 we either pay a premium for energy that is
24 clear, or we pay less for energy that's not.
25 We believe that the difference should be
26 used to offset the environmental impacts of

1 the energy that's being bought. We also
2 believe that those offsets should be spent
3 in British Columbia so that the people
4 living wherever the project is can see the
5 effects or the offsets. Okay, we've got a
6 project which has got some jobs and some
7 environmental issues, but here are the
8 offset projects that are dealing with that."

9 So based on this statement, how can B.C.
10 Hydro imply that when a natural gas plant is compared
11 to a clean project, that it can be cheaper or more
12 cost-effective given that B.C. Hydro has stated that
13 any savings that it realizes by purchasing dirty power
14 are going to be spent on offsetting the environmental
15 impact?

16 MS. VAN RUYVEN: A: I'm not exactly sure I follow your
17 question, but I believe that B.C. Hydro has made a
18 significant commitment to the environment by our
19 voluntary compliance with the 50 percent clean and
20 green target.

21 MR. LEWIS: Q: Okay, I'll paraphrase then. Mr. Elton
22 said, "Dirty power is cheaper than clean power. We
23 plan to take whatever we save by buying dirty power
24 and spend it on offsets." How can you then claim that
25 buying dirty power is cheaper?

26 MS. VAN RUYVEN: A: Well, we've never tested that in

1 the marketplace. We've only done clean calls and
2 we've done a capacity call. Now it'll be interesting
3 to see if we do an open call for all resource types,
4 whether or not that is borne out by the marketplace in
5 British Columbia. So I don't think you can jump to
6 that conclusion without having some evidence that that
7 is the case. We've only done clean calls so far, and
8 a capacity call.

9 MR. LEWIS: Q: When B.C. Hydro purchases energy on the
10 open market they're not responsible for greenhouse gas
11 costs, are they?

12 MS. VAN RUYVEN: A: Well, in this case we did not take
13 responsibility for greenhouse gas costs.

14 MR. LEWIS: Q: But when you purchase energy on the open
15 market, you're not responsible either, are you?

16 MS. VAN RUYVEN: A: We've only purchased clean energy,
17 so that allows us to have an offset.

18 MR. LEWIS: Q: When Powerex purchases energy from
19 outside sources.

20 MS. VAN RUYVEN: A: No. No, we're not.

21 MR. LEWIS: Q: Okay. So by taking this higher-level
22 objective that Mr. Elton states, isn't he effectively
23 saying, "Look, we don't do it now, but we're willing
24 to take on an extra cost to offset those impacts"?

25 MS. VAN RUYVEN: A: Yeah, and that extra cost is going
26 to have to be proven that in actual fact it's not an

1 extra cost. We are spending that money today to
2 offset a future cost that could hit us, or a
3 liability, in 10 or 20 years. We firmly believe that
4 and that we have a lot of work to do to prove that,
5 and I would believe before the Commission would allow
6 us to do that we'd have to have pretty solid proof
7 that the money we were spending today was offsetting
8 future liabilities.

9 MR. LEWIS: Q: But there is a commitment to do that?

10 MS. VAN RUYVEN: A: There is a commitment in that long-
11 term goal, which is a 20-year goal, --

12 MR. LEWIS: Q: Thank you.

13 MS. VAN RUYVEN: A: -- to look at that. That's
14 correct.

15 MR. LEWIS: Q: And this is a long-term project,
16 correct?

17 MS. VAN RUYVEN: A: This is a long-term project that
18 was set in motion while in advance of that long-term
19 goal.

20 MR. LEWIS: Q: Thank you.

21 On page 14 of the same transcripts, Mr.
22 Elton states:

23 "In terms of the environment, we made a
24 public announcement, and Minister Neufeld
25 was very much part of that, two weeks ago,
26 that we intend to find out what our

1 environmental impact is that we have as a
2 company, and commit that we will not
3 increase it."

4 MR. SANDERSON: Mr. Chairman, I have been trying to
5 follow the references, but I just -- I don't seem to
6 be able to do that. I may be -- I want the record to
7 make sense. There's page 14 of what I have. Are we
8 talking about a different document there?

9 MR. LEWIS: No, that's the one. Just let me grab my
10 binder and I'll --

11 MR. SANDERSON: Thanks.

12 MR. FULTON: I believe, Mr. Chairman, that the earlier
13 reference to page 27 in the document should be to page
14 26, in the exhibit that we're working from in any
15 event.

16 MR. LEWIS: So on my Hansard transcripts, on the bottom
17 of page 14 of 41. Now, we may have different
18 variations of these transcripts.

19 MR. SANDERSON: We do have --

20 MR. LEWIS: Okay. Here's where -- on page 14.

21 MR. SANDERSON: Thank you very much.

22 **Proceeding Time 10:55 a.m. T28**

23 MR. LEWIS: Thank you. Yes, well, after the fact I'll
24 provide all of these directly.

25 MR. LEWIS: Q: "In terms of the environment, we
26 made a public announcement. Minister

1 Neufeld was very much a part of that."

2 Has B.C. Hydro effectively increased -- is B.C. Hydro
3 effectively increasing its environmental impact with
4 this decision?

5 MS. VAN RUYVEN: A: From the perspective of purchasing
6 from a gas-fired plant, one could say that that has an
7 impact on the environment.

8 MR. LEWIS: Q: Thank you. Is it your assertion,
9 though, that this is not your project, and you are
10 discharging yourself of any responsibility with regard
11 to environmental impact?

12 MS. VAN RUYVEN: A: Well, how the Call for Tender was
13 set up was that proponents would take the GHG
14 liability and they would take all of the
15 responsibility under the Environmental Assessment
16 Certificate.

17 MR. LEWIS: Q: Thank you. With regard to a negative
18 outcome you spoke of earlier, Section 17.3 in Addendum
19 10, B.C. Hydro established that they had the sole and
20 unfettered right to reject qualified bids over 150
21 megawatts, and accept bids with less capacity, if they
22 deemed that the Tier 1 result was not cost-effective.
23 As there was no specified ceiling to the price that
24 B.C. Hydro would accept, and they did not identify how
25 this test would be applied or what methodology would
26 be used, they effectively took away any certainty that

1 bidders may have had in this process, I contend.

2 Didn't B.C. Hydro effectively say,
3 "Regardless of how fair the process was that we
4 identified in the CFT, and had the IR -- independent
5 reviewer oversee, we can use whatever criteria that we
6 want to determine if we accept you as the winning
7 bidder"?

8 MS. VAN RUYVEN: A: And again, I think it's better to
9 ask Panel 2 that question.

10 MR. LEWIS: Q: The cost-effectiveness analysis, not the
11 establishment of the concept but the actual process by
12 which it would take place, was developed, implemented
13 and accepted by B.C. Hydro without the oversight or
14 involvement of the independent reviewer, correct?

15 MS. VAN RUYVEN: A: That's correct. The independent
16 reviewer's job was finished on October 14th, when he
17 met with the Steering Committee to ask us if we
18 accepted the outcome on a per-expected basis, and that
19 was when their job was completed, and they wrote their
20 final report.

21 MR. LEWIS: Q: From senior management's perspective,
22 the cost-effectiveness analysis was an integral part
23 of your decision to approve the Tier 1 decision?

24 MS. VAN RUYVEN: A: I don't think it was an integral
25 part. I think it was simply one last test.

26 MR. LEWIS: Q: Okay. So on page 12, what I have --

1 page 12 and 13 of the Select Standing Committee
2 transcripts, Bob Elton states that:

3 "The IR was put in, basically, because the
4 concerns that B.C. Hydro could carry out a
5 competitive process for tender were in
6 question."

7 So with regards to the cost-effectiveness analysis,
8 how did B.C. Hydro remove those concerns without the
9 involvement of the independent reviewer?

10 MS. VAN RUYVEN: A: Well, the independent reviewer was
11 there to ensure that we made it through to the end of
12 the process. The process was completed at that point.
13 And the project management team had to accept the
14 outcome based on a cost-effectiveness test, which is
15 different than what we asked for, and that was around
16 whether or not there was a competition, and could they
17 prove that there was no collusion amongst the bidders,
18 and they had to accept the outcome. Senior management
19 always has the right to overturn an outcome of a
20 commercial process, albeit it has consequences.

21 So the cost-effectiveness test that we
22 asked for was a high-level analysis, just to see if
23 there were any compelling reasons that we shouldn't
24 accept a cost-effective outcome of Tier 1.

25 MR. LEWIS: Q: But without the involvement of the
26 independent reviewer, you can't conclusively state

1 of my transcripts Mr. Elton states:

2 "I'll just make a parenthetical comment
3 again that while the gas plant certainly
4 wouldn't qualify as a clean project, having
5 something like a significant sized gas plant
6 will mean that we can actually buy more
7 clean energy in the future."

8 The logic in this statement somewhat eludes
9 me. Could you please expand on how having a non-clean
10 gas plant allows you to buy more clean energy in the
11 future, and that's a good thing in terms of
12 environmental impact?

13 MS. VAN RUYVEN: A: Maybe I'll context it in our last
14 acquisition that we've done over the past number of
15 years. We've bought 3300 gigawatt hours of clean
16 energy. It's non-firm. Eventually you have to add a
17 capacity addition to your system. You cannot continue
18 to buy non-firm power forever without adding capacity
19 along the way. A 2100 gigawatt hour or 252 megawatt
20 gas-fired plant is a very good capacity addition. It
21 should allow us now to go forward to buy another 2,000
22 gigawatt hours of clean energy, which tends to be non-
23 firm.

24 And so if you look at the long term, you
25 have to sequence capacity additions with energy
26 additions and clean because they tend to be non-firm,

1 and just by the very nature of the type of product
2 they provide us, have to be supplemented with capacity
3 additions. So that was in the context of Mr. Elton's
4 comment.

5 MR. LEWIS: Q: Thank you. So you contend that there
6 are no clean energy sources that are firm capacity?

7 MS. VAN RUYVEN: A: No, I don't contend that, but the
8 ones that we've purchased so far, and I'll look at the
9 last 40 contracts that we've purchased, they tend to
10 be non-firm.

11 MR. LEWIS: Q: Thank you.

12 MS. VAN RUYVEN: A: They're run of the river and one
13 wind project, and they don't provide us with capacity.

14 MR. LEWIS: Q: Thank you very much.

15 Thank you.

16 THE CHAIRPERSON: Mr. Craig, you will also have 15
17 minutes.

18 MR. CRAIG: Thank you, Mr. Chairman.

19 **CROSS-EXAMINATION BY MR. CRAIG:**

20 MR. CRAIG: Q: Good morning, Ms. Van Ruyven.

21 MS. VAN RUYVEN: A: Good morning.

22 MR. CRAIG: Q: I'd like to start with your objective
23 that the process for the CFT was to be fair and
24 objective, and ask what role, if any, your Policy
25 Management Group had in selecting the use of credits
26 in the evaluation methodology?

1 MS. VAN RUYVEN: A: We were not directly involved in
2 that.
3 MR. CRAIG: Q: So I should direct all questions in that
4 regard --
5 MS. VAN RUYVEN: A: Panel 2.
6 MR. CRAIG: Q: -- to Panel 2.
7 MS. VAN RUYVEN: A: That's correct.
8 MR. CRAIG: Q: Okay. Did the Policy Management Group
9 deal at any time with any questions or accusations of
10 bias?
11 MS. VAN RUYVEN: A: Well, we certainly heard that
12 potentially people felt there was a bias, and so we
13 worked hard setting those guiding principles to try to
14 ensure that there was no bias. There certainly wasn't
15 any bias that I ever encountered through the whole
16 year and a half of this process in the many meetings
17 that I had meeting with the project management team.
18 And we were careful, if anything, to err on the other
19 side so that we could say that there was no bias,
20 because we knew people were sceptical. We were a
21 buyer and a potential proponent of a project, and
22 people were concerned, and that's why we hired the
23 independent reviewer. That's why we set up the terms
24 and conditions of the Call for Tender the way we did,
25 and that's why we followed such a rigorous black and
26 white process.

1 MR. LEWIS: Q: Okay, so this definitely was an issue
2 that the Policy Group was concerned with?

3 MS. VAN RUYVEN: A: We were concerned and we made sure
4 that the team understood that this had to be a very
5 fair and open process and that that was important, not
6 just to us but to the rest of the bidders who were
7 bidding into a commercial competitive process. And
8 they had to have confidence, because they were
9 spending money through the whole process, that it was
10 a fair and unbiased process.

11 MR. LEWIS: Q: Okay, I'd like to explore three types of
12 bias with you and see how you would have considered
13 these. Would you have considered that free use of a
14 B.C. Hydro asset by one of the proponents with no
15 charge for the use of that asset might be a bias or
16 might set up a bias?

17 MS. VAN RUYVEN: A: Again, I'd have to understand in
18 the context that you're asking that.

19 MR. LEWIS: Q: Well, let me use an example, not that
20 I'm alleging that it's applicable in this case, but if
21 you were buying something and you provided free space
22 to one of the suppliers but not to the others, or free
23 insurance coverage and not to the others, would that
24 create a bias? It's a use of Hydro assets for one
25 proponent and not for others?

26 MS. VAN RUYVEN: A: Again I'd have to understand it in

1 the context of the Call for Tender terms. And you
2 know, bias to me is a willful and knowingly set course
3 of action that would lead to an outcome that you've
4 already decided on. And certainly that was never done
5 through this process. We designed the process to get
6 as many bidders in as we possibly could across a wide
7 range. If we had any bias it was towards reliability.
8 It was a capacity bias because that was our shortfall.
9 And in actual fact, when we finally set the terms and
10 conditions on the NPV analysis and the minimum of 150
11 to 300, there was a natural bias that a smaller
12 aggregated portfolio closer to 150 would most likely
13 be the outcome.

14 So from my perspective, those are really
15 the only biases that Hydro had, when we went into the
16 design of the Call for Tender.

17 **Proceeding Time 11:05 a.m. T30**

18 MR. CRAIG: Q: So if Hydro were supplying free assets
19 to one of the proponents, would you or would you not
20 consider that biasing in favour of one of those
21 proponents?

22 MS. VAN RUYVEN: A: Again, I can't answer that unless
23 it's the context of what you're asking. And probably
24 better to be asked of Panel 2. If you have a specific
25 term and condition in the CFT that you think is
26 biased, I think it would be much easier for Panel 2 to

1 answer that question.

2 MR. CRAIG: Q: Okay. If you were offering a credit in
3 the evaluation for something that you might not be
4 able to deliver in the future, i.e., that it was a
5 contingent use of an asset, would that create a bias?

6 MS. VAN RUYVEN: A: Again, I can't answer that. I know
7 we were encouraged by the Commission to divest
8 ourselves of the VIGP assets. We did that. How the
9 credit was applied is a better question for Panel 2.

10 MR. CRAIG: Q: I'm looking for your policy judgment
11 with respect to these general types of things, not the
12 specific issues. I'll take those up with the other
13 policy.

14 MS. VAN RUYVEN: A: Well, the policy direction was to
15 follow the Commission's recommendation. They
16 encouraged us to divest ourselves of the VIGP assets,
17 and we did so.

18 MR. CRAIG: Q: And if you were offering a credit for
19 something that had already been promised to someone
20 else, would you consider that as setting up a bias, or
21 a problem in the evaluation?

22 MS. VAN RUYVEN: A: I'd consider that breaking a
23 promise, and again I'm not sure what you're referring
24 to.

25 MR. CRAIG: Q: All right. So those types of situations
26 that I've represented, you have no policy perspective

1 on those?

2 MS. VAN RUYVEN: A: We have a policy perspective that
3 we have a lot of integrity at B.C. Hydro, and we would
4 never set up conditions in a Call for Tender process
5 that would create bias, not willfully or knowingly.
6 So again, I think it would be much more helpful if you
7 had a certain term or condition in the CFT that you
8 felt had led to a bias, to context it in that way.

9 MR. CRAIG: Q: We'll get to that. What would your
10 policy decision and action be if you'd found out that
11 the process was biased?

12 MS. VAN RUYVEN: A: Well, we don't feel it is, so I
13 think it's important that I say that, we don't --

14 MR. CRAIG: Q: You've said it a number of times. What
15 would your policy action be if you found it was
16 biased?

17 MS. VAN RUYVEN: A: Well, if something that we did at
18 B.C. Hydro had a willful and knowing bias to it, and
19 someone had done that knowingly, then we would have to
20 take action on that.

21 MR. CRAIG: Q: And what action would you take?

22 MS. VAN RUYVEN: A: Well, it would depend on the
23 situation. If it was something like this, we'd have
24 to take action with the particular individual that had
25 manipulated the process for a particular outcome, and
26 we would have to look at whether or not we would have

1 to not accept the outcome and start over again. But
2 in this case, we don't feel that that is the case.
3 MR. CRAIG: Q: In your consideration of bias what level
4 of bias would you have considered material? What
5 level of impact would be material?

6 MS. VAN RUYVEN: A: Again, it would be simply if
7 someone had knowingly set something in those -- in the
8 Call for Tender, or had knowingly set the QEM
9 methodology in such a way that it would presuppose an
10 outcome, before we even opened the price envelopes, or
11 before we even populated the QEM. It would have to
12 have been something materially done up front that
13 would have presupposed an outcome other than going
14 through a commercially-driven competitive outcome.

15 MR. CRAIG: Q: Okay. Let me turn to some specifics.
16 You're aware that the BCUC has ordered the deferred
17 cost -- the costs of the VIGP process to be deferred,
18 and that the Order explicitly leaves the decision as
19 to whether or not those would be charged to customers
20 until after the CFT decision?

21 MS. VAN RUYVEN: A: Yes, I believe that is the case.

22 **Proceeding Time 11:10 a.m. T31**

23 MR. CRAIG: Q: Okay, thank you. And you're aware in
24 this process that Hydro is offering the responsibility
25 to handle the tolling for the gas supply?

26 MS. VAN RUYVEN: A: Yes, I'm aware of that.

1 MR. CRAIG: Q: And that that's being done because B.C.
2 Hydro has the ability to manage the gas and
3 electricity, and it's in a better position to do that
4 and manage those costs and therefore end up with
5 cheaper gas toll costs?

6 MS. VAN RUYVEN: A: There are a number of reasons and I
7 think that's better put to Panel 2.

8 MR. CRAIG: Q: I'm just looking for your understanding
9 of the issue.

10 MS. VAN RUYVEN: A: That's one of the reasons, but I
11 think again it's supported by several others, which
12 would be answered on Panel 2.

13 MR. CRAIG: Q: Do you agree that this ability of B.C.
14 Hydro to manage the gas and electricity supply is a
15 major strength, a major asset of B.C. Hydro in being
16 able to deliver lower costs?

17 MS. VAN RUYVEN: A: Well, I know that B.C. Hydro
18 manages a large gas portfolio, if I'm not mistaken one
19 of the largest in British Columbia. Gas-fired supply
20 is about 10 percent of our portfolio. So yes, we have
21 the infrastructure, we have the resources and we have
22 the skills to mitigate gas price risks both in the
23 short and long term.

24 MR. CRAIG: Q: And that's a major asset in terms of
25 being able to provide ongoing value from those
26 strengths.

1 MS. VAN RUYVEN: A: It is a strength that B.C. Hydro
2 has. It is reality. We do manage a gas portfolio
3 today.

4 MR. CRAIG: Q: And I wonder if -- and I'll direct these
5 to the panels to follow in terms of the detail, but I
6 wonder if you could help me with your understanding of
7 how B.C. Hydro is going to realize the energy margin
8 that's been credited to the project?

9 MS. VAN RUYVEN: A: Again, Panel 2 will have to answer
10 that.

11 MR. CRAIG: Q: Okay. And also with regard to how it's
12 assured or guaranteed or highly probable that that
13 will be delivered? Panel 2?

14 MS. VAN RUYVEN: A: Again Panel 2.

15 MR. CRAIG: Q: Okay.

16 Mr. Chairman, those are my questions.
17 Thank you very much.

18 THE CHAIRPERSON: Mr. Quail, because you indicated
19 earlier that you would only be five minutes, I won't
20 give you the same timeframe but I'll assume that
21 you'll be close to that five minutes.

22 MR. QUAIL: Yes, see what we can do.

23 **CROSS-EXAMINATION BY MR. QUAIL:**

24 MR. QUAIL: Q: I'd like to just begin with a little
25 observation. I note that you indicated that the
26 environmental issues are things that Hydro is content

1 to defer to stakeholders, but in the case of this
2 project Hydro seems sublimely indifferent to the
3 opposition that stakeholders have all exhibited.

4 The combined cycle thermal generating plant
5 that we're talking about here, according to my
6 understanding, has a presumed useful economic life in
7 the range of 25 years, is that not correct?

8 MS. VAN RUYVEN: A: Again I think you need to confirm
9 that with probably Panel 2.

10 MR. QUAIL: Q: Okay, but you're familiar with the 25-
11 year life of this contract, subject to potential
12 extensions.

13 MS. VAN RUYVEN: A: Yes, I'm aware that we set the term
14 at 25 years.

15 MR. QUAIL: Q: You're aware that after a certain period
16 of time, generating plants become obsolescent, they
17 become overtaken with more efficient resources, and it
18 gets hard to find parts even. You're aware there is a
19 useful lifespan to these?

20 MS. VAN RUYVEN: A: I don't have an expertise in
21 combined cycle gas plants, so I'm really again not the
22 best person to answer that question.

23 MR. QUAIL: Q: Okay. Now in the course of the
24 discussion between Mr. Wallace and yourself about the
25 replacement of the 230 kilovolt line, you indicated
26 that in -- and when Mr. Wallace was talking to you

1 about the significance of that connection being made
2 on the capacity requirements on the Island, I'm sure
3 you recall that discussion, you indicated that in
4 looking at those issues, Hydro looks at a 20-year-plus
5 planning horizon, as I understood your evidence, for
6 Vancouver Island. Is that your evidence?

7 MS. VAN RUYVEN: A: We look at a 20-year planning
8 horizon for system planning.

9 MR. QUAIL: Q: Okay. And this application assumes,
10 that is the Duke Point project assumes that a 230
11 kilovolt line is in service after March of 2009, is
12 that correct? I could refer you in the application --

13 MS. VAN RUYVEN: A: Yes, that's correct.

14 MR. QUAIL: Q: -- page 17, line 24. Okay. So it
15 appears that Hydro has, in terms of capacity on the
16 Island, an immediate short-term problem that appears
17 to be somewhat imminent, and then potentially a
18 longer-term problem which is your 20-year-plus horizon
19 for future capacity requirements. Is that right?

20 MS. VAN RUYVEN: A: We have a short-term capacity
21 shortfall in 2007.

22 **Proceeding Time 11:15 a.m. T32**

23 MR. QUAIL: Q: Yes. So as I understand the picture
24 that emerges from this proposal, what we would have is
25 that Duke Point would -- it would be starting up in
26 the winter of 2007, so it would address the last year

1 of the immediate problem, is that right?

2 MS. VAN RUYVEN: A: That's correct.

3 MR. QUAIL: Q: And then in terms of the long-term
4 problem, it's only around for the first five years of
5 that problem. That is, year 20 to 25. The longer-
6 term problem, you said, is based on a 20-year planning
7 horizon. This plant is four-fifths of the way through
8 its presumed economic life before that horizon occurs,
9 is that not correct?

10 MS. VAN RUYVEN: A: Well, the plant -- the 252
11 megawatts closes the gap today, and it has timing
12 certainty to close that gap by '07. The load will
13 continue to grow on Vancouver Island, and we will need
14 another resource addition to serve the Island
15 reliably.

16 MR. QUAIL: Q: I hate to clip into your comments, but
17 my time is really limited, and I think you're re-
18 stating what Mr. Wallace has already elicited from
19 you. And I don't hear anything that's contradicted
20 it.

21 As I understand this application, the
22 motivating factor that led B.C. Hydro to develop the
23 proposal in the first place, both in the form of the
24 original Vancouver Island generating project, now Tier
25 1, is an identified shortfall in capacity to meet peak
26 demand on the Island in the near term. Is that right?

1 MS. VAN RUYVEN: A: That's correct.

2 MR. QUAIL: Q: Okay.

3 MS. VAN RUYVEN: A: Well, to meet capacity, it's a
4 long-term capacity problem. The HDVC cable was in
5 place for some 50 years, it's a long-term asset --

6 MR. QUAIL: Q: Yes. Okay. I don't want to go -- we've
7 covered that territory, I think. But what I'm saying
8 is, there was a peak capacity need which was sort of
9 the crying need that you say requires action now.

10 MS. VAN RUYVEN: A: Right. I'm just clarifying it.
11 It's not a short-term capacity shortfall. That
12 capacity shortfall exists today, and it's --

13 MR. QUAIL: Q: And the --

14 MS. VAN RUYVEN: A: -- a long-term shortfall.

15 MR. QUAIL: Q: Okay. One of the assumptions that you
16 raise in justification of the project would be that
17 the plant would be running almost all the time. And
18 my reference is the response to the Information
19 Request from the JIESC 1.5.0(a), indicating that the
20 capacity factor is presumed to be 81.8 percent.

21 MS. VAN RUYVEN: A: Again, better question for Panel 2.

22 MR. QUAIL: Q: You'd agree, though, you're assuming in
23 justifying this that the plant would be running just
24 about all the time.

25 MS. VAN RUYVEN: A: Again, you'll have to ask --
26 clarify with Panel 2, their assumptions behind that.

1 MR. QUAIL: Q: Okay. But you would agree with me that
2 the project is most economic if market conditions
3 permit it to be kept running at all times, or as much
4 of the time as possible. Isn't that correct? I'm
5 sure you can answer that one.

6 MS. VAN RUYVEN: A: Gas-fired plants that are
7 dispatched to the higher capacity factor are generally
8 more economic. That is correct.

9 MR. QUAIL: Q: Okay. Refer you to Exhibit C17-6, which
10 is the evidence of Duke Point Power. Are you familiar
11 with that document?

12 MS. VAN RUYVEN: A: No, I'm not.

13 MR. QUAIL: Q: And I'll be referring you to questions 8
14 and 11. Do you have that before you? I'll go ahead,
15 reading them into the record. Question 8:

16 "Please explain why DPP considers that its
17 plant is the most cost-effective option
18 available to B.C. Hydro."

19 Third paragraph of the answer:

20 "Another key consideration is to
21 differentiate between the dispatchable plant
22 and a must-run facility. This factor also
23 has a significant impact on the fixed costs
24 to ratepayers that particular option will
25 impose."

26 Question 11:

1 "Please elaborate further on the difference
2 between a dispatchable facility and a must-
3 run facility."

4 Answer:

5 "The DPP project will be a dispatchable
6 facility, meaning it can be turned on or
7 turned off as desired, depending on the
8 technical or commercial circumstances
9 prevailing at any point."

10 And I would urge the Commission to read the balance of
11 that question, but I won't take the time to read it
12 into the record at this point.

13 So it appears that one of the key virtues
14 of the DPP project is it can be switched off.

15 MS. VAN RUYVEN: A: That's not the key virtue. The key
16 virtue is, it's -- meets our reliability criteria for
17 capacity factor. The fact that it's a dispatchable
18 resource has some benefits. There were some must-run
19 projects that also bid in to the Call for Tender
20 process that could have also met the capacity
21 requirement. So we were not setting the Call for
22 Tender to get a dispatchable gas-fired plant outcome.

23 MR. QUAIL: Q: But if you -- do you disagree with the
24 evidence of Duke Point Power that I've just read into
25 the record? Is it -- is what they're saying true, or
26 is it false?

1 MS. VAN RUYVEN: A: No, a dispatchable gas-fired plant
2 has some inherent benefits.

3 MR. QUAIL: Q: And that that is a key consideration in
4 this project. Is that a true or false statement?

5 MS. VAN RUYVEN: A: It was not a key consideration in
6 how we set up the Call for Tender. We allowed
7 capacity-only projects, capacity and energy projects,
8 capacity and energy that were dispatchable, and must-
9 run facilities, as well as any other fuel sources that
10 could meet our criteria, which was around reliability.
11 It wasn't around -- we did not set up the Call for
12 Tender to have a dispatchable plant outcome. We set
13 it very broadly so that all resources could bid in who
14 could at least meet the mandatory reliability
15 criteria.

16 **Proceeding Time 11:20 a.m. T33**

17 MR. QUAIL: Q: The key contradiction, with respect,
18 that I'm trying to put my finger on here is on one
19 hand the proponents, I take you Hydro and Duke Point
20 as being essentially on the same side of the fence.
21 There was correspondence on the record from your
22 counsel about who wears which hat in this matter.
23 You're both wearing the same hat. You're both the
24 same side of the fence. Are saying on one hand that
25 the fact it can be switched off is a key virtue. On
26 the other hand, Hydro justifies it on the assumption

1 that it's not switched off, that it's running
2 virtually all of the time. Can you please explain
3 away that contradiction?

4 MS. VAN RUYVEN: A: Again I think it's a question
5 better answered by Panel 2.

6 MR. QUAIL: Q: Okay. And there is cost to Hydro's
7 ratepayers even when the plant is shut off, isn't that
8 right?

9 MS. VAN RUYVEN: A: Well, there's cost to Hydro as
10 ratepayers for all supply options that are not running
11 100 percent of the time.

12 MR. QUAIL: Q: Yes, I'd refer you to Village of Gold
13 River Information Request No. 1.2.11 just released
14 over the weekend.

15 "If a plant is dispatched, are the
16 ratepayers of B.C. still paying for its
17 availability? If so, how and how much?"

18 Response:

19 "Yes, under the terms of the EPA, B.C. Hydro
20 continues to pay the fixed charges
21 regardless of whether or not the plant is
22 producing energy, as long as the plant is
23 capable of producing when asked by B.C.
24 Hydro to do so. B.C. Hydro pays the
25 variable charges..."

26 That's essentially the fuel cost, is it not? Only --

1 is it not? The variable charge is the cost of fuel to
2 the plant.

3 MS. VAN RUYVEN: A: Yes, that's correct.

4 MR. QUAIL: Q: Primarily.

5 "...only when the plant is producing energy as
6 scheduled by B.C. Hydro. Under the terms of
7 the EPA, whether or not a plant is
8 dispatched, B.C. Hydro pays the tendered
9 capital charge. For the Duke Point Power
10 Project, the tendered capital charge is
11 \$12,029.17 per megawatt per month. See
12 Appendix 3 of the EPA."

13 First of all, it's my understanding, what I
14 understand this answer to be saying is that the fixed
15 charges consist of the tendered capital charge, is
16 that right, or are there other fixed charges?

17 MS. VAN RUYVEN: A: Again, the author of the IR in
18 Panel 2 is much better prepared to answer those
19 questions.

20 MR. QUAIL: Q: Okay, I'd ask that that issue be --
21 would provide a response from Panel 2.

22 According to my arithmetic, 252 megawatts,
23 that's \$3,031,350.84 a month as a cost for shutting
24 down the plant. Do you quarrel with that?

25 MS. VAN RUYVEN: A: Well, I don't know where your
26 arithmetic comes from, so again, a better question to

1 put to Panel 2.

2 MR. QUAILE: Q: Okay. You can take out your calculator,
3 multiply \$12,029.17 by 252. That's the source of it.

4 MR. SANDERSON: Panel 2 will have done that by the time
5 they appear.

6 MR. QUAILE: Q: They will -- they come equipped with a
7 calculator. Anyway I will again ask perhaps for an
8 undertaking that they provide confirmation of that
9 number as well as the fact that that -- that whether
10 or not there are other fixed costs that remain to be
11 paid by ratepayers when the plant is not running.

12 I'll save the rest of my questions for the
13 other panels. Thank you.

14 THE CHAIRPERSON: Mr. Andrews. Mr. Andrews, you will
15 also be given 15 minutes.

16 MR. ANDREWS: Thank you. And as you know, for the
17 record, I object to the prior limitation on the time
18 for cross-examination.

19 **CROSS-EXAMINATION BY MR. ANDREWS:**

20 MR. ANDREWS: Q: Ms. Van Ruyven, can you confirm that
21 the EPA has been extended by agreement of both parties
22 to February 18th, 2005?

23 MS. VAN RUYVEN: A: I can confirm that, yes.

24 MR. ANDREWS: Q: And would you agree that if the
25 parties can extend it for that short period of time,
26 they can also extend it further?

1 MS. VAN RUYVEN: A: Again you can ask Panel 2 because
2 there were terms and conditions to allow for
3 extension. The extension to the 18th was simply to
4 accommodate the date that the Commission had indicated
5 to us for decision.

6 MR. ANDREWS: Q: From a high-level perspective, have
7 you not considered the possibility of an extension to
8 the Electricity Purchase Agreement?

9 MS. VAN RUYVEN: A: Well, there's no need to consider
10 that today based on the Commission stating that they
11 would render their decision on February 17th.

12 MR. ANDREWS: Q: If the Commission makes a decision
13 without reasons, do you feel that that is sufficient
14 certainty to allow Hydro to commit itself to proceed
15 as a management perspective?

16 MR. SANDERSON: Mr. Andrews is descending into argument,
17 Mr. Chairman, on procedural matters. I don't think
18 it's fair to ask this panel to respond to that. If he
19 wants to argue about it procedurally, we can do that
20 perhaps at 4 o'clock, but I don't think this is the
21 place to do it.

22 **Proceeding Time 11:25 a.m. T34**

23 MR. ANDREWS: The question has to do with the degree of
24 certainty that management requires, and I'm not sure
25 even how it relates to the motion at 4 o'clock.

26 THE CHAIRMAN: Mr. Sanderson, I also am having some

1 difficulty. If the question to Ms. Van Ruyven is
2 whether or not B.C. Hydro will proceed with the steps
3 that are necessary to meet the COD date with DPP, in
4 the absence of reasons, that may be a question that
5 Ms. Van Ruyven can answer.

6 MR. SANDERSON: I'm sorry. I had not understood the
7 question as you just put. Probably that is what Mr.
8 Andrews meant. I thought he was talking about a
9 previous procedural decision of the Commission without
10 reasons, which is the subject of some of his
11 complaints. But if the question is, "Your final
12 decision on this outcome not having reasons, and what
13 is Hydro's policy?" that's a different matter, and I
14 will stand down my objection.

15 THE CHAIRMAN: Mr. Andrews, did I have your question
16 correctly?

17 MR. ANDREWS: Yes, you did, with respect.

18 MR. BOIS: Mr. Chairman, I rise only because I think your
19 microphone is not turned on, and it's quite difficult
20 to hear you in the back. Thank you.

21 THE CHAIRMAN: It could also be that I can speak up.
22 Mr. Andrews, please proceed.

23 MR. ANDREWS: Q: Do you understand the question, or
24 shall I --

25 MS. VAN RUYVEN: A: Could you repeat it, please?

26 MR. ANDREWS: Q: The question is whether Hydro

1 considers that a decision by this Commission without
2 reasons would be -- would give Hydro sufficient
3 certainty to proceed with implementation of the EPA?
4 MS. VAN RUYVEN: A: I probably need a little bit of a
5 lesson with what a Commission decision without reasons
6 looks like.
7 MR. ANDREWS: Q: Well, I'm not --
8 MS. VAN RUYVEN: A: Would that mean an allowance of the
9 EPA? Is that what you're saying?
10 MR. ANDREWS: Q: Well, I hesitate to -- to go much
11 further. Put it -- if you haven't, can it be said,
12 then, that management has not examined the question of
13 whether the -- the question of whether a Commission
14 decision with reasons at the time, versus a Commission
15 decision without reasons, would affect Hydro's
16 decision to implement the EPA?
17 MS. VAN RUYVEN: A: Well, I think the decision before
18 the Commission is under Section 71, is to allow the
19 EPA or to disallow the EPA. So if they allow the EPA
20 with some conditions attached, we would have to look
21 at that to see whether or not there was some risk
22 attached to that, and the proponent would as well,
23 because it's the proponent that has to ultimately make
24 a decision and move forward and spend some money over
25 the next period of time. We also, I believe, have the
26 ability to do one more extension. So again, we'd have

1 to look at that very carefully and weigh pros and
2 cons.

3 But I believe the decision is to allow or
4 to disallow the electricity purchase agreement, and if
5 there were reasons attached to that, we'd have to look
6 at those very carefully and determine, at that point
7 in time, what the risks were.

8 MR. ANDREWS: Q: So you would have to look at the
9 reasons in order to determine whether any conditions,
10 if there were any, were such that you would or would
11 not proceed with the EPA.

12 MS. VAN RUYVEN: A: Yes, we'd have to know what those
13 conditions were to understand what the consequences
14 and impacts of our contract were.

15 MR. ANDREWS: Q: Thank you. There may be some
16 confusion about the distinction between "decision with
17 reasons" and a "decision incorporating conditions".
18 And if the -- let me try to put this another way,
19 then. Is it your understanding that the Commission
20 has the authority to either allow the whole EPA, or
21 (b), disallow the entire EPA, or (c), disallow certain
22 sections or aspects of the EPA and add conditions?

23 MS. VAN RUYVEN: A: My understanding is, I believe it's
24 the latter. But again, I haven't read Section 71 for
25 some time, so I will defer to counsel to confirm that.

26 MR. ANDREWS: Q: Is B.C. Hydro's management aware that

1 the -- an appeal is available with leave to the Court
2 of Appeal of British Columbia, from a decision by this
3 panel?

4 MS. VAN RUYVEN: A: Yes, we're aware of that.

5 **Proceeding Time 11:30 a.m. T35**

6 MR. ANDREWS: Q: And from the point of view of the
7 certainty that you require, does B.C. Hydro consider
8 that a decision that has not yet been tested by an
9 application for leave to appeal provides the certainty
10 that you need in order to proceed?

11 MS. VAN RUYVEN: A: Well, I think we'll have to wait
12 for the outcome of this proceeding, combined with the
13 possibility of an appeal, and we'll have to make the
14 decision at the time, based on all the facts in front
15 of us. I think it's important to get through this
16 decision first, understand what it is, with or without
17 reasons or conditions, including the possibility of an
18 appeal, and we will have to make that determination at
19 the time.

20 MR. ANDREWS: Q: Will you agree that reviewing the
21 Commission's reasons for its decision would be an
22 important aspect of deciding the likelihood of success
23 of an appeal, whether there would even be an appeal?

24 MS. VAN RUYVEN: A: Well, like any Commission decision,
25 we take seriously what the outcome of that decision
26 is, including recommendations, so, yes, we would have

1 to seriously consider that.

2 MR. ANDREWS: Q: Thank you. I want to direct your
3 attention to the topic of load shedding. And you've
4 indicated that B.C. Hydro takes the approach that the
5 economic consequences of load shedding, other than in
6 exceptional circumstances, are not acceptable. Is
7 that a fair phrasing of it?

8 MS. VAN RUYVEN: A: And again, I wasn't the author of
9 that. I think the context of that is economic
10 consequences of lost production and potentially lost
11 jobs, was what the context of that comment.

12 MR. ANDREWS: Q: Would you agree that to take an
13 approach that load shedding, as a general proposition,
14 is not acceptable is more a matter of policy and
15 perhaps even philosophy than it is of hard economic
16 analysis?

17 MS. VAN RUYVEN: A: No, load shedding is something we
18 absolutely accept. We look at it for short-term stop-
19 gap measures. And as I mentioned before, we have a
20 tariff, a load curtailment tariff, that one of our
21 customers participates in today, and so we don't have
22 any objection to load shedding. But we don't look at
23 it for long-term planning purposes.

24 MR. ANDREWS: Q: Would you agree that for the duration
25 -- for the -- what you've characterized as a short-
26 term capacity shortfall in 2007/08, that load shedding

1 is a feasible option?

2 MS. VAN RUYVEN: A: If we had had an outcome in the
3 Call for Tender that was closer to 150 megawatts, we
4 would have had to look to load shedding as an option
5 to fill the remaining gap, which at this point is
6 about another 120 megawatts.

7 MR. ANDREWS: Q: B.C. Hydro's management decided to
8 require the cost-effectiveness analysis, using that
9 term as it's used in the CFT report, after receiving
10 the results of the CFT process itself. Would you
11 agree, then, in a sense this Commission is performing
12 a similar level of high-level review of the merits of
13 the outcome of the CFT?

14 MS. VAN RUYVEN: A: Yes, I believe the Commission is
15 conducting a review of the process, the electricity
16 purchase agreement, the outcome of that, and within
17 the scope that they've set, the outcome of that as it
18 relates to Tier 2 and the no award outcome. But not
19 in the full aspects of a full Resource Plan.

20 MR. ANDREWS: Q: I just want to confirm something that
21 you alluded to earlier, which is, did I hear you
22 correctly to say that the DPP project has an
23 environmental assessment certificate?

24 MS. VAN RUYVEN: A: That's correct.

25 MR. ANDREWS: Q: And perhaps I'm -- are you aware of
26 whether that's in evidence, or you may not be?

1 MS. VAN RUYVEN: A: No, again you could question Panel
2 2 on that.

3 MR. ANDREWS: Q: At the management level, you must have
4 been aware of the issue about whether a CCGT was
5 purely gas-fired versus being dual fuel-fired.

6 MS. VAN RUYVEN: A: And again, Panel 2 can answer the
7 dual fuel question.

8 MR. ANDREWS: Q: Well, is it your understanding from
9 management's point of view that DPP is a dual fuel
10 facility? Or a single natural gas fuel facility.

11 MS. VAN RUYVEN: A: Again, Panel 2 is better capable to
12 answer that.

13 MR. ANDREWS: Q: Management didn't turn its mind to
14 that distinction?

15 MS. VAN RUYVEN: A: Not senior management, no. We
16 looked at the high-level outcome of a competitive
17 process, tested it against some cost-effectiveness and
18 high gas price scenarios. It met all the mandatory
19 criteria for reliability, technical, financial -- and
20 we were satisfied with that.

21 MR. ANDREWS: Q: B.C. Hydro proposed the GSX pipeline,
22 and assured the National Energy Board that it was
23 essential that that project be completed in order to
24 meet the Vancouver Island's energy needs in a cost-
25 effective manner. But recently, B.C. Hydro cancelled
26 that project, correct?

1 **Proceeding Time 11:35 a.m. T36**

2 MS. VAN RUYVEN: A: That's correct.

3 MR. ANDREWS: Q: Would you agree that the cancellation
4 of the project prevents the spending of money that
5 would not be economic?

6 MS. VAN RUYVEN: A: Well, the cancellation of the
7 project was done because we have what we feel is a
8 viable lower-cost option, and there was no need to
9 keep both projects -- both the Terasen proposal and
10 GSX going, knowing that we had a viable, much more
11 cost-effective option for gas transportation.

12 MR. ANDREWS: Q: So there was -- it was beneficial to
13 the ratepayers not to proceed with the GSX Pipeline
14 because that pipeline was not the most cost-effective
15 option.

16 MS. VAN RUYVEN: A: Yes, and the Commission
17 contemplated in the VIGP decision that we should look
18 at lower-cost gas transportation. We did. We spent
19 quite a bit of time with Terasen looking at their
20 proposal and made a decision that they could provide
21 lower-cost gas transportation than the GSX, and hence
22 that led to our decision to exit out of that contract.

23 MR. ANDREWS: Q: In the CFT report it says that the DPP
24 project would result in what it refers to as a savings
25 of between 50 million and \$100 million to B.C. Hydro,
26 depending on how you deal with the price of purchase

1 of the assets. Is that correct?

2 MS. VAN RUYVEN: A: That was an initial range that was
3 presented to us, and again, I believe has been refined
4 since then and a question for Panel 2.

5 MR. ANDREWS: Q: Well, from a management perspective,
6 did it trouble you that a B.C. Hydro project that had
7 already gone through extensive scrutiny and project
8 development, with assurances to the Commission that it
9 was as tightly budgeted as was reasonable under the
10 circumstances, now turns out to be some 50 or 100
11 million dollars more expensive than it can otherwise
12 be done using virtually the same assets?

13 MS. VAN RUYVEN: A: No, that doesn't concern me at all.
14 I think the Commission gave a good direction that we
15 haven't -- we didn't prove that VIGP was cost-
16 effective, and to run a Call for Tender process we did
17 that. We had an outcome that was some \$50 million
18 less expensive than a project we had proposed, and
19 that's a good outcome. And it's a good thing that we
20 did the Call for Tender process, because we've ended
21 up with a more cost-effective project.

22 MR. ANDREWS: Q: And have you not turned back and asked
23 yourselves why it was that VIGP was proposed at a
24 price of 50 to 100 million dollars more than DPP was
25 able to bid?

26 MS. VAN RUYVEN: A: Well, we've had many conversations

1 of the ten-year journey that got us to the VIGP
2 application, and we were quite satisfied with the
3 outcome of that VIGP decision to go back and try one
4 more time for more cost-effective solution. We were
5 fine with that decision.

6 So, yes, have we gone back and said how did
7 we find ourselves in the position of a proponent of a
8 gas-fired plant? There's lots of historical reasons
9 as to why we found ourselves in that position, and it
10 shows also that Hydro is in a better position to be
11 purchasing than to be constructing a gas-fired plant
12 in that the private sector has clearly shown, through
13 competitive process, that they can do it more cost-
14 effectively.

15 MR. ANDREWS: Q: Well, I'd suggest to you that the
16 historical reasons for the plant go back to decisions
17 that Hydro has not attempted to defend to proceed with
18 a natural gas strategy on Vancouver Island that long
19 predated even a VIGP proposal.

20 MS. VAN RUYVEN: A: But we were put under re-
21 regulation, and the VIGP project was the first project
22 to go forward to the Commission, and appropriately
23 went through a very public process.

24 MR. ANDREWS: Q: So is it correct, then, that Hydro
25 does not have at a management level, an explanation of
26 why DPP'S project is priced 50 to 100 million dollars

1 lower than VIGP?

2 MS. VAN RUYVEN: A: Other than when you run competitive
3 processes, and people are in a competitive situation
4 where there are lots of bidders, they will find ways
5 to be more cost-effective. And that's exactly what
6 the Commission asked us to do, go out and do a
7 competitive process to see if you can find more cost-
8 effective solutions than the project that you have
9 proposed.

10 So I would suggest in a robust competition,
11 bidders quite simply sharpen their pencil and figure
12 out ways to do things more cost-effectively.

13 MR. ANDREWS: Q: Why did B.C. Hydro not sharpen its
14 pencil when it was preparing VIGP?

15 MS. VAN RUYVEN: A: Well, I think we thought we had a
16 very good project and that we had appropriate costing.
17 We were not up against competition. And in hindsight,
18 B.C. Hydro doesn't have the expertise to build
19 combined cycle gas-fired plants. So it's a good
20 decision that came out of the Commission decision that
21 we set ourselves on another course of action.

22 **Proceeding Time 11:40 a.m. T37**

23 MR. ANDREWS: Q: Would you agree that the transfer of
24 green house -- or the purported, attempted transfer of
25 greenhouse gas liability from B.C. Hydro and the VIGP
26 proposal to the DPP proponent here is one of the

1 significant changes in costs between the two projects?

2 MS. VAN RUYVEN: A: No, I don't see that that would

3 create that, but again Panel 2 is probably better able

4 to put that in the context of all the costs.

5 MR. ANDREWS: Q: So at a management level --

6 THE CHAIRPERSON: Mr. Andrews, two more questions.

7 MR. ANDREWS: Q: At a management level did you discuss

8 the financial advantage to B.C. Hydro of purporting to

9 relieve yourselves of the greenhouse gas liability

10 through this proposal?

11 MS. VAN RUYVEN: A: No, we did not.

12 MR. ANDREWS: Q: You said that the DPP plant was set in

13 motion or the direction for it was set prior to B.C.

14 Hydro's most recent commitment to environmental

15 policies, and my question is, I guess, combining that

16 with your testimony about the ongoing development of

17 an integrated electricity plan for 2005, the issues

18 that arise as to how much Hydro ratepayers and

19 stakeholders are willing to allocate to greenhouse gas

20 liability, and measures are being addressed in this

21 IEP process, would you agree that to the extent that

22 this DPP versus VIGP choice raises greenhouse issues,

23 that those issues would probably be better addressed

24 in an integrated planning process, rather than on a

25 project specific basis?

26 MS. VAN RUYVEN: A: I believe we need to address the

1 issue of environmental liability through the
2 integrated electricity planning and we need to get
3 input from stakeholders to understand what their
4 values are and what trade-offs they are willing to
5 make against environmental, social, and financial
6 trade-offs. And that is a very big part of the
7 stakeholder engagement and IEP process that will
8 culminate in a 2005 IEP sometime in November of '05.

9 MR. ANDREWS: Q: Thank you. I do have more questions
10 but I'll defer at this point.

11 THE CHAIRPERSON: Mr. Steeves, you mentioned that you may
12 have questions. Do you have questions for this panel?

13 MR. STEEVES: I have one.

14 THE CHAIRPERSON: How long is it your estimate that you
15 might be, Mr. Steeves?

16 MR. STEEVES: Just one or two minutes.

17 THE CHAIRPERSON: Thank you.

18 **CROSS-EXAMINATION BY MR. STEEVES:**

19 MR. STEEVES: Q: Good morning, Mr. Chairman. Good
20 morning Ms. Ruyven [sic]. You just mentioned to Mr.
21 Andrews, William Andrews that B.C. Hydro does not have
22 any expertise in building gas-fired plants, is that
23 correct?

24 MS. VAN RUYVEN: A: We have partnered before with other
25 partners for gas-fired plants.

26 MR. STEEVES: Q: But you have not in-house expertise in

1 this area?

2 MS. VAN RUYVEN: A: No, we are a large hydro company
3 that has a history of constructing large hydro
4 facilities, not gas-fired plants.

5 MR. STEEVES: Q: And therefore B.C. Hydro would have no
6 expertise in either a single gas-fired turbine system
7 or a dual fuel system, is that correct?

8 MS. VAN RUYVEN: A: Now, unless there are folks at
9 Burrard Thermal that have that expertise that run our
10 largest thermal facility, I would suggest that we
11 wouldn't have that expertise in our organization. We
12 would contract that out if we were ever to be a
13 proponent of a gas plant ourselves.

14 MR. STEEVES: Q: So therefore, the expertise that you'd
15 have in-house would not be capable of really analyzing
16 or assessing the -- would not be capable of assessing
17 the technical aspects of the turbine system, the inner
18 workings?

19 MS. VAN RUYVEN: A: I think in terms of the financial
20 evaluation, we do have expertise to look at that.

21 MR. STEEVES: Q: But not technical engineering
22 expertise.

23 MS. VAN RUYVEN: A: Not construction expertise.

24 MR. STEEVES: Q: Or in operations.

25 MS. VAN RUYVEN: A: And again, there may be some people
26 at Hydro from the Burrard aspect that may.

1 **Proceeding Time 11:45 a.m. T38**

2 MR. STEEVES: Q: And in the CFT has there been any
3 further evaluation of the technical aspects with
4 regard to the single and dual fuel systems?

5 MS. VAN RUYVEN: A: Well, there was a technical review
6 done for projects to get through the pre-qualification
7 stage, and we did use an independent reviewer, R. W.
8 Beck, to help us with that technical review. And so
9 projects went through quite a rigorous review to make
10 it to the pre-qualification stage, and we did go to
11 some outside expertise to help us with that.

12 MR. STEEVES: Q: In what areas were these technical
13 analyses conducted?

14 MS. VAN RUYVEN: A: Good question for Panel 2.

15 MR. STEEVES: Q: All right, thank you very much.

16 THE CHAIRMAN: Mr. Fulton, you have 25 minutes.

17 **CROSS-EXAMINATION BY MR. FULTON:**

18 MR. FULTON: Q: Ms. Van Ruyven, I would like to start
19 with the issue of cost-effectiveness, and while some
20 of these questions may have technical elements to
21 them, and if you begin to have a level of discomfort
22 in terms of the technical aspect, please defer them on
23 to the next panel. I'm hoping, though, that most of
24 them will be questions that you can answer at a
25 management level.

26 Would you agree with me that B.C. Hydro

1 attempted to remove as much discretion as possible
2 from the evaluation of tenders?

3 MS. VAN RUYVEN: A: Yes, I would agree with that.

4 MR. FULTON: Q: And would you also agree with me that
5 that was accomplished in two principal ways. The
6 first was by establishing clearly-defined
7 specifications and scope for the product B.C. Hydro
8 was seeking, and the second was developing the QEM
9 based on common and largely fixed input assumptions?

10 MS. VAN RUYVEN: A: I would agree.

11 MR. FULTON: Q: Okay. Now, with respect to the product
12 specification definition -- definitions of cost-
13 effective, would you -- are you able to confirm for me
14 that the selection process within the target range of
15 150 to 300 megawatts was based on the project or
16 portfolio with the lowest MPV?

17 MS. VAN RUYVEN: A: That's correct.

18 MR. FULTON: Q: And given the large range of capacity
19 used in the tender, that is, 150 to 300 megawatts, can
20 you tell us why was this general approach used over
21 one that was based on the unit cost of capacity from
22 the different projects or portfolios? And by that I
23 mean, on a dollar per megawatt after adjustments for
24 energy margin, and other pre-defined system impacts.

25 MS. VAN RUYVEN: A: Well, again, Panel 2 can delve into
26 more detail to that question. From a high level, we

1 set the parameters, minimum of 150. That was very
2 much along the lines of the Commission's
3 recommendations. We put the upper bound at 300
4 megawatts because that was about what the upper bound
5 of a gas-fired plant with duct firing would be. So we
6 book-ended the minimum and maximum. And then we
7 followed the directions on a simplified MPV analysis
8 without system benefits or transmission deferral
9 credits to then evaluate the projects or project that
10 would aggregate to a minimum of 150 megawatts. And
11 that's the methodology that we followed in the QEM and
12 that the bidders had up front.

13 MR. FULTON: Q: Are you able to tell me from a
14 management perspective whether or not an approach
15 based on the unit cost of capacity would have yielded
16 a different outcome than the process in fact did?

17 MS. VAN RUYVEN: A: Management didn't discuss that.

18 MR. FULTON: Q: Okay.

19 MS. VAN RUYVEN: A: And again, it was back to -- one of
20 our guiding principles was to, as closely as possible,
21 follow the Commission directions. We had the ability,
22 later on, to look at Tier 2 if we had no Tier 1 award,
23 on a cost-per-megawatt basis. So there was that
24 ability in the privative clause. If we had no outcome
25 in Tier 1 that was cost-effective to look at other
26 projects that did not aggregate to 150 on a per-

1 megawatt basis.

2 MR. FULTON: Q: Okay. Looking next to the treatment of
3 risk in tender evaluation, did management form any
4 conclusion of whether the differences in risk,
5 financial or otherwise, were adequately captured in
6 the expected values used or otherwise irrelevant to
7 the determination of the cost-effectiveness of the
8 alternative bids?

9 MS. VAN RUYVEN: A: I'm not sure I quite understand
10 your question.

11 **Proceeding Time 11:50 a.m.**

12 MR. FULTON: Q: Okay, well, let me try it this way,
13 then. The CFT tenders were evaluated with a
14 simplified model. The minimum thresholds were
15 established for reliability attributes, correct?

16 MS. VAN RUYVEN: A: The minimum threshold of 150 was
17 established partly following the Commission's
18 direction for a minimum of 150. Our expected load at
19 the time was higher than that, but we were looking for
20 reducing regulatory risks, so we effectively decided
21 that the 150 minimum we could live with.

22 MR. FULTON: Q: And once the thresholds were met,
23 though, the model simply compared the expected value
24 of each tender under a set of predefined gas and
25 electricity prices.

26 MS. VAN RUYVEN: A: And again, a question better

1 verified by Panel 2.

2 MR. FULTON: Q: Yes, but that's -- what's --

3 MS. VAN RUYVEN: A: Generally directionally I would say
4 that that would have been my understanding.

5 MR. FULTON: Q: Right. And that was your
6 understanding as a member of management when you've
7 looked at the results of the CFT.

8 MS. VAN RUYVEN: A: And as a member of management, we
9 understood what that could possibly lead to. So on a
10 simplified NPV basis, what that meant is that if we
11 had projects that aggregated to something close --
12 well, 150 or slightly above, that they had an inherent
13 advantage in how we'd set up the methodology. That
14 changes were on a simplified NPV analysis that the
15 aggregation of smaller projects to something at 150 or
16 just over were highly likely to be successful. So
17 that was the expected outcome going into the process
18 with the way we'd set up the evaluation.

19 MR. FULTON: Q: And in the case of the electricity
20 prices, what was looked at was the average -- the
21 average of two forecasts was used in the evaluation.

22 MS. VAN RUYVEN: A: I believe that's the case, yes.

23 MR. FULTON: Q: Right. And the evaluation did not
24 explicitly take into account possible differences in
25 the risk profile of the different tenders. For
26 example, it did not explicitly evaluate differences in

1 risk exposure associated with uncertainties such as
2 gas prices or spark spread.

3 MS. VAN RUYVEN: A: Again a question for Panel 2.

4 MR. FULTON: Q: But when you were looking at the
5 results of the CFT from a management level, was that
6 your understanding?

7 MS. VAN RUYVEN: A: When we looked at the results from
8 a management level, we asked to run a high gas price
9 scenario, low electricity, where there was no
10 correlation between gas and electricity prices, which
11 is -- in our opinion we felt was the ultimate stress
12 test. A highly unlikely scenario, but that was asked
13 for, the cost-effectiveness test that was run between
14 October 14th and October 19th.

15 MR. FULTON: Q: Okay, right. So with the background
16 that I provided you with, and the basic understanding
17 at least that you had from a management level, was it
18 management's belief that the differences in the risk,
19 whether they be financial or otherwise, were
20 adequately captured in the expected values used or
21 otherwise were they irrelevant to the determination of
22 the cost-effectiveness of the alternative bids?

23 MS. VAN RUYVEN: A: Well, the evaluation we asked for
24 in the cost-effectiveness test was to test the Tier 1
25 award, which was the 252 megawatt gas-fired plant,
26 against a Tier 2 scenario and a no award scenario.

1 And then we asked to stress test it against the high
2 gas, low electricity scenario and to bookend that to
3 give us some order of magnitude as to whether or not
4 this was the right decision. Or more importantly,
5 were there any compelling reasons to overturn the
6 outcome of a competitive process with a bid that was
7 compliant and that met all of the mandatory criteria
8 that we had set?

9 So that's all that cost-effectiveness test
10 was, was a final stepping back from the outcome to
11 take one more look at whether or not this was the
12 right decision to make. And it was completely
13 disconnected from the QEM and any evaluation that was
14 done through the call for tender. It was a completely
15 separate process.

16 MR. FULTON: Q: In terms of the treatment of risk in
17 the cost-effective analysis, when management
18 considered the outcomes at its meeting, can I take it
19 that in assessing the three alternatives that were
20 before it, management did not consider risk through
21 various sensitivity analysis and stress testing?

22 MS. VAN RUYVEN: A: No, we looked at what Mr. Wallace
23 cross-examined me on, which was basically three slides
24 of very high-level analysis. At that time it looked
25 like there was as small premium to pay for the Tier 1
26 against the Tier 2 and now award.

Proceeding Time 11:55 a.m. T40

The conversation that took place in that hour meeting on October 19th was very much around the lines of it was a small premium. We had a reliable outcome to a competitive process that met all the mandatory criteria and with the premium that we saw, there was no compelling reason to overturn the decision. And we also talked about some of the other risk factors of overturning a competitive decision, and what that could do to further competition and further acquisition calls that we would run in the future, and we also talked about the risk of the cable date slipping and making it much more difficult to close the gap with less certain contingency plans. And that was really where our discussion led us to through that one hour to the final decision of accepting the outcome.

MR. FULTON: Q: Does management believe that the variables on which the sensitivity analysis was conducted in the CFT, and I'm here talking about the timing of the next 230 kV cable, the size deficit on Vancouver Island in fiscal '07-'08, natural gas prices and the cost of mainland generation, did management believe that those factors represent the key financial risks in comparing the alternatives?

MS. VAN RUYVEN: A: We discussed all of those issues

1 over a year and a half period of time and what
2 ultimately it always came down to was a reliable
3 solution and reliability really was one component of
4 the cost effectiveness. So we needed something that
5 was cost effective, so it was lower cost than the VIGP
6 benchmark, it had timing certainty and it met all the
7 mandatory criteria for the product that we were
8 looking for.

9 MR. FULTON: Q: Yes, you discussed all those
10 alternatives, but did you conclude that those
11 alternatives represented the key financial risks?

12 MS. VAN RUYVEN: A: The alternatives being?

13 MR. FULTON: Q: The timing of the next 230 kV cable,
14 the size of the deficit on Vancouver Island in fiscal
15 '07-'08, natural gas prices and the cost of mainland
16 generation?

17 MS. VAN RUYVEN: A: I would say we discussed all of
18 those, not from necessarily a financial perspective,
19 certainly from a reliability perspective, and you've
20 got to remember that this -- the outcome of the Call
21 for Tender was not then put into an integrated
22 electricity plan or a resource plan for the whole
23 system, and there was not a quantification or
24 qualification of how this fit within the whole system.
25 This was simply the outcome of a process that we had
26 run for on-Island generation for our looming capacity

1 shortfall.

2 MR. FULTON: Q: Okay. The treatment of system energy
3 benefits, next. As I understand it, management seems
4 to be relying on the competitive processes as a
5 justification for the plant, but there was no
6 competitive process that was used to establish the
7 value of energy produced by the plant from the
8 perspective of the entire system, was there?

9 MS. VAN RUYVEN: A: No, I believe in the January 23rd
10 letter that the Commission sent to B.C. Hydro it
11 clearly stated that system benefits and transmission
12 deferral credits were not to be included in the
13 analysis.

14 MR. FULTON: Q: Right. And what has been the size of
15 Hydro's most recent energy calls?

16 MS. VAN RUYVEN: A: Our last energy call we had a
17 subscription level of a thousand gigawatt hours and
18 purchased 1800 gigawatt hours, which is fairly close
19 to the VIGP at about 2100 gigawatt hours.

20 MR. FULTON: Q: And would the plant be likely to
21 displace future calls from other energy resources in
22 the province?

23 MS. VAN RUYVEN: A: No, we are planning on doing two
24 sequential calls, one in the late spring of this year
25 for a thousand gigawatt hours and one the following
26 year, but that will be the subject of a REAP

1 application at the end of February in front of this
2 Commission.

3 MR. FULTON: Q: Okay. You had a discussion with Mr.
4 Quail earlier this morning about the high capacity of
5 the plant, do you recall that discussion?

6 MS. VAN RUYVEN: A: Yes.

7 **Proceeding Time 12:00 a.m. T41**

8 MR. FULTON: Q: Okay. And in the response to Green
9 Island Energy IR 1.11.10, the capacity shortfall in
10 the presence of a Tier 2 solution is in the order of
11 about 20 hours for contingencies shorter than two
12 hours, and in the order of 85 hours for contingencies
13 greater than two hours. Would you agree with that,
14 subject to check?

15 MS. VAN RUYVEN: A: And again, I'm not familiar with
16 the IR.

17 MR. FULTON: Q: Okay. Can you tell us what the
18 rationale of senior management was to justify how a
19 high utilization capacity contract that's greater than
20 the 80 percent that's described on page 1 of Tab J of
21 the CFT, between 25 and 35 years, can deliver the most
22 cost-effective solution to a one- or two-year capacity
23 shortfall, lasting less than 100 hours per year?

24 MS. VAN RUYVEN: A: Well, management didn't discuss
25 that in the context of how that plant would run. So
26 again, a question for Panel 2.

1 MR. FULTON: Q: Okay. And so when you say that, that
2 issue wasn't discussed in the hour presentation that
3 you received?

4 MS. VAN RUYVEN: A: No, we discussed at a much higher
5 level the reliability issues. But it wasn't in the
6 context of how that plant would be dispatched. It was
7 in the context of -- we had a cost-effective project
8 that met all of our reliability criteria, so again, it
9 really ultimately came down to that.

10 MR. FULTON: Q: Okay. B.C. Hydro has indicated that
11 the cost-effectiveness includes considerations such as
12 reliability, dispatchability, safety, timing,
13 location, cost, and the financial capacity of the
14 utility, correct?

15 MS. VAN RUYVEN: A: Yes.

16 MR. FULTON: Q: Okay. And would you agree with me that
17 these factors would be affected by the CFT and EPA
18 terms and conditions?

19 MS. VAN RUYVEN: A: Can you clarify in what way?

20 MR. FULTON: Q: Well, for example, if the CFT had no
21 mandatory requirements, and the EPA had no penalties
22 for non-performance by the seller, then the winning
23 bid, although perhaps cheap, might not be the most
24 cost-effective solution to the Vancouver Island
25 capacity issue. Would you agree with that?

26 MS. VAN RUYVEN: A: I agree, and that's why we set

1 fairly stringent mandatory criteria at the very
2 beginning of the process, and that's why we had a two-
3 stage process, which was a pre-qualification stage,
4 and then a tender process.

5 MR. FULTON: Q: Yeah. And you have given evidence this
6 morning on your view of the potential bias, but would
7 you agree with me that if -- if there were or are
8 inappropriate CFT and/or EPA terms and conditions, and
9 they existed in a CFT, that bids could fail the most
10 cost-effective test, as B.C. Hydro has described the
11 term, even if the process was fair, competitive and
12 transparent?

13 MS. VAN RUYVEN: A: I'm not sure I quite understand
14 your question.

15 MR. FULTON: Q: All right. We've gone over what the
16 B.C. Hydro definition of cost-effectiveness is.
17 Right?

18 MS. VAN RUYVEN: A: Are you talking about cost-
19 effective and the QEM? Or are you talking about the
20 high-level -- one last test that we did as a senior
21 management group?

22 MR. FULTON: Q: Well, I'm talking about the terms that
23 are in the CFT, and the EPA. And the fact that the
24 factors -- that there may be factors in the CFT and
25 EPA that would lead to a result where the process
26 itself could be signed off as being fair, competitive

1 and transparent, according to its terms, but because
2 of the way the terms were set, and the conditions were
3 set, in the EPA and CFT, that the result may well be
4 that you don't arrive at the most cost-effective
5 solution.

6 MS. VAN RUYVEN: A: I mean, that's possible, because it
7 depends on how many bidders stay in till the very end.
8 And in this case, most likely outcome would have been
9 a portfolio much closer to that 150, 150 megawatts.
10 There were no bidders that made it to the end that
11 aggregated to 150 megawatts. But we never set up any
12 terms and conditions to predispose ourselves to any
13 one outcome. We set them up to have a good
14 competition and have as many sources bid in.

15 Ultimately, you don't have a lot of control
16 over who finally places a bid, and that's part of a
17 competitive process.

18 **Proceeding Time 12:05 p.m. T42**
19 You set the terms and conditions as closely as you can
20 to what you are specifically looking for, and that's
21 why we set mandatory criteria, that's why we went
22 through a two-stage process for the pre-qualification,
23 and then you wait for an outcome and you test that
24 outcome through some kind of evaluation methodology,
25 which is exactly what we did.

26 MR. FULTON: Q: Okay. In the CFT report on process at

1 -- on the process at page 25, B.C. Hydro submitted
2 that the central issue for the Commission is, amongst
3 other things, to determine whether the process was
4 appropriate to reach a solution in the best interest
5 of ratepayers, do you recall that?

6 MS. VAN RUYVEN: A: Yes, I haven't reviewed that for a
7 long time, but yes.

8 MR. FULTON: Q: And is it B.C. Hydro's position that
9 such a solution would be reached if the terms and
10 conditions of the CFT, including the EPA were, to use
11 the words of the Commission's letter of January 23,
12 2004, more stringent or less flexible than the
13 minimums?

14 MS. VAN RUYVEN: A: Maybe I should get the reference to
15 what you are looking at.

16 MR. FULTON: Q: Okay, the letter is Exhibit B-1, tab F,
17 page 6. And if you begin on page 5 under the heading
18 "Other CFT Issues" and then that will provide you with
19 the context of the Commission's statement at page 6.

20 MS. VAN RUYVEN: A: Yes, and I think we followed this
21 very closely by accepting a simplified NPV analysis.
22 Clearly an expected outcome would have been, as I said
23 before, portfolios that aggregated to 150 or something
24 closer to that. So I don't think we set requirements
25 that didn't meet this recommendation from the
26 Commission. I believe we did that.

1 MR. FULTON: Q: Now, the last point that I wish to deal
2 with relates to your evidence and it's something, I
3 believe, Mr. Wallace touched on this morning, and it's
4 that part of your evidence where you suggest that a
5 negative outcome of this process will significantly
6 hamper B.C. Hydro's future efforts to competitively
7 procure electricity. Do you recall that evidence?

8 MS. VAN RUYVEN: A: Yes.

9 MR. FULTON: Q: Okay. And if one were to take a
10 hypothetical case where a CFT was undertaken with
11 unduly stringent and inflexible terms and conditions
12 such that many bidders were disqualified or others
13 dropped out due to excessive risk, would you not agree
14 with me that in that scenario, a negative result on
15 the future procurement of electricity might result if
16 the Commission accepted an EPA that fell within those
17 circumstances, due to negative bidder perception?

18 MS. VAN RUYVEN: A: I think that's a possibility. I
19 would say in this case that was not the case. We had
20 flexible terms. The bidders knew of those terms and
21 conditions up front. They knew well early into the
22 process. A lot of the bidder comments and suggestions
23 were incorporated into the call for tender to give us
24 that flexibility. We ran a rigid process. Once the
25 rules were set, we never wavered off of them, but
26 there was a lot of consultation and lot of

1 flexibility, I believe, in how the terms and
2 conditions were set. I don't believe it was too
3 stringent or it didn't give us some flexibility.

4 You can see that, and again Panel 2 will go
5 into much more detail as to how we set those terms and
6 conditions in the EPA and in the Call for Tender
7 process.

8 MR. FULTON: Q: Thank you. Those are my questions.

9 THE CHAIRPERSON: Thank you, Mr. Fulton.

10 I have really only one area of questioning
11 and it relates to the suspension period. I sense this
12 is an opportunity for me to get your views with
13 respect to the decision that was made with respect to
14 the transmission deferral credit.

15 MR. FULTON: Mr. Chairman, I'm wondering if you could
16 speak into your mike, because I'm having difficulty
17 hearing.

18 THE CHAIRPERSON: Yes. My apologies to the audience. I
19 said that I only had one area that I wish to pursue
20 with Ms. Van Ruyven. It related to the suspension
21 period.

22 **Proceeding Time 12:10 p.m. T43**

23 As you've said, with the design of the QEM,
24 the lowest MPV, and without the transmission deferral
25 credit being available, I think it's your testimony
26 that that loads, if you will, if there's a bias, and

1 if I hesitate to use the word because it's getting an
2 awful lot of airplay in this room, but if one was to
3 describe that as a bias, one would -- that would
4 suggest that it would be the smaller project. And I'm
5 -- really, a very broad question.

6 Was the loss of the transmission deferral
7 credit as an element in the assessment of the bids
8 significant, and in what way was it significant to
9 you?

10 MS. VAN RUYVEN: A: Again, Panel 2 can go into a lot
11 more detail. I'll just give you my perspective on
12 some of the conversations I was involved in. I think
13 one of our biggest concerns was to do with gaming,
14 potentially, through the process. Removing the
15 transmission deferral credit and just doing a simple
16 NPV analysis, knowing that the bidders knew how they
17 would be evaluated, potentially allowed for the risk
18 of those smaller projects to bid up to a much higher
19 price.

20 And so, through the suspension period, we
21 had to figure out a mechanism that that couldn't
22 happen, or we mitigated the risk of that happening.
23 And that's when we introduced the privative clause,
24 and the ability to have some flexibility in the
25 process, so to speak, around cost-effectiveness. So,
26 the transmission deferral -- we again had to look at

1 the risks associated, we did a lot of analysis as to
2 what it might mean to the bidders that were in the
3 process, and what it might mean to the outcome. We
4 satisfied ourselves that we could mitigate the risks
5 through the terms and the conditions, and then made a
6 decision after that month of taking a break that we
7 could go forward with the recommendations in the
8 January 23rd letter, continue with a robust competition
9 and hopefully continue with enough bidders that we
10 ended up at the end of the process with some kind of
11 successful outcome.

12 THE CHAIRMAN: Thank you. I have no further questions.
13 There are no further questions from the panel.

14 Mr. Fulton?

15 MR. FULTON: Mr. Chairman, Mr. Hill arrived late this
16 morning. He came over by ferry. He's indicated to me
17 that he has about a minute worth of questions. Mr.
18 Sanderson doesn't have any objection, and so I'm
19 asking if Mr. Hill could ask his questions to complete
20 this panel, prior to Mr. Sanderson having any re-
21 examination.

22 THE CHAIRMAN: It's too much of a departure for me, Mr.
23 Hill, unfortunately, from our practices with respect
24 to the order of cross-examination. The panel is
25 finished with its cross-examination. If the panel had
26 not been finished with its cross-examination, then I

1 would have given you the opportunity, but in this --
2 in the circumstances, I'm afraid I can't.

3 Mr. Sanderson, do you have any re-
4 examination?

5 MR. SANDERSON: I don't, Mr. Chairman.

6 THE CHAIRMAN: Thank you. Thank you very much.

7 (PANEL ASIDE)

8 THE CHAIRPERSON: We're adjourned until 1:45.

9 (PROCEEDINGS ADJOURNED AT 12:15 P.M.)

10 (PROCEEDINGS RESUMED AT 1:45 P.M.) T44

11 THE CHAIRPERSON: Please be seated.

12 It is not my intention to allocate time for
13 this panel as I did with the first panel. However, I
14 do expect that we are going to be close to the
15 schedule that's set out in A-38, and if I find that
16 we're not, then we'll have to review where we're at at
17 that point.

18 So with that, Mr. Fulton, I think I will
19 turn the calling of cross-examiners over to you.

20 MR. FULTON: Yes, well, Mr. Sanderson will need to have
21 his panel form first, Mr. Chairman, --

22 THE CHAIRPERSON: Yes.

23 MR. FULTON: -- and introduce the panel and have them
24 make a statement.

25 THE CHAIRPERSON: Yes, of course.

26 MR. SANDERSON: I won't be cross-examining, I hope, but I

1 do have a few questions. And maybe I could ask the
2 panel to be sworn.

3 While they are, I just want to bring the --
4 go ahead.

5 **B.C. HYDRO PANEL 2 - CFT PROCESS & OUTCOME**

6 **MARY HEMMINGSEN, Affirmed:**

7 **CHRIS O'RILEY, Affirmed:**

8 **GRAEME SIMPSON, Affirmed:**

9 **ROHAN SOULSBY, Affirmed:**

10 **STEVE ECKERT, Affirmed:**

11 MR. SANDERSON: Mr. Chair, just before -- while this
12 panel is getting settled, one procedural point.

13 With respect to IR Round No. 2 that was
14 submitted by various intervenors and which the
15 Commission ruled need not be answered in advance in
16 terms of IRs, but it loosely characterized them as the
17 intervenors IR's No. 2, to facilitate the cross-
18 examination of the technical panels, starting with
19 this one, I've provided the counsel for each of those
20 asking the question with what I've termed draft
21 responses. They're not suitable for filing. It's
22 entirely in counsel's hands as to what use they want
23 to make of that. It's either a pre-notice of the
24 answers they're going to get in a summary way, and
25 they can decide not to answer the questions in light
26 of those answers. They can ask them and get them on

1 the record.

2 **Proceeding Time 1:45 p.m. T26**

3 Or we've agreed that if that form of answer
4 is satisfactory and complete, we'll file it later as
5 an undertaking, substantively in that form. And I've
6 left it with each of the counsels to whom I've
7 provided that letter to make those decisions. But
8 that was an attempt to try and expedite the actual
9 hearing time associated with that panel.

10 So that -- the letter, but not the
11 summaries, will probably appear as an exhibit, because
12 that was filed with the Commission this morning. But
13 I just wanted to let you know that process was in
14 play.

15 THE CHAIRMAN: Thank you.

16 MR. SANDERSON: With that, if I could introduce this
17 panel. I think the expertise and the identity of each
18 of the members was covered in my opening. In the
19 middle of the panel, and acting as Chair of the panel,
20 is Ms. Hemmingsen. And I'll begin some questions of
21 her in a minute. But on her immediate right is Mr.
22 Soulsby, and on his right Mr. Eckert. Moving the
23 other way, on Ms. Hemmingsen's left, Mr. O'Riley and
24 on his far left, Mr. Simpson.

25 **EXAMINATION IN CHIEF BY MR. SANDERSON:**

26 MR. SANDERSON: Q: Ms. Hemmingsen, as Chair of the

1 panel, perhaps you could begin and tell us what your
2 role at B.C. Hydro is.

3 MS. HEMMINGSEN: A: I hold the position of Manager of
4 Planning and Portfolio Management.

5 MR. SANDERSON: Q: And Mr. O'Riley, you're the Chief
6 Risk Officer, is that correct?

7 MR. O'RILEY: A: That is correct.

8 MR. SANDERSON: Q: And Mr. Simpson?

9 MR. SIMPSON: A: I'm the Manager of Gas Supply in the
10 generation business unit.

11 MR. SANDERSON: Q: Mr. Soulsby, what's your
12 responsibility?

13 MR. SOULSBY: A: The Manager of Energy Supply and
14 Portfolio Plans.

15 MR. SANDERSON: Q: Thank you. And finally Mr. Eckert,
16 I understand you're an independent management
17 consultant, is that correct?

18 MR. ECKERT: A: That's correct.

19 MR. SANDERSON: Q: Thank you. Ms. Hemmingsen, you've
20 filed pre-filed testimony in this proceeding. I think
21 that can be found at tab 2 of Exhibit B-35, is that
22 correct?

23 MS. HEMMINGSEN: A: That's my understanding.

24 MR. SANDERSON: Q: Do you have any corrections or
25 amendments to that testimony?

26 MS. HEMMINGSEN: A: None other than in the course of

1 answering the Information Requests some responsibility
2 may have shifted in terms of which witness might be
3 the most appropriate to address the answer. So I
4 think what we need to do is proceed with your
5 direction on the general categories of issues, and
6 then the panel will determine which is the witness
7 most appropriate.

8 MR. SANDERSON: Q: Okay.

9 MS. HEMMINGSEN: A: So there may be some changes from
10 what we provided in our direct testimony.

11 MR. SANDERSON: Q: Thank you for that. Are there any
12 other changes or corrections to that evidence?

13 MS. HEMMINGSEN: A: No.

14 MR. SANDERSON: Q: With that caveat, then, are you able
15 to adopt it as your evidence in this proceeding?

16 MS. HEMMINGSEN: A: I am.

17 MR. SANDERSON: Q: Thank you. Mr. O'Riley, you've also
18 filed direct evidence that appears in Exhibit B-35?

19 MR. O'RILEY: A: That is correct.

20 MR. SANDERSON: Q: Do you have any corrections or
21 amendments to that?

22 MR. O'RILEY: A: I do not, subject to the same caveat
23 raised by Ms. Hemmingsen.

24 MR. SANDERSON: Q: All right, thank you. And with that
25 caveat, are you able to adopt that testimony as your
26 evidence in this proceeding?

1 MR. O'RILEY: A: I am.

2 MR. SANDERSON: Q: Thank you. Mr. Simpson, you've also
3 filed direct testimony.

4 MR. SIMPSON: A: Yes, I have.

5 MR. SANDERSON: Q: In Exhibit B-35. Are there any
6 corrections or amendments to it, in addition to that
7 that Ms. Hemmingsen or Mr. O'Riley has referenced with
8 respect to the IRs?

9 MR. SIMPSON: A: Yes, I have one addition to the
10 material that's filed. I wish to provide some further
11 explanation of the response to question 9 in my direct
12 testimony filed in Exhibit B-35.

13 **Proceeding Time 1:50 p.m. T46**

14 MR. SANDERSON: Q: Maybe I'll just stop you there for a
15 moment, Mr. Simpson, and let the panel go to that
16 evidence, just so we can follow this. That's question
17 9 you are referring to?

18 MR. SIMPSON: A: Question 9, yes. And that response
19 indicated that the gas tolls used in the CFT
20 evaluations --

21 MR. SANDERSON: Q: Let me slow you down for just a bit
22 until the Chair finds that reference.

23 MR. SIMPSON: A: Sorry.

24 THE CHAIRPERSON: We don't have the benefit of tabs
25 within the panel members, but I am there now, thank
26 you.

1 MR. SANDERSON: Q: Thank you.

2 MR. SIMPSON: A: Okay, that response indicated that the
3 gas tolls used in the CFT evaluation could be expected
4 to rise by about 6.25 cents per gigajoule as a result
5 of updated projections filed by Terasen Gas (Vancouver
6 Island) in the LNG CPCN proceeding which recently
7 concluded.

8 The estimated impact of this toll increase
9 when calculated over the combined contract demands of
10 the Island Co-Generation project and the Duke Point
11 Project, would be an increase in gas tolling costs for
12 both projects of approximately \$2 million per year.

13 For the purpose of the CFT evaluation and
14 cost effectiveness comparisons, only the portion of
15 this increase applicable to the Duke Point project
16 would be relevant. Based on information recently
17 received from Terasen Gas (Vancouver Island) the
18 portion of the increase assigned to Duke Point is
19 expected to be no more than 50 percent, or
20 approximately \$1 million per year, which would
21 translate to a net present value increase of less than
22 \$10 million for the purpose of the CFT evaluation.

23 MR. SANDERSON: Q: All right, thank you, Mr. Simpson.
24 Now, with that caveat and the one we gave earlier, do
25 you adopt as your evidence the evidence we've now
26 turned to at Exhibit B-35?

1 MR. SIMPSON: A: Yes, I do.

2 MR. SANDERSON: Q: Okay. Mr. Soulsby, if I could turn
3 to you now. Have you also filed direct testimony in
4 Exhibit B-35?

5 MR. SOULSBY: A: I did.

6 MR. SANDERSON: Q: And do you have any corrections or
7 amendments to it?

8 MR. SOULSBY: A: None other than those identified by
9 Ms. Hemmingsen.

10 MR. SANDERSON: Q: Thank you. And can you adopt that
11 for us as your evidence in this proceeding?

12 MR. SOULSBY: A: I can.

13 MR. SANDERSON: Q: Thank you. Mr. Eckert, you filed
14 direct testimony also in this case, in Exhibit B-54, I
15 believe?

16 MR. EKERT: A: That's correct.

17 MR. SANDERSON: Q: And as well there has been an update
18 this morning with respect to it that was labeled
19 Exhibit B-54A.

20 MR. ECKERT: A: That's correct.

21 MR. SANDERSON: Q: And do you have any further
22 corrections or amendments to either Exhibit B-54 or
23 54A?

24 MR. ECKERT: A: In addition to the general caveat that
25 Ms. Hemmingsen made, I did want to make two
26 corrections to Exhibit B-15. One is on B.C. IR

1 2.79.1. In that IR response we state that Appendix 5
2 references no such duct firing capability. And that's
3 in fact incorrect. If you go to Appendix 5 of the
4 EPA, the statement is that the seller's plant includes
5 the following principle equipment. While the
6 equipment has duct firing capability, such capability
7 is not contracted to B.C. Hydro under the EPA. So I
8 wanted to make that one clarification.

9 In addition, there was another IR that I
10 wanted to -- it was the Village of Gold River IR
11 1.5.29 and response (i). There appears to be an
12 incorrect reference to a Hill IR and the correct
13 reference should be Hill IR 1.1.0(a).

14 MR. SANDERSON: Q: Thank you very much. I'll just a
15 moment, Mr. Chairman, to make sure everybody got those
16 reference.

17 Appearing they did, with that caveat, Mr.
18 Eckert, are you able to adopt as your evidence the
19 material that we've just described?

20 MR. ECKERT: A: I can.

21 MR. SANDERSON: Q: Thank you. Mr. Chairman, I don't
22 have any more questions in direct and the panel is
23 available for cross-examination.

24 THE CHAIRPERSON: Thank you.

25 MR. FULTON: We'll begin with the Joint Industry
26 Electricity Steering Committee.

1 **CROSS-EXAMINATION BY MR. WALLACE:**

2 MR. WALLACE: Q: Thank you. I'd like to start with a
3 passage that Mr. Fulton quoted from the Commission's
4 letter to Hydro in January, in which the Commission
5 stated:

6 "The Commission Panel will be concerned if
7 such requirements are more stringent or less
8 flexible than the minimums that are needed
9 thereby increasing costs for ratepayers by
10 disqualifying otherwise worthwhile projects
11 or by increasing bid prices."

12 And they were referring to restrictions under the CFT.
13 You are aware of that passage?

14 MS. HEMMINGSEN: A: Yes, I am.

15 MR. WALLACE: Q: And presumably you agree that it is
16 important to attract a wide variety of resources to
17 the CFT?

18 MS. HEMMINGSEN: A: That was one of the objectives of
19 the design of the CFT.

20 MR. WALLACE: Q: Okay, and I'm going to suggest to you
21 that there are a number of terms that did restrict the
22 parties that could bid in because of -- that were
23 contained in the CFT.

24 **Proceeding Time 1:56 p.m. T47**

25 MR. HEMMINGSEN: A: Well, is that a question or --

26 MR. WALLACE: Q: Well, I guess you'll agree that there

1 are terms. I guess we'll just not agree on whether
2 they're appropriate or not, and maybe we can go to
3 them.

4 MS. HEMMINGSEN: A: Well, just in response, if I
5 understand the question, is -- the CFT design was
6 influenced by a product requirement. So that being
7 capacity, certainly reduced some potential projects
8 from competing in that.

9 MR. WALLACE: Q: And the other restriction, I guess,
10 was that you had to have delivery of generation by
11 2007 to meet the capacity shortfall on Vancouver
12 Island.

13 MS. HEMMINGSEN: A: That was right, and once again that
14 was consistent with the Commission's direction that
15 the supply requirement was for 2007.

16 MR. WALLACE: Q: And that restriction, and I understand
17 why you had it completely, but would eliminate coal
18 and other long-lead type projects that might, if you
19 were looking at it from a longer-term point of view,
20 be cheaper, but simply couldn't make that initial
21 threshold.

22 MS. HEMMINGSEN: A: To the extent that they weren't
23 sufficiently advanced on their development schedule,
24 yes.

25 MR. WALLACE: Q: Okay. Now, one term, though, that
26 interested me a lot was the contract term. The CFT

1 originally allowed all bidders to select the duration
2 of the proposed contract from between 10 and 25 years?
3 MS. HEMMINGSEN: A: The original Schedule A that we put
4 forward in the VIGP hearing contemplated that, and
5 when we set about designing the CFT we employed a
6 number of experts and considered a range of comments,
7 and we're trying to balance a number of competing
8 interests, among them simplification and providing a
9 transparent evaluation methodology; which meant it was
10 very difficult to accommodate differential terms in
11 that analysis. Also, bidders advised us that they
12 needed longer terms to get low-cost financing.
13 MR. WALLACE: Q: Yes, but when you had 10 to 25 years,
14 the bidder could have chosen which he wanted, and he
15 could have picked 25 years.
16 MS. HEMMINGSEN: A: Correct, but it would have made it
17 more difficult for us to have a simplified evaluation
18 methodology.
19 MR. WALLACE: Q: Okay. So the reason you moved from
20 giving the bidders a choice of 10 to 25 years to 25
21 years but 35 at your election, so effectively 35
22 years, was for simplification and transparency?
23 MS. HEMMINGSEN: A: That was one of the drivers. Mr.
24 Soulsby can speak to any others that were considered.
25 MR. SOULSBY: A: I think those are the main ones is,
26 was the simplicity of the evaluation. And as I think

1 Ms. Hemmingsen referred to, the issue of
2 financeability. So we thought it was something that
3 generally wouldn't be onerous to bidders, and in fact
4 my understanding is that there were no questions and
5 answers in our Q and A form arising from that change
6 that voiced any objections.

7 MS. HEMMINGSEN: A: Further, at the same time that we
8 made that amendment to extend the term, we relaxed the
9 fuel certainty guidelines so that those projects that
10 would have difficulty securing the fuel for that
11 extended term had some relief from that.

12 MR. WALLACE: Q: Okay, but dealing with those first, I
13 thought we'd agreed with respect to financing the
14 original that allowed 10 to 25 years allowed the
15 bidder to take care of its financing issue if he
16 wanted, if that was an issue for him.

17 MS. HEMMINGSEN: A: Conceivably, yes.

18 **Proceeding Time 2:00 p.m. T48**

19 MR. WALLACE: Q: Okay. And then, Mr. Soulsby, you said
20 you didn't think there were any questions with respect
21 to it, but I looked at question 241 and I haven't
22 brought copies for everybody, but it says Addendum 10,
23 paragraph 4(b), 12(a)(v), why has a 10- to 25-year
24 term been replaced with a 25-year only option? So it
25 was raised in the questions, wasn't it?

26 MR. SOULSBY: A: It sounds -- it was raised, although

1 that wasn't an objection, that was for clarification.

2 MR. SANDERSON: I'm not sure how many Qs and As there
3 were, but if there was at least 241 I'll confess to
4 not having committed them all to memory. So maybe it
5 would be useful if there are references to those, to
6 put them to the witnesses in time.

7 MR. WALLACE: Q: Well, the response, just for
8 completeness and if somebody wants to put it in the
9 record I'm quite happy with it, I just didn't think it
10 was contentious. The response was:

11 "The term has been fixed at 25 years to
12 facilitate fairer comparison of different
13 generation portfolios that otherwise would
14 not have occurred by virtue of using a
15 simplified NPV methodology for portfolio
16 selection."

17 I take Mr. Soulsby's point that it's a question, not a
18 complaint, and if that's the only difference between
19 us, I don't know if we need to clutter the record with
20 it. But -- okay. I see no need for it, I will move
21 along.

22 Now, that decision was made after the
23 Commission's January letter to B.C. Hydro?

24 MR. SOULSBY: A: Yes, subject to check I believe that's
25 correct.

26 MR. WALLACE: Q: Thank you. And it isn't an issue that

1 was raised by the Commission in that January letter,
2 it was solely B.C. Hydro's initiative.

3 MS. HEMMINGSEN: A: It was predicated on various
4 comments and expert advice that we got, that
5 influenced our decision to act in that manner.

6 MR. WALLACE: Q: Thank you. And that term obviously
7 could -- when you had 10 to 25 years, there could be
8 mid-term projects. Now a bidder had to be prepared to
9 commit to be available for 35 years, didn't they?

10 MS. HEMMINGSEN: A: That was certainly the implication,
11 but as I said before, at the same time we relaxed some
12 of the requirements that can pose difficulties for
13 them committing to that term.

14 MR. SOULSBY: A: One of the additional rationales for
15 it is outlined in IR 1.35.1 to the BCUC, where it
16 talks about the benefits of not having to have mid-
17 term processes to secure additional capacity as a
18 result of a shorter-term contract.

19 MR. WALLACE: Q: Sure. But it comes at the cost of
20 flexibility in attracting the widest range of
21 projects, doesn't it? You eliminated some projects
22 that might have been good for 10 years, 15 years,
23 whatever. They had to be capable of being there for
24 35 years.

25 MR. SOULSBY: A: They had to be capable of being there
26 for 25 years with that 10-year rule.

1 MR. WALLACE: Q: And the 35 wasn't their choice. They
2 had to be there for 35 if Hydro made that election.

3 MR. ECKERT: A: The terms on which they had to be there
4 for the additional ten years were significantly
5 different than they were in the base contract.

6 MR. WALLACE: Q: That's true, but they still had to be
7 there for 35 years.

8 MR. ECKERT: A: Yeah, but they were also assured full
9 cost recovery in that additional ten-year period.

10 MR. WALLACE: Q: But sir, if you were -- they were
11 assured, subject to arbitration, cost recovery over
12 the additional ten years.

13 MR. ECKERT: A: That's correct.

14 MR. WALLACE: Q: And B.C. Hydro could back out of the
15 arbitration. If the arbitration award was undesirable
16 to B.C. Hydro, it didn't have to go through with it.

17 MR. ECKERT: A: That actually was changed. If, in the
18 final form EPA, the -- if you went to arbitration,
19 B.C. Hydro did not have the right to back out --

20 MR. WALLACE: Q: Okay.

21 MR. ECKERT: A: -- of that extension.

22 MR. WALLACE: Q: Okay. But the fact remained that they
23 had to know that they had a project for 35 years -- a
24 project that, when they started out, you started out
25 on the CFT, could have been a ten-year project, was no
26 longer eligible.

1 MS. HEMMINGSEN: A: To the extent that that was an
2 issue for them.

3 MR. WALLACE: Q: Yes. And as a matter of fact, I take
4 it -- that we -- it did rule out at least one project,
5 if I look at Calpine's letter, Exhibit 123, Calpine
6 states in its letter to the Commission: "Calpine
7 confirms that, if its project..." Oh, wait, I'll go to
8 the next -- well, I'll read the two -- the two main
9 letters of the -- paragraphs of the letter.

10 "Calpine confirms that if its project, as
11 bid in the VICFT, is approved by the
12 Commission as part of a Tier 2 portfolio,
13 Calpine is willing and able to bring on line
14 48 megawatts of capacity within the time
15 frame established by the terms of the VICFT.
16 We wish to point out to the Commission that
17 our bid was not considered by B.C. Hydro
18 because our bid proposed a revision to the
19 EPA. Since our land lease with our steam
20 host, Norske, currently only runs through
21 2029, we propose to include a provision that
22 would allow the project to terminate the EPA
23 in 2029 if this lease was not extended
24 through the full 25-year term of the EPA, or
25 2032."

26 Is that correct? Is that why Calpine was ruled out?

Proceeding Time 1:56 p.m. T47

MR. SANDERSON: Mr. Chairman, I fear we're on a slippery slope. This letter has troubled me, as I'd indicated when it was issued, because Calpine is not a party, of course, and we don't have any evidence from them.

I think the Commission has been fairly clear that the terms of the non-successful bidders aren't properly before this proceeding. And the difficulty of starting to go into the contractual basis for treating different bids and why was this one rejected or why was that one rejected, without getting into those areas, strikes me as really not feasible. Like, I can't see where the line gets drawn.

This one is in a special case because counsel have consistently made reference to this, and now there's a letter from Calpine.

I'm quite prepared to have this panel answer this specific question if and only if this is the only place we're going on this issue in the context of the ruling. But what I don't want is it to stand as a precedent for why did you reject this bid, why did you reject that bid, why did you reject some other bid, that is going to put into the record what we've heretofore characterized, successfully I think, as confidential and quite properly so.

So I'm asking for some clarity from the

1 Commission. If this line of questioning is going to
2 continue, then I'd like some assurance that it's
3 limited to this one point.

4 THE CHAIRPERSON: The reference in the transcript is
5 Volume 2, page 312, lines 13 to 22. I'll give you
6 each a minute to read that.

7 MR. WALLACE: I'm sorry, I don't have that.

8 THE CHAIRPERSON: It states, starting on line 13:

9 " Mr. Wallace, at page 234, and other
10 participants raised issues regarding the
11 implications of the CFT criteria for certain
12 resources including co-gen. The Commission
13 Panel is of the view that those issues may
14 be pursued during this proceeding. However,
15 the Commission Panel also notes that in the
16 absence of evidence from developers, it may
17 not be persuaded that the CFT is not
18 satisfactory evidence that Duke Point is the
19 most cost-effective resource for Vancouver
20 Island at this time."

21 Your objection, Mr. Sanderson, when E-123
22 was received, the Calpine letter, spoke to the issue
23 of whether or not they had standing. And I do have
24 concerns with respect to the use of the letter in the
25 absence of participation by Calpine. I think there is
26 room here for you, Mr. Wallace. The difficulty that

1 you have is you don't have the developer here. And I
2 do also think that the parameters that were drawn with
3 respect to unsuccessful bidders are rather narrow.
4 They are stated here in the decision, and your use of
5 the Calpine letter isn't beyond, I don't think, what
6 was contemplated in the scope, but you do still have
7 the difficulty of not having Calpine here.

8 So I will need to deal, I think, with Mr.
9 Sanderson's objection to the letter on the basis that
10 they don't have standing.

11 MR. WALLACE: Well, Mr. Chairman, it seems to me that the
12 issue is purely, were the terms and conditions biased
13 toward a particular outcome, or did they encourage
14 particular outcomes? Did they cancel somebody?

15 **Proceeding Time 2:10 p.m. T2a**

16 If B.C. Hydro turns around and says, "No,
17 Calpine's wrong," then I guess I have no evidence that
18 they were put out for that reason. But if Hydro turns
19 around and says, "Yes, Calpine is right, that's why we
20 disqualified them," then I have better evidence than
21 if Calpine said it. They ran the CFT.

22 So I don't think Calpine's participation
23 here and not be able to be cross-examined is to the
24 point. All I asked is: Was Calpine correct, and is
25 that the reason that they were terminated? I think
26 it's perfectly appropriate.

1 THE CHAIRPERSON: Mr. Sanderson?

2 MR. SANDERSON: Well, again, my objection was not
3 specifically to the letter, just because it's got so
4 much currency already, whether I liked it or not, and
5 it's being circulated, that I'm frankly content to
6 have this Panel clean it up.

7 What I asked for was an assurance that
8 we're not going to get drawn in to more speculation
9 and more questions of Hydro as to, "Well, why did you
10 reject this one? Why did you reject that one?" et
11 cetera. Mr. Wallace has said he doesn't feel obliged
12 to call evidence to support this, and I don't think is
13 going to be tendering evidence on any of the others,
14 and as long as that's the case, my view is this panel
15 -- the sole expectation of this particular letter,
16 ought not to be required to answer questions about
17 that confidential bidding process. You've already
18 ruled that that process needs to remain confidential.

19 And the independent reviewer and the in-
20 camera perspective the Commission has got are enough
21 of a safeguard to make sure that the process is run as
22 it was said to be run, and I think that's been
23 decided. That being the case, I don't see how we can
24 go down this road without trenching on that ruling,
25 with the one exception of this letter, if it's clearly
26 seen as an exception.

1 THE CHAIRPERSON: Mr. Weisberg.

2 MR. WEISBERG: Commissioner Hobbs, I just rise because I
3 want to say something that perhaps will assist you in
4 making your determination. Mr. Sanderson has just
5 raised the prospect of going down roads with multiple
6 bids from other developers. I just want to make sure
7 that from Green Island's perspective, we want to
8 pursue the reasons why Calpine's bid was considered
9 non-compliant because we want to explore the
10 possibility of bias, and we want to explore the
11 possibility of unduly stringent terms.

12 Beyond that, I can assure you now, we will
13 not pursue this line of question in regards to other
14 projects other than ones that were bid in and passed
15 the criteria. And I hope that assists.

16 THE CHAIRPERSON: It does. Mr. Keough.

17 MR. KEOUGH: Mr. Chairman, I rise because this is of
18 concern to my client. You will recollect that Duke
19 Point Power brought a motion requesting certain
20 orders, including that if you were going to treat
21 everybody fairly there should be disclosure across the
22 board. That motion was denied and I accept that.

23 My concern is what we have here is a non-
24 party selectively putting something before the
25 Commission and not being here to justify it, and I say
26 "selectively" in a deliberate fashion. We do not know

1 anything else. And so the situation you are
2 confronted with is a non-party filed something, and
3 now it becomes the subject matter of considerable
4 debate.

5 We don't know anything else about the bid
6 or any of the other terms of the bid, and I think it
7 is very troubling indeed for a non-party -- if it were
8 a party you might be able to do something about it;
9 but for a non-party to selectively come in and then
10 put a tidbit of information on the record and then
11 have it used in an environment where the Commission
12 has already ruled that non-winning bidders information
13 should be kept confidential.

14 And so I think it's very unfair indeed not
15 to have complete disclosure if they are going to
16 selectively release information. And that's my
17 concern. They cannot -- a non-party should not be
18 allowed to not follow your ruling and then have people
19 allowed to use the selective information they've
20 decided voluntarily to somehow get in the public
21 domain. And I think that's incredibly unfair,
22 particularly in light of the rulings that have already
23 occurred.

24 Thank you.

25 THE CHAIRPERSON: Mr. Wallace, I'm going to permit your
26 question. I think Mr. Sanderson is correct, however.

1 We are going to need to limit this to the letter.
2 This panel should have an opportunity to respond.

3 **Proceeding Time 2:15 p.m. T3A**

4 I would like, and I think Green Island did
5 this very well when they identified the distinction
6 here, if you will, with respect to other options, and
7 Mr. Keough's comments remind me of that. At page 314
8 of the scope decision at the top of the page, we said:

9 " In identifying the principal issue in this
10 manner, the Commission Panel accepts that
11 for the purpose of this review, no other
12 resource options need be considered..."

13 Now the exception, if you will, to that, is
14 the line of questioning that you're embarking upon,
15 and if you will, the threshold to it is that there is
16 some evidence from a developer that in fact the
17 criteria were of the nature that I think you're
18 proposing to try to establish. You have a limited
19 foundation with respect to that, I think, in the
20 context of the Calpine letter, but nevertheless I'll
21 permit the question.

22 MR. WALLACE: Thank you. I wasn't trying to establish a
23 precedent. I was trying to get a fairly simple
24 question answered.

25 MR. WALLACE: Q: By now I'd suspect you've forgotten the
26 question, so let me place it again for the convenience

1 of the record. In the Calpine letter it states:

2 "We wish to point out to the Commission that
3 our bid was not considered by B.C. Hydro
4 because our bid proposed a revision to the
5 EPA. Since our land lease with our steam
6 host, Norske, currently only runs to 2029,
7 we propose to include a provision that would
8 allow the project to terminate the EPA in
9 2029 if this lease was not extended through
10 the full 25-year term of the EPA or 2032."

11 And my question to you: Is it true that they were --
12 or that their bid was rejected for that reason?

13 MS. HEMMINGSEN: Q: As Ms. Van Ruyven testified,
14 Calpine's bid was rejected because it was non-
15 compliant with the prescribed terms and conditions
16 that were common to all bidders.

17 Now, stating that, I'd also like to
18 establish that Calpine, as did any other bidder or
19 interested party, had multiple opportunities to pursue
20 issues or concerns that they had with the terms of the
21 EPA at various bidder workshops, at specific requests
22 for project descriptions, and project-specific
23 revisions. So if this was an issue for them, they
24 were aware of what the proposed EPA terms were, and
25 they could have through these multiple channels raised
26 the issue, and/or they could have decided not to

1 condition their bid and to accept that risk. It was
2 not a condition of the CFT that they had to have land
3 tenure for that term.

4 The reason that they were disqualified is
5 because they had submitted a non-compliant bid. And
6 we reviewed this issue with out independent reviewer,
7 who affirmed that under the terms of CFT we had no
8 other choice without receiving a qualified independent
9 review report and being subject to legal exposures
10 from other bidders.

11 MR. WALLACE: Q: Okay, but the reason they were non-
12 compliant was because they did not comply with the 35-
13 year commitment required by B.C. Hydro.

14 MS. HEMMINGSEN: A: Because they submitted a
15 conditioned bid, was the reason that they filed. And
16 that was not allowed under the terms of the CFT. And
17 as I said, they had multiple opportunities to pursue
18 that issue and their particular concern through our
19 extensive Q&A bidder input period.

20 MR. WALLACE: Q: Yes, but that didn't necessarily mean
21 there would have been a change from the 35-year
22 requirement.

23 MS. HEMMINGSEN: A: It could have meant.

24 MR. ECKERT: A: Well, yeah, I'm not aware of any
25 requirement that they have land tenure for 35 years.

26 MS. HEMMINGSEN: Q: No. The requirement is not land

1 tenure. The requirement is that they be prepared to
2 sign an agreement under which they would deliver power
3 for 35 -- up to 35 years.

4 MR. ECKERT: A: Yeah, but if they were unable to do
5 that, then presumably that would be reflected in the
6 terms of the renewal and the cost structure of the
7 renewal, and that would have been -- we would have
8 adjusted the price to compensate them for whatever
9 cost they incurred to supply for those additional ten
10 years.

11 MR. WALLACE: Q: Well, it was more than that, because
12 part of this 22 years that they were prepared to make
13 a commitment to was -- they were only prepared to make
14 a commitment for 22 years. Would you agree with that?
15 From the letter and from what they did with the --

16 MS. HEMMINGSEN: A: But the terms and conditions of the
17 EPA were not developed in a vacuum, and bidders had
18 every opportunity to raise particular concerns with
19 the form and structure of the EPA, at multiple
20 channels.

21 MR. WALLACE: Q: Okay. So all we can leave it at then,
22 I think, is you would agree with me that the time they
23 were prepared to commit to was less than the time that
24 the EPA required.

25 MS. HEMMINGSEN: A: That seems to be the case since
26 they conditioned their bid on that basis.

1 **Proceeding Time 2:20 p.m. T04A**

2 MR. WALLACE: Q: Okay, thank you.

3 I'd 'd like to turn, then, to B.C. Hydro's

4 decision to assume the gas supply risk. The CFT

5 provided that B.C. Hydro would take the fuel and

6 transportation risk on any gas project?

7 MS. HEMMINGSEN: A: I think Mr. O'Riley can address

8 this line of questions.

9 MR. WALLACE: Q: Sure.

10 MR. O'RILEY: A: That is correct.

11 MR. WALLACE: Q: And it would not take the fuel supply

12 risk on any other source?

13 MR. O'RILEY: A: That is correct, subject to some

14 special language around the oil for dual-fuel sites

15 that Mr. Eckert can address.

16 MR. WALLACE: Q: Okay.

17 MR. ECKERT: A: And under the terms of the EPA, if a

18 tolling project were to tender dual fuel, we would

19 take the response -- we would take the price risk

20 around the fuel oil for that dual fuel facility.

21 MR. WALLACE: Q: Okay. But you would not take the

22 price risk on any other fuel?

23 MR. O'RILEY: A: That is correct.

24 MR. WALLACE: Q: Okay. And was it ever suggested, or

25 do you consider having gas plants bid in two bids, one

26 including gas supply and one not?

1 MS. HEMMINGSEN: A: Bidders had that option available
2 to them. They could either select the tolling option
3 or the fixed-price option

4 MR. WALLACE: Q: Well, given they have a choice, I can
5 understand why you wouldn't, but did you ever consider
6 making it mandatory that they have to put in a risk --
7 a gas -- a risk -- I'm sorry. A bid under which they
8 took the gas supply risk, and one under which you took
9 it, so that you could see what the quantification of
10 that risk was?

11 MR. O'RILEY: A: No, we did not.

12 MR. WALLACE: Q: Okay. Would you agree that the effect
13 of you taking the gas supply risk made it difficult
14 for non-gas projects to bid in, where they had to take
15 the fuel price risk for 35 years?

16 MR. O'RILEY: A: Not necessarily. I guess, if you
17 think of some of the non-gas resources, and coal and
18 wood waste being two examples, those are projects that
19 are typically developed by proponents with access to
20 their own fuel. And examples would be mine-mouth
21 generation for coal-fired -- mine-mouth coal-fired
22 generation, and hog fuel generation within an
23 integrated pulp and paper mill. So there were ample
24 opportunities for those types of facilities to bid in,
25 given the norms or the natural -- the normal means by
26 which those products are typically sold.

1 MR. WALLACE: Q: Sure. But there was a risk with
2 increased fuel cost, even when you control your own
3 resources, that they would be taking for 35 years.

4 MR. O'RILEY: A: There would be a production cost risk,
5 and there would be natural offsets to that, given you
6 actually have the fuel or you have -- in the case of
7 the coal -- or you would -- in the case of wood waste,
8 you're selling a product that's tied to the price of
9 hog fuel or related to the price of hog fuel.

10 MR. ECKERT: A: I'd like to just add on to Chris's
11 answer, and that is that there -- in the renewal term,
12 no bidder was obligated to take any fuel price risk.

13 MR. WALLACE: Q: I'm sorry?

14 MR. ECKERT: A: In the renewal term, no bidder was
15 required to take the fuel price risk.

16 MR. WALLACE: Q: Okay. But that's 25 years out.

17 MR. ECKERT: A: Right. But you characterized the
18 obligation as a 35-year obligation for a full risk --

19 MR. WALLACE: Q: Okay.

20 MR. ECKERT: A: -- and it's not a 35-year obligation.

21 MR. WALLACE: Q: Thank you, I stand corrected. It was
22 25 on fuel risk, 35 commitment overall.

23 MR. ECKERT: A: That's correct.

24 MR. WALLACE: Q: Okay. Thank you. And so, I mean --
25 taking just hog fuel as an example, I think that --
26 I'm sorry, I think it was you, Mr. O'Riley, raised,

1 but I'm not sure --

2 MR. O'RILEY: A: Yes.

3 MR. WALLACE: Q: -- that is to some extent a market
4 item, and it does vary in price?

5 MR. O'RILEY: A: I would say there's a limited market.
6 I'm not actually aware of where hog fuel is traded or
7 bought and sold here in the province.

8 MR. WALLACE: Q: Okay. To the extent that the gas
9 price was too low, or if it was too low, that would
10 make it even harder for non-gas projects to compete,
11 where the other person is taking the risk?

12 MR. O'RILEY: A: That would be correct, yes.

13 MR. WALLACE: Q: Okay. How many non-gas bidders did
14 you have to start with in this process? I counted
15 ten.

16 **Proceeding Time 2:25 p.m. T5A**

17 MR. O'RILEY: A: We defer to the others on the panel to
18 confirm that.

19 MS. HEMMINGSEN: A: I can't do math in my head quick
20 but it sounds like the right order of magnitude
21 subject to check.

22 MR. WALLACE: Q: Okay, and two qualified, I believe.

23 MS. HEMMINGSEN: A: There was a number of pre-
24 qualification submissions, and they included a mix of
25 resources and then the mandatory criteria led to two
26 projects proceeding with non-gas fired.

1 MR. WALLACE: Q: Okay. And only one eventually bid
2 in.

3 MS. HEMMINGSEN: A: That's correct.

4 MR. WALLACE: Q: And that's out of an original
5 starting number of bidders of around 22 to 23?

6 MS. HEMMINGSEN: A: Right. But that relates back to
7 your earlier comment about the product that we needed
8 and it needed to have a date certain delivery of '07
9 and be in an advanced state of development or capable
10 of expedited development, and that's where gas
11 projects had somewhat of an advantage over something
12 like a coal project.

13 MR. WALLACE: Q: Now, did it give you any concern that
14 you had gone from 20-odd projects down, in the end, to
15 basically I think it's, what? Five gas projects and
16 one non-gas project?

17 MS. HEMMINGSEN: A: Well, based on other bidding
18 processes and competitive tendering processes that
19 we've seen, that's basically the attrition that you
20 can expect. There's a lot of people that sniff around
21 and are interested, and then there's a couple that
22 stay till the end and ultimately bid in. So that's
23 not unusual in this type of call.

24 MR. WALLACE: Q: Well, that diversity you were trying
25 to seek though, in the first place, didn't seem to be
26 there when you got to the end, was it?

1 MS. HEMMINGSEN: A: Well, that could be attributed to
2 many factors, including various bidder dynamics and
3 changes in their circumstances. It's not necessarily
4 an issue with the design of the call.

5 MR. WALLACE: Q: Okay, now this was a capacity call and
6 driven, at least initially, by the requirement 2007-
7 2008 to meet your capacity on Vancouver Island
8 requirements?

9 MS. HEMMINGSEN: A: Well, it was driven by the need to
10 have dependable capacity in place by 2007.

11 MR. WALLACE: Q: And when at one of the information --
12 and accordingly, presumably one of the types of
13 options you would have liked to have attracted would
14 be peaking plants to see how they bid into the
15 process?

16 MS. HEMMINGSEN: A: We were interested in any projects
17 that could meet those product requirements.

18 MR. WALLACE: Q: Okay. And you were asked in question
19 122, and it's a short one and I think maybe I can
20 simply read it into the record:

21 "Can B.C. Hydro provide an annual profile of
22 forecast capacity needs so that those
23 parties considering capacity tenders can
24 evaluate the hours and days of capacity
25 needs and related fuel requirements."

26 And the response was:

1 "B.C. Hydro requires a 24-hour, 7-day a week
2 capacity solution over the six-month period
3 from October to March inclusive commencing
4 May 1st, 2007."

5 And do you recall that response?

6 MS. HEMMINGSEN: A: I do recall that response, and that
7 relates to the N minus 1 criteria that the Commission
8 reaffirmed in our planning basis for criteria as
9 opposed to an operating type of criteria.

10 MR. WALLACE: Q: And I can understand that you need it
11 available, but this does not give the bidder any
12 information on what he's going to require to be
13 permitted for or fuel or any of those other things, if
14 it's really likely to be a 240-hour commitment. And
15 I'm wondering why B.C. Hydro was not prepared to
16 provide more detail to potential peakers?

17 MS. HEMMINGSEN: A: Well, subject to a check, I believe
18 we did provide a load profile of a 5-year history of
19 what the load that we experienced was on a hourly
20 basis, but I can check that.

21 MR. WALLACE: Q: Okay, if you could provide that
22 reference I'd appreciate it.

23 **INFORMATION REQUEST**

24 MR. WALLACE: Q: Okay, I'd like to change subjects now
25 and move to just the EPA generally. One, and I guess
26 provincial policy under around EPAs, why one would do

Proceeding Time 2:30 p.m. T6A

1 MS. HEMMINGSEN: A: The energy component of it, the
2 capacity price is fixed.

3 MR. WALLACE: Q: Okay, and the energy -- so the value
4 of the energy risk remains with the customer?

5 MS. HEMMINGSEN: A: With the ratepayer, subject to --

6 MR. WALLACE: Q: Ratepayer, yes.

7 MS. HEMMINGSEN: A: -- management and mitigation in our
8 overall portfolio.

9 MR. WALLACE: Q: And utilization risk, if it's a low
10 load factor, high load factor, remains with the
11 ratepayer?

12 MS. HEMMINGSEN: A: The dispatch of the plant under the
13 EPA is at Hydro's option, yes.

14 MR. WALLACE: Q: And so the risk that this plant is not
15 heavily used, because you have a high -- set fixed
16 cost and then a variable cost, the risk that the plant
17 is not used at the level that you project is a risk
18 that remains with the ratepayer.

19 MS. HEMMINGSEN: A: Sorry, you seem to have a couple of
20 points there.

21 MR. WALLACE: Q: Okay.

22 MS. HEMMINGSEN: A: The high fixed cost --

23 MR. WALLACE: Q: Well --

24 MS. HEMMINGSEN: A: -- I agree with that. We were
25 securing a capacity product. So that capacity
26 product, there's a price to pay to make that available

1 to our system. And I don't agree that that's a high
2 price to pay.

3 MR. WALLACE: Q: Okay, let's separate it out. Let's
4 get to the second one then. You have forecast an 80
5 percent load factor or utilization of the contract.
6 And the risk that it does not live up to that
7 expectation is with the ratepayer?

8 MS. HEMMINGSEN: A: That's a risk that we've taken on.
9 Perhaps Mr. O'Riley can speak to that.

10 MR. O'RILEY: A: Yeah, I think it's more complicated
11 than just the utilization factor. It's the risk to
12 the whole energy margin that we capture in the market,
13 and depends on the cost of market power we would be
14 buying to replace that dispatch. So I think it's a
15 fairly complex --

16 MR. WALLACE: Q: Okay, and we're going to get to it in
17 more detail, I can assure you, but in general terms
18 the risk that the energy margin won't develop rests
19 with the ratepayer.

20 MR. O'RILEY: A: I think if we could have purchased
21 other -- if there were other resource options,
22 including market purchases, along the way that may
23 have been lower cost, then that -- customers will
24 regret the fact that we made this purchase.

25 MR. WALLACE: Q: Okay. And, I mean, those options
26 would be out there presumably after the 230 kV line

1 comes to Vancouver Island, wouldn't they?

2 MR. O'RILEY: Well, we'll explore a range of options
3 through the IEP process in this coming year.

4 MR. WALLACE: Q: Okay. And finally, the risk of plant
5 failure, while there are penalties for the IPP, the
6 risk that the plant fails in terms of lack of service
7 rests with the ratepayers of Vancouver Island.

8 MS. HEMMINGSEN: A: I think Mr. Eckert can answer that
9 question.

10 MR. ECKERT: A: I think we take the ultimate -- the
11 risk that the -- I'm sorry, could you just repeat the
12 question? Let me just make sure I get the --

13 MR. WALLACE: Q: The risk that the plant will not be
14 available to provide service, while subject to
15 penalties for the IPP, the actual lack of service sits
16 with the ratepayers on Vancouver Island.

17 MR. ECKERT: A: Yes it does, but the contract does
18 provide certain means for B.C. Hydro to mitigate that
19 risk to the extent that it became extreme to the point
20 where it triggered termination rights, for example.

21 MR. WALLACE: Q: Okay. Now just turning then to the
22 EPA itself and the nature of the agreement, it gives
23 you a right to dispatch the Duke Point Power Plant?

24 MR. ECKERT: A: That's correct.

25 **Proceeding Time 2:35 p.m. T07A**

26 MR. WALLACE: Q: And basically, the EPA, as I

1 understand it, reflects the operational circumstances
2 of that sort of plant. You supply the gas, it's
3 converted into electricity at a certain heat rate, and
4 you've got a guarantee of that.

5 MR. ECKERT: A: Right. The tender -- the way the
6 proponent tendered the project, it essentially fixes
7 the heat rate for the plant over its term. So they
8 take a risk around -- basically, what we do is, we
9 supply a fixed quantity of gas to the plant, and in
10 return we get a corresponding fixed quantity of
11 energy.

12 MR. WALLACE: Q: The EPA essentially gives you a
13 virtual plant, with a heat rate of about 7300. Or
14 7.3.

15 MR. ECKERT: A: Yeah. I don't know that number off the
16 top of my head, but I'll concede that you -- that
17 sounds right.

18 MR. WALLACE: Q: Okay. And so your decisions to
19 dispatch are going to be dependent on many of the same
20 criteria that an owner of a plant would use in
21 dispatching a plant with a similar heat rate?

22 MR. ECKERT: A: We would dispatch the plant
23 opportunistically, generally for energy, and if the
24 market price were such that it provided a positive
25 energy margin to run this plant, then we would
26 dispatch the plant.

1 MR. WALLACE: Q: Okay. Thank you for that. You're
2 planning that this will be a base load plant, with an
3 80 percent load factor?

4 MR. O'RILEY: A: We generally expect it will run in
5 that manner.

6 MR. WALLACE: Q: Okay. And it's permitted as a base
7 load plant?

8 MR. O'RILEY: A: Yes, it is.

9 MR. WALLACE: Q: And if it isn't a base load plant, I
10 take it that the emissions and efficiencies would be
11 different?

12 MR. O'RILEY: A: It would have lower emissions if it
13 ran at a lower utilization factor.

14 MR. WALLACE: Q: Would you have to revisit the
15 environmental permits if it's not a base load plant?

16 MR. O'RILEY: A: I do not believe we would.

17 MR. WALLACE: Q: Okay. So you would not have -- you
18 don't contemplate any circumstance where you have to
19 run it at higher than would be opportunistic, simply
20 for environmental reasons.

21 MR. O'RILEY: A: I don't believe we would be capped for
22 environmental reasons on the utilization.

23 MR. ECKERT: A: I believe that the bidder has declared
24 that they have received all material permits that
25 would allow us to operate the facility within the
26 terms of the EPA.

1 MR. WALLACE: Q: But, again, I guess my question was
2 that it was permitted as a baseload plant, and I think
3 that was confirmed.

4 MR. ECKERT: A: I guess I would characterize that as
5 establishing sort of the maximum emissions for the
6 facility. So if it were utilized just -- less, you
7 would remain within the limits of your permit.

8 MR. WALLACE: Q: Okay. I can leave it at that.

9 Now, we've established that it's intended
10 to be utilized at approximately 80 percent. If the
11 actual utilization is significantly different, then
12 the unit cost of production rises, I take it.

13 MR. O'RILEY: A: The total capital -- fixed -- the
14 total fixed cost plus the energy cost, the gas
15 purchase cost, divided by the utilization, the
16 megawatt-hour output, that would -- that increases as
17 a function of utilization.

18 MR. WALLACE: Q: Okay, could you provide a -- your
19 estimate of unit costs for the EPA without gas costs?
20 Because they can vary -- at 20, 40 and -- well, 20,
21 40, 60 and 80 percent load factors?

22 MR. O'RILEY: A: I don't --

23 MR. SOULSBY: A: This actually was requested in one of
24 the IRs, I believe. And we elected not to answer it
25 on the basis that it would require a purely
26 hypothetical determination of what the gas price

1 forecasts are. In other words, the gas and
2 electricity prices in the QEM model are what determine
3 the --

4 MR. WALLACE: Q: I just asked without gas price. If
5 you could provide the unit costs for the EPA without
6 gas costs at those four load factors.

7 MR. O'RILEY: A: I'm not sure that's possible.

8 MR. WALLACE: Q: Why wouldn't it -- wouldn't it be just
9 the fixed cost over a 20 percent volume?

10 MR. SOULSBY: A: What would we assume for the energy
11 margin?

12 MR. WALLACE: Q: I'm saying -- I don't -- okay. No, I
13 want your cost. I don't want an energy margin. I
14 want your cost of generation at a 20, 40, 60 and 80
15 percent load factor, excluding the gas price, because
16 any of us can add that in.

17 **Proceeding Time 2:40 p.m. T8A**

18 MR. SOULSBY: A: I would assume that you're asking for
19 the fixed price of the plant.

20 MR. WALLACE: Q: Yes, the fixed costs over the units.
21 Yes, the fixed costs plus your other variable but not
22 gas.

23 MR. SOULSBY: A: That's possible, yes, we can do that.

24 MR. WALLACE: Q: Okay. Thank you.

25 **INFORMATION REQUEST**

26 MR. WALLACE: Q: And just to make sure then, I --

1 THE CHAIRPERSON: Mr. Wallace, before you move on, I want
2 to raise the issue and I think I'll do so explicitly
3 stating that I'm not suggesting that this is an
4 appropriate course of conduct -- an appropriate step;
5 but it occurs to me that the high gas/low electricity
6 scenario has in fact a capacity factor that hasn't
7 been disclosed in the public record, that would be
8 more helpful to Mr. Wallace than the question that
9 he's left with you. And I think it probably best just
10 to leave it with you as to whether or not you would be
11 willing to disclose the capacity factor for that
12 scenario.

13 MS. HEMMINGSEN: A: Can I just ask a question in
14 response to that? Is that in terms of the cost-
15 effectiveness analysis, high gas, low electricity
16 price that you are pointing to?

17 Okay, my understanding is that we did
18 respond to the Joint Industry's request on that front
19 and did disclose the capacity factor in an IR that was
20 filed on Friday, I believe.

21 THE CHAIRPERSON: Okay, well, that's helpful then, if
22 that's the case.

23 MR. WALLACE: Q: I don't think that's quite correct. I
24 think it was in a letter I was given about two hours
25 ago.

26 MS. HEMMINGSEN: A: Okay.

1 MR. WALLACE: Q: But all that it gave was the capacity
2 factor, it wasn't what the dollars and cents or costs
3 were or any such thing. So I would like to stick with
4 that question. I do intend to pursue I think what is
5 called the stress case. I'll just refer to it later.

6 MR. SANDERSON: Mr. Chairman, I just want to make sure we
7 are getting the right stuff on the record here. If I
8 understand the question, unlike the cost-effectiveness
9 work, Mr. Wallace wants to net out the revenue side.
10 He just wants the cost side, if I understood him. So
11 he wants straight physical cost, I think, and he wants
12 just to divide by -- assuming that you've got the
13 amount of energy that's consistent with 20 percent,
14 the amount of energy that's consistent with 40
15 percent. It's arithmetic that he can do well himself,
16 but if he wants this panel to do it, fine, probably
17 they can. Both -- he has the model, so not only could
18 he do it himself but his client can certainly do it.

19 But having said all that, if that's all
20 that's being asked for, the panel has said they can
21 produce it and will. Am I right that that's what's
22 being asked for?

23 MR. WALLACE: That is what is being asked for, is the
24 unit costs under the EPA without gas costs at those
25 load factors. And the reason I ask for it is, one, we
26 asked for it before in an information request and

1 didn't get it; and two, that when it comes from the
2 utility we don't get into a debate of you looking and
3 saying, "Well, gee, we don't know if everybody agrees
4 on this number." We'll know whether the number is in
5 agreement.

6 It seems to me it is a very basic number,
7 knowing what the costs are.

8 MS. HEMMINGSEN: A: In response to Chairman Hobbs'
9 questions, we did provide that in the supplemental
10 responses. So I'm sorry, I was incorrect, it wasn't
11 the Friday it was provided in the supplemental
12 responses and it states here that it's an 11 percent
13 capacity factor that was implied by that high gas/low
14 electricity price scenario.

15 MR. WALLACE: And Mr. Chairman, Mr. Sanderson alluded to
16 the supplementary responses earlier. My understanding
17 is they are not part of the record. It was provided
18 to me this morning some time and basically left that I
19 can follow it on cross-examination or whatever. It's
20 certainly helpful in moving us along.

21 MR. WALLACE: Q: And just to make sure that I'm
22 integrating -- if I take the unit costs I get that I
23 then gross them up to get a total cost properly. My
24 understanding is that you would then take the gas
25 price that one wanted to use times the heat rate,
26 which I believe is 7.3 and a few decimal points, and

1 add that and Terasen costs to the unit costs to get
2 the total cost?

3 MR. O'RILEY: A: Well, you'd probably want to add the
4 variable O&M as well.

5 MR. WALLACE: Q: Oh, I would ask that you include the
6 variable O&M with your unit costs under the EPA.

7 MR. SOULSBY: A: That being the so-called energy
8 charge?

9 MR. WALLACE: Q: Okay, thank you.

10 MR. SOULSBY: A: And just for clarification, the
11 treatment of some of the things that would have
12 otherwise been included under the portfolio side of
13 the QEM, such as the transmission network upgrades and
14 the start-up costs and anything else that gets
15 introduced on that side, the \$50 million VIGP credit,
16 you're not interested in those?

17 MR. WALLACE: Q: Sorry, can you run that by me again?

18 **Proceeding Time 2:45 p.m. T09A**

19 MR. SOULSBY: A: There are a number of other fixed
20 costs that would have gone into the figure as you
21 described it. But they normally would be -- would
22 have been tallied up on the portfolio side of the
23 spreadsheet. Are you interested in having those
24 included, or not?

25 MR. WALLACE: Q: I would -- I want, yes. I want to
26 know the costs under the EPA, and -- the total costs

1 of you using the EPA to generate electricity. So your
2 total fixed costs and, actually, if you could give a
3 breakdown, just so that we can see what those are,
4 then we'll know that everything's in or not in.

5 And just being careful, also, with respect
6 to the Terasen costs, do they come in the form of
7 fixed costs or do they come in the form of unit cost,
8 that would be put into the gas price?

9 MR. SIMPSON: A: The assumption is that they would come
10 in the form of fixed costs.

11 MR. WALLACE: Q: Okay, then can you include those on
12 your fixed portion when you're calculating the cost to
13 B.C. Hydro under the EPA?

14 MR. SIMPSON: A: Yes.

15 **INFORMATION REQUEST**

16 MR. WALLACE: Q: Thank you. Okay. Now, as I
17 understand it, there are two conditions where you'll
18 dispatch this plant. One is when you're required to
19 do so for reliability purposes, and the other would be
20 what was called "opportunistically," or to make money.
21 Is that correct?

22 MS. HEMMINGSEN: A: That's the general approach we'd
23 take, yes.

24 MR. WALLACE: Q: Okay. And --

25 MR. O'RILEY: A: I might just characterize that as when
26 we -- we're not necessarily selling it to export into

1 the external markets. We're requiring energy for
2 domestic load --

3 MR. WALLACE: Q: Right.

4 MR. O'RILEY: A: -- and that's one component of that.

5 MR. WALLACE: Q: Okay. And I take it that would be at
6 any time when it would be cheaper to run than to
7 purchase the energy, for example --

8 MR. O'RILEY: A: That's correct.

9 MR. WALLACE: Q: -- at Mid-C. Okay. And the
10 reliability, at least in the couple of years before
11 the 230 kV upgrade, is relatively rare?

12 MS. HEMMINGSEN: A: The requirement to run to meet peak
13 load demands is rare?

14 MR. WALLACE: Q: Yes. Relatively rare, for the
15 reliability concern during the time prior to the 230
16 kV upgrade.

17 MS. HEMMINGSEN: A: Well, it depends on what kind of
18 winter season you have.

19 MR. WALLACE: Q: Yes. But it -- we're still talking,
20 what, three to ten days? Maybe two weeks? Would you
21 agree? And an outage -- I mean, you do not forecast a
22 lot of running for reliability.

23 MS. HEMMINGSEN: A: No, I'm not sure I agree with that,
24 because the reason the unit is there is to meet n
25 minus 1 planning criteria, which can emerge from any
26 series of circumstances, disruption to the existing

1 cables, or any other plant outage on Vancouver Island.

2 MR. WALLACE: Q: But I'm talking about your anticipated

3 planned dispatch. And I suggest to you that's very

4 rare, for reliability.

5 MR. O'RILEY: A: It's providing reliability, whether

6 it's being dispatched or not.

7 MS. HEMMINGSEN: A: Yeah.

8 MR. O'RILEY: A: And that's the point of n minus 1

9 planning criteria.

10 MS. HEMMINGSEN: A: Yes.

11 MR. WALLACE: Q: No, but I'm just talking about -- I

12 understand your point on that, but your anticipated

13 dispatch for reliability is very rare.

14 MR. O'RILEY: A: I don't think we agree.

15 MS. HEMMINGSEN: A: No. I don't think we do either.

16 MR. WALLACE: Q: Okay. We'll come back to it when we

17 look at the QEM model then. But we'll leave it at

18 that, then.

19 When you dispatch opportunistically, I take

20 it you will not dispatch other than for reliability,

21 and we can put that out of the picture for a moment,

22 if the variable cost is greater than the market price?

23 MR. O'RILEY: A: Then the value -- if it's greater than

24 the value of energy to us, which is approximately at

25 the market price, but it's not necessarily the market

26 price.

1 MR. WALLACE: Q: Okay. But it's very close to the
2 market price.

3 MR. O'RILEY: A: The energy value is our long-term
4 value of energy in our system, and that's the value of
5 energy we use to dispatch our hydro facilities and
6 make decisions. Do we acquire energy and we acquire
7 energy from the market, or from our dispatchable
8 thermal resources. So, on a given day in the spring,
9 for example, our energy value could be much higher
10 than the prevailing market price.

11 MR. WALLACE: Q: Well, then why wouldn't you buy it in
12 the market, instead of dispatch this plant?

13 MR. O'RILEY: A: Well, we may. We may do both.

14 MR. WALLACE: Q: Yeah.

15 MR. O'RILEY: A: Depending on the relative --

16 MR. WALLACE: Q: But wouldn't you normally make a
17 decision to buy it in the market rather than dispatch
18 this plant?

19 MR. O'RILEY: A: Well, there could be circumstances,
20 there would often be circumstances, where we might buy
21 in the market and run this plant based on the relative
22 values of gas and our energy margin. Or energy price.

23 MR. WALLACE: Q: But they'd have to be relatively
24 close. I mean, if there was a big gap, you'd just buy
25 more in the market.

26 MR. O'RILEY: A: Well, there's constraints on how much

1 we can buy in the market, based on transmission inter-
2 tie capacity, and such.

3 **Proceeding Time 2:50 p.m. T10A**

4 MR. WALLACE: Q: Okay. Do you have significant
5 constraints for imports on purchases?

6 MR. O'RILEY: A: We do at times, yes.

7 MR. WALLACE: Q: Okay, and when would that be,
8 principally?

9 MR. O'RILEY: A: Well, the constraints can arise at all
10 hours, any time of the year as a function of
11 transmission constraints imposed by other Bonneville
12 or B.C. Transmission company.

13 MR. WALLACE: Q: But are they seasonal or are they --

14 MR. O'RILEY: A: There's certainly -- we have
15 constraints on minimum generation that are seasonal.
16 So when we have high in-flows to own reservoirs in
17 spring, we could have seasonal min generation
18 constraints.

19 MR. WALLACE: Q: For imports.

20 MR. O'RILEY: A: Yes.

21 MR. WALLACE: Q: Okay, just going through, the heat
22 rate is the rate -- some basic principles, at which
23 you can convert gas to electricity?

24 MR. O'RILEY: A: That is correct.

25 MR. WALLACE: Q: And for example, if the heat rate, and
26 this is just a simplistic example, is 7 and the gas

1 price is \$6.00, then the variable cost to generate a
2 megawatt of electricity is \$42.00 plus your own
3 variable cost of, I think it's about \$3.00?

4 MR. O'RILEY: A: Yes.

5 MR. WALLACE: Q: Okay. And the lower the heat rate in
6 comparison to others, the more efficient your plant is
7 and the less gas you need to make a megawatt of power?

8 MR. O'RILEY: A: Yes, and I would just add, there are
9 other factors that come into it. There's loss credits
10 for Vancouver Island and other variable costs and
11 benefits that would be factored in, but generally it's
12 the gas price times the heat rate plus your variable
13 costs.

14 MR. WALLACE: Q: And am I right the variable cost was
15 \$3.00? I just should confirm that.

16 MR. O'RILEY: A: Approximately.

17 MS. HEMMINGSEN: A: Mr. Eckert can confirm that.

18 MR. ECKERT: A: I'll confirm that in a minute.

19 MR. WALLACE: Q: Okay, thank you.

20 Now, you're familiar also with the concept
21 of a market heat rate?

22 MR. O'RILEY: A: I am.

23 MR. WALLACE: Q: And that's a way of expressing the
24 relationship between the price of electricity and the
25 price of gas?

26 MR. O'RILEY: A: Yes, it is.

1 MR. WALLACE: Q: And essentially the market heat rate
2 is the market price of electricity divided by the
3 market price of gas.

4 MR. O'RILEY: A: Yes.

5 MR. WALLACE: Q: And as such it's a ratio, and you
6 don't -- by looking at it you can avoid some of the
7 problems of conversions of dollars and gigajoules and
8 mmbtu's, et cetera?

9 MR. O'RILEY: A: Well, you avoid some problems. You
10 have to express the ratio either in gigajoules per
11 megawatt hour or mmbtu per megawatt hour, so the units
12 do matter.

13 MR. WALLACE: Q: As long as you use the same units in
14 both prices, you're okay.

15 MR. O'RILEY: A: The currencies and the real to nominal
16 conversions go away and --

17 MR. WALLACE: Q: Good. And just taking my simplistic
18 example again, if the price of electricity is \$42.00,
19 price of gas is \$6.00, and the market heat rate is 7.3
20 being approximately this EPA, then you would not
21 dispatch -- you would not normally dispatch
22 opportunistically to make a market sale?

23 MR. O'RILEY: A: Now we're doing more math in my head.
24 I think --

25 MR. WALLACE: Q: Well, let me --

26 MR. O'RILEY: A: I think the way you constructed the

1 numbers, yes, I don't think you would dispatch in that
2 circumstances.

3 MR. WALLACE: Q: Yes. Basically what I've got is the
4 gas cost would be 7.3 times 6. It's \$43.8 and --

5 MR. O'RILEY: A: I liked your 7 heat rate better. That
6 was a little easier to --

7 MR. WALLACE: Q: I know, but again I would have had to
8 change another one.

9 MR. O'RILEY: A: Okay.

10 MS. HEMMINGSEN: A: And one factor that's not
11 represented there is the loss savings by generating on
12 Vancouver Island. So that may factor into your
13 decision as well.

14 MR. O'RILEY: A: Okay.

15 MS. HEMMINGSEN: A: So you can generate on Vancouver
16 Island and displace the generation from another
17 resource.

18 MR. WALLACE: Q: And what would the advantage versus
19 buying at Mid-C, say, be in that? Is that a 3 percent
20 difference or something? 5 percent?

21 MS. HEMMINGSEN: A: No, it's closer to 5.

22 MR. WALLACE: Q: Okay. Losses are in the 5 percent
23 range. Thank you. And the reason Burrard rarely gets
24 dispatched is its heat rate is around 11 or somewhere
25 in there?

26 MR. O'RILEY: A: That is correct.

1 MR. WALLACE: Q: Okay now, I'd like to look a bit at
2 the utilization estimates around this. Duke Point
3 Plant is GE Frame F?

4 MS. HEMMINGSEN: A: Mr. Eckert can answer that.

5 MR. ECKERT: A: The GE Frame 7F.

6 **Proceeding Time 2:55 p.m. T11A**

7 MR. WALLACE: Q: Frame 7F, thank you. And that's a
8 relatively common plant, today?

9 MR. ECKERT: A: In one of the IRs I think we state that
10 there have been more of those units used than any
11 other unit.

12 MR. WALLACE: Q: And roughly how many would that be?

13 MR. ECKERT: A: I don't know that number.

14 MR. WALLACE: Q: Okay. And I think we've established
15 it's heat rate is about 7.3.

16 MR. ECKERT: A: Yes.

17 MR. WALLACE: Q: And there are now more current models
18 out there with lower heat rates?

19 MR. ECKERT: A: I'm aware that there are newer GE
20 model turbines, yes. I'm not aware of what those heat
21 rates are and what the reliabilities are, how many are
22 in service or any of those factors.

23 MR. WALLACE: Q: Okay, and I guess I'm wondering why
24 you aren't, and we are going to come to it. You used
25 a hypothetical CCGT for your electricity prices going
26 out in the OEM. Not OEM, whatever we were -- OEM. In

1 the QEM you used a hypothetical plant being the same F
2 series. If you are aware of other plants, is there a
3 reason why you didn't use those, the heat rate?

4 MR. SANDERSON: Well, the witness said they weren't
5 aware of it when you asked the original question why
6 not.

7 MR. WALLACE: Q: Okay. Why aren't you aware of what
8 else is out there in the market? Why aren't you --

9 MS. HEMMINGSEN: A: I think if your question relates to
10 the basis for our price forecast assumptions, Mr.
11 O'Riley can answer that question.

12 MR. WALLACE: Q: Okay.

13 MS. HEMMINGSEN: A: In terms of why aren't we aware of
14 other heat rates in terms of Vancouver Island
15 solutions, once again it goes to the product that we
16 required. It was a reliable product, and some of
17 these other units that are the G series and
18 potentially the H series of GE turbine have not proven
19 their reliability. So there was trade-off between --

20 MR. WALLACE: Q: I'm actually going more to the risk
21 side of looking forward -- and it's probably for Mr.
22 O'Riley. Why when you are looking forward isn't
23 somebody very aware of what's happening with those
24 plants and the evolutionary steps that are being taken
25 with respect to them?

26 MR. O'RILEY: A: Yes, we rely for one of our scenarios

1 for long-term prices, we used a GE7F gas fired
2 turbine, combined cycle turbine as a proxy for the
3 value of energy, electricity in the market, and we do
4 keep abreast of the developments in the technology,
5 and our conclusion to date is that the 7F is, remains
6 the industry standard. There are more efficient units
7 under development, the G&H series. I don't, off the
8 top of my head, have those heat rates, and I apologize
9 for that. There are issues with those units in terms
10 of reliability and costs and size that have made them
11 not as well accepted in the market, so we've struck to
12 our approach of using the F series.

13 Having said that, we do test our assumption
14 of that type of generation setting the value of energy
15 in the market in the long-term with our so-called
16 partial recovery or 25 percent recovery case, where we
17 take the capital or fixed costs of a 7F and
18 approximate that only 25 percent of those costs are
19 recovered in the market price and we're not saying
20 that it's only -- that people are going to build those
21 plants and accept a return of only 25 percent of their
22 fixed costs. We use it as a proxy for any number of
23 market outcomes, like oversupply or general
24 improvements in efficiency or new technologies.

25 MR. WALLACE: Q: Okay, thank you. And I think you've
26 actually answered that quite fully.

1 I take it from that you recognize that
2 right now there is substantial over-supply of gas
3 capacity in the U.S.?

4 MR. O'RILEY: A: Yes, there's currently a glut, if you
5 will, of new generating capacity that was built in --
6 came on-line largely in 2000-2001 and still again in
7 2002 and that followed a period in the '90s where new
8 generation lagged growing load in the market. And
9 we're seeing -- sorry.

10 MR. WALLACE: Q: Sorry, no, if you're not complete.

11 **Proceeding Time 3:00 p.m. T12A**

12 MR. O'RILEY: A: Well, we're seeing that the rate of
13 new supply dropping off substantially, given the
14 trends in the market, and fewer and fewer additions
15 coming on-line each year.

16 MR. WALLACE: Q: Okay. And in JIESC IR 1.5, we put
17 some quotes from various publications to B.C. Hydro.
18 Now, those quotes were eliminated from the response,
19 and Mr. Sanderson mentioned that, but I just want to
20 see if your knowledge agrees with the general trends
21 they're talking about.

22 Well, one, there was a Public Utilities
23 Fortnightly, which reported that the average capacity
24 of the 900-plus units built since 2000 is less than 25
25 percent. Would you agree that that is a reasonable
26 figure?

1 MR. O'RILEY: A: Would it be possible to have those
2 articles?

3 MR. WALLACE: Q: I did provide the articles to your
4 counsel.

5 MR. O'RILEY: A: I tried to print them, and they -- the
6 highlighted portions came out as redacted, so --

7 MR. WALLACE: Q: Very fitting.

8 Mr. Chairman, I can assure you, we didn't
9 redact anything.

10 That's the Public Utilities Fortnightly.

11 Mr. Chairman, I can make the articles available. I
12 think I'm just at a general understanding level, and
13 so unless anybody thinks they're necessary, it wasn't
14 my intent to --

15 THE CHAIRMAN: Question 5 of your IRs --

16 MR. WALLACE: Yes. It was in the original IR but it
17 isn't in the IRs with responses.

18 THE CHAIRMAN: Right. But I have the original IRs.

19 MR. WALLACE: Good.

20 THE CHAIRMAN: So if you can correlate that with --

21 MR. WALLACE: The one I'm referring to right now is the
22 quote from the Public Utilities Fortnightly, it's the
23 fifth quote down.

24 THE CHAIRMAN: Thank you.

25 MR. O'RILEY: A: Could you point out to me -- remind me
26 where the quote is? This doesn't have the highlighted

1 portion on it at all.

2 MR. WALLACE: Q: Oh, sorry, I don't -- I didn't bring
3 it. I pasted it in and it got -- it disappeared on my
4 copy.

5 I'm simply going for your understanding,
6 sir, if you disagree then that's fine, or you don't
7 know, that's fine too. I just -- if you do know, I'd
8 like to know if you -- you have already said that your
9 understanding is since that period of 2000 that there
10 was a large overcapacity. This suggests that the
11 average capacity factor is less than 25 percent for
12 the facilities since 2000, and I'm asking if that
13 accords with your own understanding.

14 MR. O'RILEY: A: Well, I understand that utilization
15 factors were very high in 2000/2001, and that if you
16 look at the market heat rates, you see that in
17 historical market heat rates, you -- that rings true.
18 In 2002/3/4, we've had lower market heat rates, and I
19 would anticipate lower dispatch figures as a result.
20 Having said that, we are seeing load growing, and
21 plants being retired throughout the system. So we
22 would expect that trend to reverse itself over time.

23 MR. WALLACE: Q: Okay. But at the moment, does the 25
24 percent seem about right to you?

25 MR. O'RILEY: A: For the period -- the narrow period of
26 2002 through 2004, that number certainly makes sense.

1 MR. WALLACE: Q: Okay. Thank you. And you're aware
2 that a lot of these same plants that you have, have
3 been selling -- or same or similar power plants to
4 what you were contracting for on the EPA have been
5 selling for a small portion of their value?

6 MR. O'RILEY: A: I've -- I read that in this document.
7 Through my time at Powerex, we spent some time looking
8 at those opportunities in the market and didn't
9 actually come across many plants that were being sold
10 on a discounted basis, so I -- I've read the comments
11 by the people at Goldman, Sachs, for example, and --

12 MR. WALLACE: Q: Okay --

13 MR. O'RILEY: A: -- I presume they are true, but that's
14 not my experience.

15 MR. WALLACE: Q: Okay, and with Business Week, they
16 refer to the sale of Duke Energy -- by Duke Energy of
17 plants on their books for 2.6 million, selling for 475
18 million. Are you familiar with that at all?

19 MR. SANDERSON: I'll ask the witness to limit their
20 answer to what they're familiar with.

21 MR. O'RILEY: A: Yeah. I'm not familiar, aside from
22 reading the articles, which I'm sure others can read.

23 MR. WALLACE: Q: Okay. Are you familiar with the
24 extent of capacity for sale in the U.S. at this time?

25 MR. O'RILEY: A: I'm not, no.

26 MR. WALLACE: Q: Okay. Thank you.

1 MS. HEMMINGSEN: A: Just to reinforce, Vancouver Island
2 is a physically constrained area, and it needs
3 capacity located on-Island. So, to the extent
4 capacity is available in the U.S., with transmission
5 constraints isn't much help to us on Vancouver Island.

6 MR. WALLACE: Q: No, thank you for that, but my point
7 is more going to dispatch rates, and that will depend
8 on markets, and markets will depend to some extent on
9 whether there's a glut of supply.

10 MS. HEMMINGSEN: A: Right, which as Mr. --

11 MR. WALLACE: Q: Of heat rates.

12 MS. HEMMINGSEN: A: -- O'Riley testified to, is
13 expected to be whittled down by 2010. That is --

14 MR. WALLACE: Q: Well, I don't think he said by 2010.

15 MS. HEMMINGSEN: A: -- industry -- well --

16 MR. WALLACE: Q: He did say it would whittle down.

17 MS. HEMMINGSEN: A: -- he said that load was growing,
18 and the rate of new plants was declining, and if you
19 look at regional forecasts of supply and demand, and
20 when they expect that to be whittled down, it's by
21 2010.

22 **Proceeding Time 3:05 p.m. T13A**

23 MR. WALLACE: Q: Mr. Riley, you said it was going to be
24 whittled down. I don't recall you saying 2010 on the
25 stand here. Is that correct?

26 MR. O'RILEY: A: Yes, just for record, it's actually

1 O'Riley.

2 MR. WALLACE: Q: O'Riley, I'm sorry.

3 MR. O'RILEY: A: Yeah. I'm not sure who this Riley
4 person is.

5 But I would agree with Ms. Hemmingsen as to
6 the date she proposed.

7 MR. WALLACE: Q: So, but the very fact at this time,
8 anyway, the plants are selling for a fraction of cost
9 does mean that they're likely to be selling their
10 power at a rate that would not recover both variable
11 cost and return on capital?

12 MR. SANDERSON: There is no evidence whatever that plants
13 are selling at a fraction of their cost. That's
14 precisely my point. It's quite, quite inappropriate
15 for Mr. Wallace to try and put that evidence into the
16 mouths of these witnesses who have stoutly refused
17 to --

18 MR. WALLACE: My apologies.

19 MR. SANDERSON: Thank you.

20 MR. WALLACE: Q: We'll clean the question.

21 If plants are selling at a fraction of
22 their cost, does that mean that looking at it from --
23 implications from a market perspective, that a plant
24 is unlikely to be able to sell -- or the owners don't
25 anticipate that they can sell -- recover their
26 variable costs and return on their capital?

1 MR. O'RILEY: A: I understand that a number of plants
2 are not located as well as they could. There were a
3 number of plants built in haste in the late '90s and
4 early 2000s. And for example, in the desert
5 southwest, Nevada and Arizona, there's a number of
6 plants that, because of transmission restricts, can't
7 get to the load centres. And so there may be a market
8 there but they can't access it. So I would expect
9 those plants to be selling at a percentage of their
10 book value.

11 MR. WALLACE: Q: And that is basically because they
12 can't price their product to cover variable cost and
13 return the capital?

14 MR. O'RILEY: A: More so they can't get their product
15 to the market.

16 MR. WALLACE: Q: Now, I'd like to take a look at your
17 full and partial recovery scenarios, just to
18 understand the significance of them to set up going
19 into some other questions.

20 As I understand it, your 100 percent cost
21 recovery scenario is where you take your gas price out
22 of the EIA forecast, and then convert it on your
23 hypothetical Mainland CCTT, and recover 100 percent of
24 your capital and costs. Is that correct?

25 MR. O'RILEY: A: Yeah. I think it's worth explaining
26 the full picture --

1 MR. WALLACE: Q: Okay.

2 MR. O'RILEY: A: -- of our pricing, because there's a
3 little more to it than that. So for the period 2007
4 through 2012, we rely on the Henwood model, which is
5 produced by a company called Global Energy Now. And
6 that's a production costing model that looks at the
7 supply and demand throughout the WECC in our case.
8 They have all the units in the western system, the
9 coal, the nuclear, the hydro, the gas-fired plants as
10 part of the existing fleet. They take into account
11 plants that are under construction, named plants that
12 are well along the way in terms of the development
13 process, known retirements, known additions in the
14 form of renewable energy and such. And they combine
15 that with the load and transmission constraints and
16 fuel costs, and they calculate a market clearing price
17 for each hour, which they aggregate the hours together
18 and come up with monthly and annual values.

19 MR. WALLACE: Q: Okay now, that doesn't have anything
20 to do with your full and partial recovery, does it?

21 MR. O'RILEY: A: Well, it does. We have two price
22 scenarios, one called the full recovery, one called
23 the partial recovery. And in the period 2007 through
24 2012, we use the Henwood model and that process I just
25 described to calculate the price curve.

26 MR. WALLACE: Q: Okay, and how do the full and partial

1 fit into that then?

2 MR. O'RILEY: A: Beyond 2000 -- for 2013 and beyond, we
3 use not a hypothetical CCGT but a real F Series CCGT
4 and the cost structure associated with that, and we
5 use that as a proxy for the cost of electricity in the
6 market. So we put the gas price through that and it
7 comes out to be an electricity cost. And the
8 rationale is that people would not build such plants
9 without an expectation of actually earning at least
10 their full capital costs back in their energy margin.
11 So that's the justification for the 100 percent
12 recovery scenario.

13 **Proceeding Time 3:10 p.m. T14A**

14 The 25 percent recovery scenario, the
15 partial recovery, as it's called, uses the same CCGT
16 and assumes we only recover 25 percent of the capital
17 costs, and as I described previously, that could arise
18 from any number of circumstances in over-supplying.
19 And over-supply, new technology, increasing
20 efficiencies and such.

21 MR. WALLACE: Q: Okay, now I guess the point I was
22 trying to make there was that that full and partial
23 cost recovery scenario then only goes to the period
24 2013 and beyond?

25 MR. O'RILEY: A: Sorry, would you mind repeating the
26 question, please?

1 MR. WALLACE: Q: Yes. The full and partial recovery
2 scenario then only works its way into the calculations
3 for 2013 and beyond.

4 MR. O'RILEY: A: Well, the full and partial recovery is
5 our short-hand for the entire price curve. So the
6 2007 through 2032, in this particular case, we just
7 have different means of calculating it for the '07 to
8 '12 window and the '13 and beyond.

9 MR. WALLACE: Q: So within '07 to '12 you do then, you
10 are saying, alter Henwood for the different recovery?

11 MR. O'RILEY: A: We use Henwood -- no, we generally --
12 we essentially use the Henwood model for the '07 to
13 '12.

14 MR. WALLACE: Q: In both cases.

15 MR. O'RILEY: A: In both cases. We actually cap, in
16 the partial recovery case, if we end up with a year in
17 which prices are higher than they would be in our 25
18 percent recovery beyond 2013, we cap the price in that
19 particular year so it has a dampening effect on the
20 output of a Henwood model.

21 I should say that the reason we go to this
22 100 percent recovery case, and using the proxy, the
23 CCGTs as a proxy is we have run the Henwood model for
24 25 - 30 years and we get to the same -- a similar
25 price, and that's based on the logic that people are
26 adding generation resources based on economics and to

1 maintain reserve margins. And the resulting price is
2 very similar to what you get under our 100 percent
3 recovery case.

4 MR. WALLACE: Q: Okay, and I'll be coming to that in
5 more detail in a minute. You then -- you take your
6 partial and full recovery, I gather, and for your base
7 case, average the two?

8 MR. O'RILEY: A: No, we calculate -- in our normal
9 price forecasting process we come up with six
10 electricity prices. For the purpose of the QEM model,
11 and I'll defer -- if we get into any detail, defer to
12 Mr. Soulsby. We look at two cases which is based on
13 the EIA gas and the full recovery and the partial
14 recovery. We put those price curves through the model
15 and then we average the results. So after we've
16 determined the dispatch and such, we average the
17 results. We're not averaging the price curves.

18 MR. WALLACE: Q: Okay, thank you.

19 MR. SOULSBY: A: And just for clarity, I've actually
20 averaged at the portfolio level, not at the tender
21 level.

22 MR. WALLACE: Q: Okay. You take the QEM output and
23 then do your averaging as part of the portfolio.

24 MR. SOULSBY: A: Yeah, there's a portfolio run for the
25 full recovery case and portfolios run with the 25
26 percent recovery case, and it's the actual NPV output

1 of the overall portfolio which is then averaged.

2 MR. WALLACE: Q: Okay. Now, that distinction, I think
3 I'm getting now, but does that mean that your model
4 essentially assumes 62 and a half percent recovery of
5 fixed costs? And that being -- taking the 25, the 100
6 and averaging them?

7 MR. O'RILEY: A: Well, I think you get a different
8 answer if you -- because of the ability to turn on and
9 off the various tenders within the portfolios in the
10 QEM model you get a different answer using 100 percent
11 recovery and 25 percent recovery than you would if you
12 just use a 62 and a half percent recovery, because
13 you're going to get the lower dispatch so.

14 MR. WALLACE: Q: Are they approximately the same or --

15 MR. O'RILEY: A: Well, I think you'd want to look at it
16 in some detail before you said that.

17 MR. WALLACE: Q: Okay. Now, I'd like to -- so you
18 have the right to dispatch this plant with a heat rate
19 of 7.3. Did you take a look to see how that would be
20 economically dispatched in the market, looking forward
21 using future prices at all?

22 **Proceeding Time 3:15 p.m. T15A**

23 MR. O'RILEY: A: We're not aware of any future prices
24 that encompass the 25-year period of the EPA.

25 MR. WALLACE: Q: Okay. Did you test it, maybe, just
26 for the first five or six years, to see how it

1 compared to your model?

2 MR. O'RILEY: A: I'm actually not aware of any prices
3 that extend the first five or six years of the EPA.

4 MR. WALLACE: Q: That would go out to 2012?

5 MR. O'RILEY: A: I'm not aware of market prices that go
6 to 2012.

7 MR. WALLACE: Q: Okay, 2010, could you have taken it
8 for that period? For electricity.

9 MR. O'RILEY: A: Yeah, there's very limited market
10 prices, and I'm -- of dubious quality, that extend
11 until 2010.

12 MR. WALLACE: Q: Well, would you agree with me,
13 forecasts are sometimes of dubious quality too?

14 MR. O'RILEY: A: Anything can be of dubious quality, if
15 not done well.

16 MR. WALLACE: Q: Sure. And the advantage of market
17 prices, whether there are a lot of them or not, is
18 that they are something that somebody is prepared to
19 pay for the commodity, and if somebody else thinks
20 it's the wrong price, and it's of dubious quality,
21 they can put off -- put in an offsetting transaction
22 and profit on the arbitrage, can't they?

23 MR. O'RILEY: A: They can, but often when you see
24 quotes for long-term prices, they're not real offers
25 or real bids, they're just -- they're just -- they're
26 often just estimates, or settlement prices, or what

1 have you. They're not actual reflecting -- real bids,
2 or real offers, or real transactions.

3 MR. WALLACE: Q: I take it you didn't even try looking
4 at this.

5 MR. O'RILEY: A: We have not tested the portfolios with
6 market prices.

7 MR. WALLACE: Q: Okay. Did you test them looking back?
8 Do a back-cast, to see how it would have got
9 dispatched over the last year or two, had the plant
10 been there?

11 MR. O'RILEY: A: Well, the dispatch of the plant, on a
12 retrospective basis, would depend -- if we'd used the
13 last six years versus the last two --

14 MR. WALLACE: Q: Yeah.

15 MR. O'RILEY: A: -- we have not run the portfolios,
16 it's not part of the evaluation process to look at how
17 they would have been dispatched, say, from '98 through
18 2004.

19 MR. WALLACE: Q: You didn't try either. Either short-
20 term or backward them?

21 MR. O'RILEY: A: No, we did not.

22 MR. WALLACE: Q: Okay.

23 MS. HEMMINGSEN: A: Just back to the question on
24 whether we've looked at the applicability of using
25 forward prices for general price forecasting. We have
26 extensively looked at that in landing on our price

1 forecasting methodology, and looking at the
2 appropriateness of market prices and the signals that
3 they send, and that was the basis to land on only
4 using them out for two years, to the point that
5 they're become illiquid. So that has been a
6 consideration that B.C. Hydro has spent considerable
7 time looking at. And it carries through to this CFT.

8 MR. O'RILEY: A: Yeah. If I could add, there's a -- in
9 the course of the QEM, we're applying our price
10 forecasting process. We do do quite a bit of testing
11 of our price forecasting process, so comparing the
12 near few years against market, and comparing on an
13 ongoing basis how our forecast compares to actuals.
14 So during the 2000/2001 period, for example, our
15 forecast was well below what the actual market prices
16 have been. In the years 2002 through 2004, prices
17 have tended to be lower than what our forecasting
18 approach has indicated.

19 MR. WALLACE: Q: Yeah. And I guess what I was getting
20 at was not your forecast as much as your dispatch,
21 although obviously they're inter-related.

22 MR. SOULSBY: A: That was tested not retroactively,
23 with using back-casting price forecasts, as you
24 suggested, but rather it was tested extensively using
25 different types of technologies, and the same price
26 forecasts. And understanding the difference between

1 various technologies, and making sure that the QEM
2 model is coming out with an intelligent result of one
3 technology against another technology, given certain
4 price forecasts. So that was done.

5 MR. WALLACE: Q: I'm asking if you tested your dispatch
6 utilization against forward markets or back-casting
7 against recent markets to see if your 80 percent
8 utilization would come out of those results. And what
9 I take it is you're telling me, no, we did not
10 dispatch against actual market prices.

11 MS. HEMMINGSEN: A: Because we had previously
12 determined that they weren't a good representation of
13 what to expect in the years that the DPP would be
14 operating.

15 MR. WALLACE: Q: Okay. And not even in the first years
16 the DPP would be operating.

17 MS. HEMMINGSEN: A: No. It starts operating in 2007,
18 and there's no credible market forecasts that extend
19 into that 2007 period.

20 MR. WALLACE: Q: I wasn't -- I think I might agree with
21 you on market forecasts. I think you probably wanted
22 to say market price.

23 MS. HEMMINGSEN: A: That's -- sorry, yes.

24 MR. WALLACE: Q: We'll leave it at that. And how do
25 you determine when you do have a credible --
26 "credible" market price?

1 MS. HEMMINGSEN: A: Do you mean price, or forecast?

2 **Proceeding Time 3:20 p.m. T16A**

3 MR. WALLACE: Q: And how do you determine when your
4 credible market price is more credible than your
5 forecast?

6 MS. HEMMINGSEN: A: Sorry, are you asking about a
7 forecast or a market price?

8 MR. WALLACE: Q: You said you had no credible market
9 price, and I'm going on what basis do you determine
10 that?

11 MS. HEMMINGSEN: A: I'll just correct myself. It was
12 credible market forwards. They're not a good
13 indicator of what the expected price will be. And in
14 determining the appropriate price forecast to use,
15 we've spent considerable time and Mr. O'Riley can go
16 through that, to identify third party, reputable
17 industry standard forecasts, and have landed on a
18 number of them, in terms of the six scenarios that we
19 represent. And they go through a thorough,
20 exhaustive, comprehensive process to look at all
21 factors that influence long-term prices.

22 MR. WALLACE: Q: And your view is that that's
23 preferable to actual market prices, even in the short
24 run?

25 MR. O'RILEY: A: We do use market prices for the first
26 two or three years, and we use them in a lot of

1 different areas for income forecasting and planning
2 the dispatch of our system and such. We tend not to
3 use them, we don't use them for long-term decisions
4 because they just don't extend far enough out into the
5 future. We're in the circumstance now where we've
6 left this project so late that we're getting into that
7 two- to three-year window. But generally we've used
8 our scenario base forecasting approach, which received
9 a lot of consideration by our risk management
10 committee and executives in the company, and it's
11 described fairly well in IR 1.13.1 from the BCUC, and
12 we have adopted that for long-term planning, and
13 you'll see that in the integrated electricity planning
14 work that'll be done this spring and summer. And
15 you'll see it in things we're bringing forward in
16 forums like this.

17 MR. WALLACE: Q: Okay. Would you agree with me that
18 gas and electricity future prices are available to
19 2010?

20 MR. O'RILEY: A: There are -- I mean, there are market
21 prices at NYMEX. A lot of them are settlement prices
22 because they don't trade every day, so they're
23 estimates of what the price was the previous day or
24 someone's estimate. And those are available, I think,
25 through 2010. There are market prices from brokers,
26 electricity market prices from brokers that are

1 offered for various windows, and there's not usually
2 any information provided as to whether those are real
3 bids and offers there, or indicative bids and offers.
4 Typically the fine print at the bottom says these are
5 all indicative. And they're typically extrapolated
6 from earlier years where the liquidity is better.

7 So you can get numbers, and whether those
8 represent good market prices I think requires some
9 judgment.

10 MR. WALLACE: Q: You can get future prices that people
11 are prepared to deal on.

12 MR. O'RILEY: A: You can go out for -- if you want a
13 price that people are prepared to deal on, you've
14 really got to go out for bids, or get on the phone
15 with brokers and say --

16 MR. WALLACE: Q: But you get reported future prices for
17 gas and electricity to 2010 at this point, and you can
18 go out and make your own offers in the market beyond
19 that.

20 MR. O'RILEY: A: Yeah. Well, I think I described my
21 perspective on what prices are available.

22 MR. WALLACE: Q: Okay. And you're aware that Mr.
23 Sheldon has looked at market prices and dispatch of a
24 plant with an EP -- or with a heat rate of 7.3, and
25 concluded that it would be dispatched on current
26 markets at 20 to 30 percent of the time?

1 MR. O'RILEY: A: I think Mr. Fulton looked at a very
2 narrow range of historical prices. He used the lowest
3 of the past six years to do his calculations, and came
4 out with a low dispatch. He also took the forward
5 prices as they exist, and made a number of
6 assumptions, and came up with much lower dispatch than
7 we've come up with. We've asked some IRs of that, and
8 I understand we've received some results, and I have
9 not had a chance yet to review his answers to those
10 IRs.

11 MR. WALLACE: Q: Okay, when you say he -- when he
12 looked backward he looked at the lowest of the last
13 five years, he looked at the most recent year
14 available to him, didn't he?

15 MR. O'RILEY: A: He chose to use, I believe, 2002, 2003
16 and 2004, and if he had used -- even going back to
17 '98, '99, '00 and '01, he would have got a quite
18 different, different answer, so.

19 **Proceeding Time 3:25 p.m. T17A**

20 MR. WALLACE: Q: Do you agree -- do you disagree with
21 his conclusion that based on market prices the EPA on
22 an opportunistic basis would be dispatched 20 to 30
23 percent of the time over the next few years?

24 MR. O'RILEY: A: I don't think we agree with this
25 methodology, so no, I can't concur with that.

26 MR. WALLACE: Q: Okay. And where do you think he's

1 going wrong?

2 MR. O'RILEY: A: Well, I think he's -- I mean there's a
3 number of questions we raised to him, and as I said, I
4 haven't had a chance to look at his answers, but
5 there's questions around the shape of the profile you
6 apply to forward prices. Typically their forward
7 power prices are given in calendar blocks and there's
8 a seasonal shape to that, there's a monthly shape to
9 that which there's assumptions behind -- beyond that,
10 and I'm not sure of what his assumptions were.

11 There's assumptions around the variable
12 cost, variable versus fixed cost for the Duke Point
13 project that we didn't agree with, that certainly
14 affected dispatch. So there's any number of
15 assumptions that can be used to show a lower dispatch.

16 MR. WALLACE: Q: Thank you. We'll pursue that later, I
17 guess.

18 Ms. Hemmingsen, I want to just follow up on
19 one comment you made. Losses with respect to
20 Vancouver Island are 5 percent. That seems --

21 MS. HEMMINGSEN: A: In that order.

22 MR. WALLACE: Q: Okay, that seemed high to me. Isn't
23 that the range of losses from the interior to
24 Vancouver Island?

25 MS. HEMMINGSEN: A: No, actually our system-wide losses
26 are around 11 percent and then the portion that

1 relates to mainland to Vancouver Island is in the
2 neighbourhood of 5 percent. I think it's slightly
3 less. 4.8 seems to ring a bell, so subject to check.
4 I believe there is an IR where we outlined what that
5 loss percentage was.

6 MR. WALLACE: Q: Thank you. I'd like to turn then just
7 to your forecasting methodology. You use -- and we've
8 discussed it in part and I won't repeat those areas,
9 but you use one forecast for gas, the EIA forecast.

10 MR. O'RILEY: A: We, in our forecasting approach, which
11 is again described in BCUC 1.13.1, we used three
12 forecasts for natural gas. One is the --

13 MR. WALLACE: Q: I'm sorry, for the QEM?

14 MR. O'RILEY: A: Yes, the QEM model has one forecast
15 for natural gas prices.

16 MR. WALLACE: Q: And that one forecast is the EIA.

17 MR. O'RILEY: A: That's correct.

18 MR. WALLACE: Q: Okay, and I'm going to be moving into
19 the context of the QEM at this point.

20 MS. HEMMINGSEN: A: So you can move on to Mr. Soulsby.

21 MR. WALLACE: Q: Okay. I suspect we'll come back to
22 Mr. O'Riley because the interconnection between the
23 QEM and markets and heat rates, I think, is fairly
24 tight.

25 But Mr. Soulsby then, you use the one gas
26 forecast.

1 MR. SOULSBY: A: That's correct.

2 MR. WALLACE: Q: And you would recognize that that
3 forecast has been low over the last few years?

4 MR. O'RILEY: A: The EIA --

5 MR. WALLACE: Q: So much for Mr. Soulsby.

6 MR. SOULSBY: A: Over to Mr. O'Riley.

7 MR. O'RILEY: A: Yeah, the EIA forecast is a long-term
8 forecast so. It's 20-25 years which we're extending
9 for the last seven years, and certainly like many
10 forecasts, it has been lower than what we've seen in
11 the market in the last few years. It's important to
12 note that when people do these forecasts they
13 typically forecast based on sort of normal or average
14 conditions, so average temperature and average water
15 and such, and we have had, in North America we've had
16 colder than normal winters and in the west we've
17 certainly had lower water for the last few years so
18 any number of factors drive prices to be -- actual
19 prices to be different than what than the forecast and
20 that's an area of concern for us at B.C. Hydro and
21 that's why in our forecasting approach and in the cost
22 effectiveness study we use higher gas forecasts as
23 scenarios.

24 MR. WALLACE: Q: Yes, and I'm going to try and keep the
25 cost effectiveness for Panel 4 and deal with the QEM
26 in this panel. It's enough for me to handle at one

1 time.

2 MS. HEMMINGSEN: A: Us too.

3 MR. WALLACE: Q: Now, Mr. O'Riley, you, I would assume,
4 have had a chance -- have you had a -- or I'll ask
5 you. Have you had a chance to take a look at the
6 article contained in Appendix 2 of Mr. Sheldon's
7 evidence basically criticizing forecasts and I guess
8 in particular EIA?

9 **Proceeding Time 3:30 p.m. T18A**

10 MR. O'RILEY: A: Yes, that would be Mr. Weisman's
11 article.

12 MR. WALLACE: Q: Yes.

13 MR. O'RILEY: A: I believe -- yeah, he's the IT
14 executive. And I guess his article, which was
15 certainly interesting, he was very critical of
16 forecasting. He didn't really provide any
17 alternative, so he had a number of -- although he said
18 that EIA had made it -- made some improvements over
19 the last few years, he criticized their performance on
20 their short-term, year-to-year forecasts. But as I
21 said, he didn't provide any alternative to companies
22 like B.C. Hydro that are making long-term asset
23 decisions. So we didn't find it that useful.

24 MR. WALLACE: Q: Right. Though he did provide a bit of
25 advice, didn't he, in saying:

26 "In the face of the track record just

1 described, it should be obvious that any
2 company or investment firm will lose its
3 shirt if it makes important decisions based
4 on forecasts by experts with poor track
5 records."

6 That was a bit of advice there for you.

7 MR. O'RILEY: A: I guess it is. I guess it would have
8 been more useful if he had -- if he had had an
9 alternative for us to consider.

10 MS. HEMMINGSEN: A: And just on that front, in terms of
11 power contracting, I have checked with a number of our
12 peer jurisdictions and find that they use the same
13 types of forecasts to make long-term supply decisions
14 as we do. So the EIA forecast, for example, is an
15 industry stalwart forecast. And they supplement that
16 with other third-party forecasts as we do. So --

17 MR. WALLACE: Q: Okay, now --

18 MS. HEMMINGSEN: A: -- it seems to be the state of
19 practice.

20 MR. WALLACE: Q: The EIA December forecast for 2005
21 moves gas prices up by over \$1. Can you confirm that?

22 MR. O'RILEY: A: No, I don't believe there was a change
23 by a dollar.

24 MR. WALLACE: Q: No?

25 MR. O'RILEY: A: No. I can dig it out here, actually,
26 but --

1 MS. HEMMINGSEN: A: No, our understanding is, as a
2 modest change.

3 MR. O'RILEY: A: I would have said something like 20
4 cents, but --

5 MR. SOULSBY: A: 22 cents?

6 MR. O'RILEY: A: Yeah.

7 MR. WALLACE: Q: I may have a misunderstanding. Tell
8 me what you think it is, and if I have to say it's --

9 MS. HEMMINGSEN: A: We believe it's 22 cents.

10 MR. WALLACE: Q: 22 cents? Okay. Thank you. And do I
11 take it, then, that you have not updated anything
12 because that is considered to be a modest increase?

13 MR. O'RILEY: A: We've not received -- I guess EIA have
14 published a preliminary sort of news release,
15 describing the results of their latest forecast.
16 They're -- we expect their full document to come out
17 in the next few weeks. It's a very lengthy document,
18 so almost 300 pages, and we'll be going through that
19 in detail, understanding the changes in their
20 assumptions.

21 And our practice is, if there's new
22 information, we'll update our forecasts and we'll take
23 that back to our risk management committee and get
24 buy-in for that change.

25 MR. WALLACE: Q: Okay. Thank you.

26 Mr. Chairman, I'm not sure if you're taking

1 a break this afternoon or not.

2 THE CHAIRMAN: We will take a break. How much longer do
3 you think you'll be in cross?

4 MR. WALLACE: I would -- I have -- I'm not sure. Depends
5 how long the answers are. It -- we'll be going
6 through the QEM model, continuing. I would -- I will
7 not finish today, before 4 o'clock.

8 THE CHAIRMAN: Will you finish in an hour?

9 MR. WALLACE: I can't say for sure. It -- these are --
10 they're difficult technical subjects. I'm going into
11 the QEM model. I'm gaining understanding, but
12 sometimes they don't always move as quickly as I would
13 like.

14 THE CHAIRMAN: Let's take 15 minutes.

15 **(PROCEEDINGS ADJOURNED AT 2:35 P.M.)**

16 **(PROCEEDINGS RESUMED AT 3:48 P.M.)** **T19A**

17 THE CHAIRPERSON: Please be seated. Mr. Wallace, I would
18 like to finish your cross-examination today.

19 MR. WALLACE: And are you prepared to sit late to do
20 that, sir?

21 THE CHAIRPERSON: Well, I'm prepared to sit fairly late.
22 I'm hoping that you will finish today. So let's
23 proceed and we'll see how it goes.

24 MR. WALLACE: I will do everything I can, I can assure
25 you. With my health I have no desire to talk any
26 longer than I possibly could. But this is extremely

1 important subjects to us. It goes to our core, the
2 core of our concerns around this project and I do feel
3 I have to pursue it.

4 THE CHAIRPERSON: I appreciate that.

5 MR. WALLACE: Thank you.

6 **CROSS-EXAMINATION BY MR. WALLACE (Continued):**

7 MR. WALLACE: Q: While you used the EIA gas price in
8 the QEM, you did not use the EIA electricity price
9 forecast. Is that correct?

10 MR. O'RILEY: A: That is correct.

11 MR. WALLACE: Q: Okay, and I guess -- I'd like to know
12 why not, because if you had, it seems to me at least
13 there'd be consistency in views of the world. You
14 would have a consistent relationship between gas and
15 electricity views.

16 MR. O'RILEY: A: Yes. The EIA power forecast is kind
17 of a different beast. It's actually a forecast of --
18 for those states in the U.S. that are regulated, it's
19 a forecast of essentially the revenue requirement per
20 unit in those states. And for those states that
21 there's a market or there's expected to be a market,
22 it's a forecast of the market clearing price. They
23 kind of blend the whole thing together, and for their
24 purpose it makes sense. They're trying to understand
25 how much is the electrical production sector taking
26 from the economy in terms of dollars over time. But

1 from our perspective, because we have no right to sell
2 or buy from these states that are regulated at their
3 regulated cost of service rates, it's kind of a
4 meaningless number in the context of this proceeding.
5 So we looked at it as part of our forecast when we
6 reviewed our forecasts last year, and came to the
7 conclusion it just wasn't even a price forecast like
8 you would normally expect, and disregarded it.

9 I guess the other sort of technical thing
10 is they don't provide a lot of granularity on the
11 location and the shape through the months and the
12 heavy load to light load, and those are the kind of
13 things we need to make decisions, given the
14 flexibility of the system and the type of decisions
15 we're making. So we didn't find it that useful.

16 MR. WALLACE: Q: Okay. Now, are you suggesting the EIA
17 forecast is entirely regulated or is it a mix -- are
18 you saying a mix of regulated and market.

19 **Proceeding Time 3:50 p.m. T20A**

20 MR. O'RILEY: A: It's a mix, but they don't tell you
21 any -- give you any insights into how many states are
22 regulated or which ones. How many states are deemed
23 to be regulated and which is which, so unfortunately
24 there's not a lot of information there to help provide
25 any insight into the forecast.

26 MR. WALLACE: Q: Did you look at the implicit market

1 heat rate in the EIA forecast at all?

2 MR. O'RILEY: A: Well, further to my comments, it's not
3 really a market price, it's a mix of regulated cost of
4 service prices based on historical investments in some
5 states and a mix of market prices in other states. So
6 I don't think you can calculate a market heat rate.

7 MR. WALLACE: Q: Okay. And that's because of your
8 qualification on the price. If the price -- because
9 you say it's not a market price.

10 MR. O'RILEY: A: Yes, so by definition you can't
11 calculate a market heat rate.

12 MR. WALLACE: Q: Okay. You could calculate an implicit
13 heat rate comparison between their gas price and their
14 electricity price?

15 MR. O'RILEY: A: Well, I'm not sure what we would call
16 that.

17 MR. WALLACE: Q: Well, it might not be a market heat
18 rate but it's an EIA heat rate.

19 MR. O'RILEY: A: Yeah, you can certainly divide those
20 two numbers. I'm not sure what value there would be
21 in that information.

22 MR. WALLACE: Q: Okay, and you are aware that Mr.
23 Fulton -- and Mr. Chairman, by the way, I gather I've
24 been referring to him as Mr. Sheldon. My apologies.
25 I hope the record can be corrected so that there's no
26 confusion on it.

1 THE CHAIRPERSON: Well, the record might be clearer if
2 you referred to him as Mr. Sheldon.

3 MR. WALLACE: It may be, you're right. Mr. Sheldon
4 Fulton. Thank you.

5 MR. WALLACE: Q: Okay, I think I'll move on from that
6 then. I have your objection to it, clearly. Now,
7 with respect to you talked earlier about partial and
8 full recovery and when you average the prices for the
9 base case, am I right on that?

10 MR. O'RILEY: A: That is not correct.

11 MR. WALLACE: Q: Okay, that's the mistake I have at
12 first.

13 MR. O'RILEY: A: Yeah, we take the individual
14 scenarios, put them in the model or outside of this
15 process, whatever decision we are doing, we calculate
16 the return or the net present value, what have you,
17 for individual price scenarios and look at them, and
18 look at them separately from one another.

19 MR. WALLACE: Q: In any event, I take it from -- you've
20 mentioned that you use Henwood out to 2012 and then
21 you uses the CCGT, and I call it hypothetical, because
22 I don't think it's an actual plant. It is based on a
23 GE F turbine but it is a hypothetical, isn't it?

24 MR. O'RILEY: A: Well, it's an actual physical unit
25 that's been installed in a number of locations
26 throughout Alberta and the northwest.

1 MR. WALLACE: Q: Yes, but you aren't using a particular
2 one, you're using a hypothetical one.

3 MR. O'RILEY: A: Well, we are referring to the cost
4 structure of this plant which is well represented in
5 the region.

6 MR. WALLACE: Q: Okay. And in any event, from 2013
7 out, your electricity price then is basically a
8 conversion of the gas price run through that CCGT.

9 MR. O'RILEY: A: For the 100 percent recovery case,
10 that is correct.

11 MR. WALLACE: Q: Okay. And even for your 25 percent
12 case, you're always going to have a case where it is
13 run through this CCGT.

14 MR. O'RILEY: A: Yes.

15 MR. WALLACE: Q: And in every case you are going to be
16 recovering your variable cost plus at least 25 percent
17 of your fixed cost.

18 MR. O'RILEY: A: That's not necessarily the case,
19 because -- and the reason you know that is we get this
20 different dispatch factors in the two scenarios. So
21 because of the shape that's applied through the year,
22 which comes from Henwood, you get quite a different
23 monthly and on and off peak heat rates in the 100
24 percent case and the 25 percent case.

25 MR. WALLACE: Q: Well, if you get the 25 percent case,
26 wouldn't you still -- you are still recovering part of

1 your costs at all times? Part of your fixed cost? I
2 mean that's what you are -- that's how you are
3 generating your electricity price. It's basically
4 variable cost plus 25 percent of fixed.

5 MR. O'RILEY: A: Yeah. But then we are applying the
6 shape to it, so there is some differences.

7 MR. WALLACE: Q: So the shape might on occasion take it
8 down -- on average -- so it's, on average it's going
9 to be your variable cost plus 25 percent of your
10 fixed, but shape occasionally will bring it down
11 below?

12 MR. O'RILEY: A: Well, more than occasionally, because
13 we do get different dispatch rates.

14 MR. WALLACE: Q: Okay. Now, did you compare how your
15 CCGT for 2013 out compared in terms of market shape
16 and in terms of heat rates to Henwood or past or
17 future markets?

18 | Proceeding Time 3:55 p.m. T21A

19 R. O'RILEY: A: Well, we don't get a shape out of our
20 CCGT calculation. It just gives you one number for
21 the year, and we take the shape from Henwood from 2012
22 and apply that to our price curve from 2013 and
23 beyond.

24 MR. WALLACE: Q: Okay. Well, let's take a look at some
25 of this in specifics. I provided to your counsel part
26 of the OEM model that was provided to the JIESC on

1 Friday evening. And Mr. Chairman, this was the model
2 that we had requested in IR 2.9, which is the QEM
3 model populated with the EPA numbers as I understand
4 it. I left some sitting, I'm sorry, on your desk, and
5 I've also --

6 MR. O'RILEY: A: Oh, there's a whole bunch of them
7 here. Sorry.

8 MR. WALLACE: Now, Mr. Chairman, I'm not quite sure and I
9 have to clarify with my friend Mr. Sanderson, what the
10 status of that model is as an exhibit at this time.

11 MR. SANDERSON: The model, if we're talking about the
12 same thing has been release to those intervenors only
13 who were prepared to sign the confidentiality
14 agreement, given it's proprietary nature. So the
15 model is not -- and the Commission Staff certainly
16 have it. I don't think that -- the model -- Mr.
17 Soulsby may be able to help.

18 MR. SOULSBY: A: Well, the particular version of the
19 model that was released in accordance with IR 2.9,
20 JIESC IR 2.9, was a model that was populated with the
21 Duke Point Power plant data. There's certain
22 information not redacted, and this is quite important,
23 it's not redacted but it was purposely and grossly
24 false, so --

25 MR. WALLACE: Q: With our agreement, we --

26 MR. SOULSBY: Right, correct, but I just wanted to make

1 sure that everybody understands those gross changes
2 carry right the way through the model. So if you're
3 going to any output, we'll have to kind of caveat it
4 by saying it's --

5 MR. WALLACE: Q: Yes, I think we'll be okay on that.

6 I think, Mr. Chairman, I guess we're still
7 a bit concerned on the confidentiality here. I would
8 like to that model that was sent to us to definitely
9 be available to you as an exhibit. And I think these
10 sheets -- and I'm hoping I haven't violated anything
11 here -- I've sent them to Mr. Sanderson -- they are
12 very --

13 MR. SANDERSON: No.

14 MR. WALLACE: Q: They pinpoint excerpts out of it.

15 MR. SANDERSON: I don't think we have a concern with the
16 sheets.

17 MR. WALLACE: Okay.

18 MR. SANDERSON: Nor do I think we have a concern with
19 Commission Staff and the Commission having the model.
20 The only constraint, if you want, on the model was not
21 so much confidentiality as it was the propriety nature
22 of the model and not making it available to all and
23 sundry, and in particular Hydro's competitors or
24 Duke's competitors or whoever.

25 I don't know whether, Mr. Wallace, you can
26 conduct your cross-examination without making the

1 model available generally, but as I said --

2 MR. WALLACE: I think I can. I think these four pages
3 extracted from it will work for that purpose. On the
4 other hand, I think the context of the model and that
5 is -- should be in as part of the record.

6 So I guess I would propose that Exhibit
7 C19-17 be reserved for both the Excel spreadsheets and
8 the hard copy four pages that I have provided.

9 MR. WALLACE: Q: And Mr. Soulsby, you have the
10 spreadsheets?

11 **Proceeding Time 4:00 p.m. T22A**

12 MR. SOULSBY: A: I have four copies of four
13 spreadsheets.

14 MR. WALLACE: Q: Yes. And can you recognize these as
15 being extracts from the model that you provided?

16 MR. SOULSBY: A: Ah, yes, I --

17 MR. WALLACE: Q: Subject to check.

18 MR. SOULSBY: A: Subject to check.

19 MR. WALLACE: Q: Thank you. And first I would like to
20 take you to the forecast electricity prices, and
21 that's at lines 136 through 166. And you'll see there
22 that in column L and column M, years 2012 and 2013,
23 and that's the transition from Henwood to the CCGT
24 forecast.

25 MR. SOULSBY: A: That would be the transition year,
26 yes.

1 MR. WALLACE: Q: Okay. And the price jumps just about
2 \$12 there in January, and similar sorts of numbers
3 throughout both high load hours and low load hour
4 prices, and that's probably close to 15 to 20 percent.
5 Did that give you any concern about your model?

6 MR. SOULSBY: A: And I'm assuming that this is the full
7 recovery case, not the 25 percent recovery case?

8 MR. WALLACE: Q: It's the full recovery case.

9 MR. SOULSBY: A: Okay. We did consider -- and Mr.
10 O'Riley can probably speak more to this, but we did
11 consider the transition issues in the price
12 forecasting work that we generally do, outside the QEM
13 model, but that is something that has been of concern
14 to us, and I think as Mr. O'Riley described earlier,
15 we actually incorporated additional variables to
16 ensure that the transition wasn't onerous, in the
17 sense that the market prices for electricity in the
18 Henwood years, 2013, were taken if there was an
19 inappropriate jump in transitioning and I'll leave it
20 to Mr. O'Riley.

21 MR. WALLACE: Q: Well, doesn't that tell you that the
22 CCGT model might be excessive in the price forecast?

23 MR. O'RILEY: A: Well, I'd just make a couple of
24 comments. One is, it's a 20-year model, so we're --
25 can't look at any one year and say, "Oh, I don't like
26 that particular year, and I like this particular year

1 but I don't like that one." So we would expect over
2 time that there would be times when the market prices
3 are higher, and times when the market prices are lower
4 than our forecast.

5 MR. WALLACE: Q: Yeah. But when you change models, all
6 of a sudden your base price jumped 20 percent.

7 MR. O'RILEY: A: Yeah.

8 MR. WALLACE: Q: Didn't that give you a concern?

9 MR. O'RILEY: A: Well, the transition is always a
10 concern. And if you recall back to VIGP, and we talk
11 about our market prices in that context, and in some
12 IRs there, and we had lots of transitions. It's
13 something we always wrestle with. So we do -- the
14 transition and how we make it, and what year we make
15 the transition is something we review regularly. I
16 think if you look at the 25 percent recovery case, you
17 don't get the same kind of transition. Like, you get
18 a much smoother transition. And keep in mind, those
19 are weighted equally in our process. We're not saying
20 -- we're not putting a higher weight on the 100
21 percent recovery in that case.

22 MR. WALLACE: Q: No, but you may get a smoother case in
23 the other, but you also -- you have in one case then a
24 smooth transition case, and in the other a substantial
25 bump up of almost 20 percent.

26 MR. O'RILEY: A: I would also say that this is -- this

1 process -- that the results of this price forecasting
2 process are used in lots of other applications in B.C.
3 Hydro. So it's not something, you know, we cooked up
4 for this QEM model, and I think it gives it some
5 credibility. We're making decisions around capital
6 investments and we're using them in the IEP, and any
7 number of applications. So, it --

8 MR. WALLACE: Q: Well, doesn't it tell you to have
9 another look at either Henwood or your CCGT?

10 MR. O'RILEY: A: Well, I think over time we think the
11 results are -- give you a reasonable result. And if
12 you look at different scenarios, you see the impact.

13 MR. WALLACE: Q: Okay, I'd like to go to dispatch,
14 then, which is the next sheet. Line 228 to 258. And
15 I thought we had agreed that basically you would get
16 -- opportunistically at least, you would only dispatch
17 when price exceeded variable cost, with some
18 qualification around that. Doesn't appear to be
19 what's happening here. This is the dispatch level,
20 and they seem to be three fairly arbitrary levels of
21 either 3 percent, 30 percent, 60 percent or -- I guess
22 four levels -- 100 percent. Would you agree with
23 that?

24 MR. SOULSBY: A: I wouldn't agree that they're
25 arbitrary, no.

26 MR. WALLACE: Q: Well, they're not -- they're clearly

1 not based on a comparison of heat rates or variable
2 costs to market, they are generalizations or
3 something. What are they?

4 MR. SOULSBY: A: I mean, the way the QEM model works
5 is, it takes the type of plant which it's evaluating,
6 in this case a peaking dispatchable facility, and
7 looks at the number of starts that are available to be
8 used over the year, and it also looks at, as you
9 alluded to, the temperature dependency of the units
10 both in terms of capacity, and more importantly for
11 dispatch, in terms of heat rate, and makes a
12 calculation of the dispatch of the unit by month,
13 heavy load, light load hour, over the course of the
14 year depending on those variables. So there's nothing
15 arbitrary about it.

16 **Proceeding Time 4:05 p.m. T23A**

17 MR. WALLACE: Q: Well then, what you do is lump ranges
18 into a category rather than try and fine tune them, I
19 take it.

20 MR. SOULSBY: A: Well, it's not an hourly dispatch
21 model. It has 24 dispatches, heavy load, light load
22 by month. So it's either turned on or off in any
23 given month.

24 MR. WALLACE: Q: Moving along then to lines 363 to 394,
25 you show your anticipated dispatch by month. This is
26 on the QEM full recovery model. And do agree with me

1 that that is the anticipated megawatt dispatch under
2 the EPA?

3 MR. SOULSBY: A: For the full recovery case.

4 MR. WALLACE: Q: Okay, and if I look at first under the
5 high load hours in 2007 December, I see 3,107 hours.
6 In 2008 for January I see 3,223 hours. Those are what
7 you -- and similarly in January and February, figures
8 in the same range. Those are what you anticipate
9 dispatching at that time under this model?

10 MR. SOULSBY: A: On an economic -- or as you said
11 earlier, an opportunistic dispatch methodology, that's
12 correct.

13 MR. WALLACE: Q: Okay. And that's approximately one
14 day per month at the high load hours and one day per
15 month in the same timeframe for the low load hours?

16 MR. SOULSBY: A: No. Subject to check.

17 MR. WALLACE: Q: Okay. And intuitively that just
18 doesn't make sense to me in that that would be when
19 you would expect high prices, and then you have much
20 higher dispatch rates during what might even be the
21 fish flush period. Can you explain that?

22 MR. SOULSBY: A: I'm looking at the capacity adjustment
23 factors that are shown here, and I would like to check
24 that the months 1 through 12 are in fact lining up
25 with the months January through December, as you're
26 suggesting.

1 MR. WALLACE: Q: Well, that would be helpful to me. I
2 just assumed that 1 would be January and 12 would be
3 December. I think they are.

4 MS. HEMMINGSEN: A: I think the other point to make too
5 is you're focusing on the early years. If you look in
6 the later years, the dispatch volumes switch and you
7 see much higher dispatch in the winter period and much
8 less dispatch in the spring period.

9 MR. WALLACE: Q: And I grant that. The reason I looked
10 at the early years, because that is the critical years
11 for capacity from this plant. And so again I was
12 surprised.

13 Mr. Soulsby, you mentioned that this
14 dispatch is for opportunistic purposes. But in fact,
15 isn't it dispatch for all purposes under the model?
16 This is what you assume will be dispatched.

17 MR. SOULSBY: A: The model is an economic dispatch
18 model, so it's modelling the -- it's not modelling the
19 dispatch for reliability as we've covered I think
20 earlier today. That's difficult to predict.

21 MR. WALLACE: Q: You may not dispatch for reliability,
22 you were telling me earlier. But this is what you
23 expect to dispatch under the model.

24 MR. SOULSBY: A: That's correct.

25 **Proceeding Time 4:10 p.m. T24A**

26 MR. WALLACE: Q: Okay. And if we could then move to

1 lines 427 to 457, this is the energy margin by year
2 from 2007 to 2018?

3 MR. SOULSBY: A: That's correct.

4 MR. WALLACE: Q: And what interested me was that in
5 2008, for example, particularly during -- well, during
6 low load hours, you're regularly losing 500,000 or in
7 excess of 500,000 on at least three occasions while
8 dispatching. And I'm wondering what's going on there.
9 That doesn't seem very opportunistic.

10 MR. SOULSBY: A: I'd have to check the details for you,
11 but I suspect that it's related to limitations on the
12 number of starts and stops that are available.

13 MR. ECKERT: A: I think the way that the dispatch model
14 works is for a plant that is a non-peaking
15 dispatchable plant, because this was a simplified
16 model, it had monthly granularity, we didn't assume
17 that you could turn the plant off every night and on
18 every day because we didn't believe that the contract
19 would allow us to do that, and in fact this contract
20 does not allow us to do that.

21 So what we did is the logic in these cells;
22 we'll dispatch it in the light load hours if the
23 common -- if the aggregate of the heavy load and the
24 light load hour is positive, and it does take into
25 account turning down in the light load hours. So
26 that's the logic in the dispatch model.

1 MR. WALLACE: Q: Okay. Now, are you certain about
2 that, or were you saying you think?

3 MR. ECKERT: A: I'm virtually certain of that. Subject
4 to check I'm --

5 MR. WALLACE: Q: Okay, I'll take that as your evidence
6 unless I'm informed otherwise. Thank you.

7 MR. SOULSBY: A: It's been a while since I've touched
8 the QEM.

9 MR. WALLACE: Q: Okay now, when we looked at the
10 margin, we calculated that in the -- and this was done
11 rather rapidly over the weekend, but that the margin
12 in the first five years, that is under the Henwood
13 assumptions, was one-third the margin it was in the
14 next five years under the CCG assumptions. Can you
15 confirm that's in fact the case?

16 MR. SOULSBY: A: I'm sorry, if you could just repeat
17 the question, I was just looking for the reference in
18 the QEM manual actually for you to confirm what Mr.
19 Eckert has just said.

20 MR. WALLACE: Q: Do you want to finish that one first?

21 MR. SOULSBY: A: Well, it might be useful just to
22 clarify the record. In the QEM model the actual
23 dispatch of the plants is outlined, I believe it's
24 section 4.2, and then again on page 14 of section
25 4.33, that collation of the energy margin, under
26 section C, dispatchable amount, peaking capacity

1 plants. You'll find the description of what Mr.
2 Eckert was just elaborating on.

3 MR. WALLACE: Q: Okay, I'm just not sure I have a copy
4 of that manual. Was that part of what was released in
5 the confidential information?

6 MR. SOULSBY: A: No, this was part of the filing. I'm
7 sorry, this is the QEM, not the manual. This is the
8 QEM document.

9 MR. SANDERSON: I think this was provided to the JIESC
10 pursuant to the confidentiality agreement along with
11 the model.

12 MR. SOULSBY: A: It's Appendix H to the file.

13 MR. WALLACE: Q: Okay, thank you, I have that reference
14 then.

15 Now looking at energy margins, because
16 obviously energy margins are very important to the
17 comparative analysis of the projects, or the
18 alternatives. Would you agree with me that in the
19 first five years, the net margin is one-third what it
20 is in the next five years starting in 2012 -- or I'm
21 sorry, in the next five years, under the CCGT model?

22 MR. SOULSBY: A: Subject to check, I take those
23 numbers.

24 MR. WALLACE: Q: Wouldn't that concern you if one model
25 turns out over a five-year period, three times the
26 profit the other model does?

1 MR. SOULSBY: A: Well, if that was the only variable in
2 play, I might agree with that. But that's not the
3 only variable in play. In fact, there's a huge
4 difference in the dispatch arising from the change in
5 the gas price forecast over that period.

6 MS. HEMMINGSEN: A: Right.

7 MR. SOULSBY: A: So I don't agree.

8 MS. HEMMINGSEN: A: There's really two factors: the
9 gas price forecast changes; and also, as we discussed
10 earlier, the supply/demand balance changes about 2011
11 and it starts being more towards a capacity demand
12 balance, and prices start escalating.

13 MR. WALLACE: Q: So you're assuming a change in the
14 market.

15 MS. HEMMINGSEN: A: We're assuming that the current low
16 prices that are driven by an overhang of supply
17 dissipate, that overhang dissipates, and prices
18 increase consistent with what we've seen in the past.

19 MR. WALLACE: Q: And that is the reason you move to the
20 CCGT?

21 MS. HEMMINGSEN: A: That's one of the reasons why we're
22 comfortable reflecting that as one of the scenarios
23 and weighting it by 50 percent. As Mr. O'Riley
24 outlined, there's an alternative scenario where you
25 don't see that kind of uplift in 2013, and it assumes
26 the current situation continues. And we've weighted

1 each of those 50 percent.

2 MR. WALLACE: Q: Okay, but I guess what I'm saying is
3 -- okay, I'll leave it at that then. Thank you.

4 And we calculate that you actually make
5 over 90 percent of your net margin in the last 20
6 years of your contract. Can you confirm that?

7 **Proceeding Time 4:15 p.m. T25A**

8 MR. SOULSBY: A: Subject to check.

9 MR. WALLACE: Q: And again, does that concern you?

10 MR. SOULSBY: A: If you're looking from the same
11 numbers --

12 MR. WALLACE: Q: Yes.

13 MR. SANDERSON: Again, what you'd have as check is the
14 100 percent case, which is the one in this exhibit.

15 MR. WALLACE: Q: That's correct. Thank you.

16 I'd like to now have you turn to the other
17 document that I provided you, a coloured graph. And
18 Mr. Chairman, I have also circulated that, it's
19 entitled "QEM model heat rates" and if that could be
20 marked Exhibit Q -- or, C, I'm sorry, C-19-18.

21 THE CHAIRMAN: We have it, thank you.

22 THE HEARING OFFICER: C-19-18.

23 (GRAPH ENTITLED "QEM MODEL HEAT RATES", MARKED AS
24 EXHIBIT C19-18)

25 (FOUR PAGES OF SPREADSHEET, MARKED AS EXHIBIT C19-17)

26 MR. WALLACE: Q: And this was provided to your counsel

1 last night. Have you had a chance to examine it?

2 MR. O'RILEY: A: Briefly, yes.

3 MR. WALLACE: Q: Okay. And this -- the purpose of this
4 model -- let me -- or this graph, let me explain it to
5 you, is we have modeled implicit heat rates from a
6 variety of different sources, the most critical ones
7 here being, I guess, the Henwood and the 2000 -- or
8 the CCGT case. So what you have is the implicit heat
9 rate of the 2007 high load, full, and the -- both peak
10 and off-peak. And then you have the 2015 being the
11 CCGT peak and off-peak. And Mr. O'Riley, you'll
12 understand that and how that's set out there?

13 MR. O'RILEY: A: Yes, I do.

14 MR. WALLACE: Q: And then just for completeness, there
15 is the 2007 high load and low load hour market heat
16 rates, as derived by Mr. Sheldon Fulton. And you
17 recognize those there.

18 MR. O'RILEY: A: Yes.

19 MR. WALLACE: Q: Okay. And then there's the unit heat
20 rate of 7.3 for the EPA, simply to show where it fits
21 within the curves. And opportunistically, you would
22 only produce -- I've got to make sure I get this the
23 right way around; when the market heat rate is in
24 excess of the plant heat rate?

25 MR. O'RILEY: A: I mean, subject to the discussion we
26 had previously about our energy value, which is --

1 MR. WALLACE: Q: Yeah.

2 MR. O'RILEY: A: -- subject to that, yes, I agree. And
3 adjusting for all the variable costs and benefits,
4 both ways.

5 MR. WALLACE: Q: Now, what interests me is particularly
6 that if you look at the red line, the high load hour
7 rate first, under Henwood you see a heat rate oh,
8 somewhere in the 9 to 10 ratio -- and under -- for the
9 same, under the CCGT, the 2015 number, you see a very
10 substantially higher heat rate, up and over 12. And
11 would you agree that the implicit heat rate in the
12 high load forecast full is over 12?

13 MR. O'RILEY: A: Yes.

14 MR. WALLACE: Q: And is that realistic? I mean, that
15 would have Burrard operating.

16 MR. O'RILEY: A: Well, I would point you back to 1998,
17 and the average heat rate was 13.6.

18 MR. WALLACE: Q: Yeah.

19 MR. O'RILEY: A: And 1998 was not a crisis year, it was
20 a regular year, a little dry, gas prices that year
21 were \$1.70. So I think the idea that heat rates are
22 always 8 is a notion based on looking at the last
23 three years, and I think you need -- if you're going
24 to make a decision for 25 years, you need to look more
25 broadly than the last three years.

26 MR. WALLACE: Q: But your heat rates under the CCGT

1 move way above what they have been recently.

2 **Proceeding Time 4:20 p.m. T26A**

3 MR. O'RILEY: A: Way above what they were the last
4 three years. And I'll just tell you, they were --
5 they averaged 8.1 the last three years.

6 MS. HEMMINGSEN: A: And furthermore, you've shown the
7 full heat rate return that's only weighted 50 percent
8 in the results --

9 MR. O'RILEY: A: Yeah.

10 MS. HEMMINGSEN: A: -- and you haven't shown the 25
11 percent return, which has a heat rate much closer to
12 82 or nine thousand.

13 MR. O'RILEY: A: Closer to nines, yeah.

14 MR. WALLACE: Q: Yeah, okay. I understand that.

15 MR. O'RILEY: A: So it's -- so.

16 MR. WALLACE: Q: Unfortunately, I didn't -- because of
17 the process, I guess it went through, that they get
18 blended afterwards. I didn't have a blended heat rate
19 to work with.

20 MS. HEMMINGSEN: A: Well, they don't get blended after.
21 Each scenario is evaluated individually.

22 MR. WALLACE: Q: And then averaged.

23 MS. HEMMINGSEN: A: When a unit is dispatched -- no,
24 the NPV is averaged.

25 MR. WALLACE: Q: Okay.

26 MS. HEMMINGSEN: A: With those scenarios. Quite a

1 different methodology than averaging the heat rates.

2 MR. WALLACE: Q: Okay. And what did you say the heat
3 rate for the low -- or the partial recovery is?

4 MR. O'RILEY: A: Well, I don't have it for this
5 particular year. But it's much closer to the market
6 prices than the full recovery heat rate.

7 MR. WALLACE: Q: Okay. Now, the other thing that
8 changed between 2007 and 2015 is that in 2007,
9 particularly in low load hours, there is -- well, in
10 both, there seems to be more shaping than there is in
11 2015. Do you -- for seasons. Do you have an
12 explanation for that?

13 MR. O'RILEY: A: Well, this is -- it's easier to --
14 it's a little easier to envision market prices through
15 the year than market prices and heat rates. But
16 generally, we're moving to a point -- and we've seen
17 this in the market in the last few years, where the
18 cheap prices in April, May and June are no longer
19 there. They're absorbed by load growth and changes in
20 the supply/demand balance. Some of the highest prices
21 we've experienced in the last few years have been in
22 the spring. So I think that's probably one of the
23 factors that's causing a flattening of the spring to
24 summer prices.

25 You're still seeing a similar shape in
26 light load, between the Henwood in 2007 and the CCGT

1 in 2015.

2 MR. WALLACE: Q: Would you agree with me that if you
3 took Henwood instead of terminating your use of it in
4 2012, and carried it on, adjusted for inflation out to
5 the end of the initial period, that you would have a
6 very different energy margin, and different heat rate
7 ratio?

8 MR. SOULSBY: A: No.

9 MR. O'RILEY: A: Actually, we wouldn't. And we've done
10 those -- we've done it various times when we reviewed
11 the decision to go from using Henwood for '07 to '12
12 and then going to the CCGT, we've gone back and looked
13 at what Henwood produces over an extended period of
14 time, and you get a very similar result. So that's
15 why we made the decision to go to the CCGT as a proxy.

16 MR. WALLACE: Q: Well, I'm told if you took Henwood's
17 shape, you took Henwood's gas/electricity price
18 relationship, and you took Henwood's relationship
19 between the high load hours and the low load hours and
20 carried it forward for the balance of the term, that
21 you would end up with a load factor in the range of 21
22 percent. Do you disagree with that?

23 MR. O'RILEY: A: No, I totally disagree with that.

24 MR. WALLACE: Q: Can you provide a calculation taking
25 Henwood forward, then, using, as I said, its shape,
26 its gas/electricity price relationship --

1 MR. O'RILEY: A: I don't think any -- none of -- I
2 mean, Mr. Fulton didn't do that calculation, I'm not
3 sure how you would come to that conclusion.

4 MR. WALLACE: Q: Well, that's what I'm advised.

5 MR. O'RILEY: A: Okay.

6 MR. WALLACE: Q: Can you do that calculation and show
7 me what it would be?

8 MR. O'RILEY: A: Run Henwood. That's quite a big
9 undertaking.

10 MS. HEMMINGSEN: A: That's --

11 MR. SOULSBY: A: That's a significant amount of work to
12 do that, and running Henwood -- each year of Henwood
13 runs about four hours to do. So we'd have to --

14 MR. WALLACE: Q: So I guess what I'm suggesting is
15 taking your output from Henwood with respect to shape,
16 with respect to gas/electricity price relationship,
17 and with respect to the relationship between high and
18 low load hours, and run it forward. I'm not asking
19 that you go and calculate all the resources in the
20 Pacific Northwest, or whatever that is.

21 MR. O'RILEY: A: Well, that's how you do -- that's how
22 you run Henwood. That's what Henwood is. It --

23 MR. SANDERSON: If I understand what Mr. Wallace is
24 asking, I think the confusion perhaps is around this,
25 that what Mr. Wallace is really saying is, take 2007
26 and assume nothing changes for 25 years, and then see

1 not in the QEM. They come in later?

2 MR. SIMPSON: A: Yes, that's correct. I believe they
3 come in at the portfolio level.

4 MR. SOULSBY: A: Just for clarification, it's not in
5 the tender sheet. They are in the QEM but they're in
6 the portfolio side of the QEM.

7 MR. WALLACE: Q: Okay, and when we asked for a QEM
8 model filled in for EPA, I take it on that document or
9 the spreadsheets you gave us, that we didn't get the
10 Terasen costs in that part of it?

11 MR. SOULSBY: A: If you were only provided with the
12 tender sheet -- and I'm not sure exactly what you were
13 provided with; if you were only provided with the
14 tender sheet, then you don't have the Terasen costs.

15 MR. WALLACE: Q: I'm not quite sure what we were
16 provided. It was a multi-page spreadsheet, but --

17 MR. SANDERSON: Well, we'll check and make sure that we
18 can clarify what you got.

19 MR. WALLACE: Q: Thank you, because if it is there we
20 would like to know that and we'd like to see it.

21 Do you treat the Terasen -- I think I asked
22 this earlier, but you treat the Terasen costs as fixed
23 costs?

24 MR. SIMPSON: A: I think there are two elements to it.
25 Most of the costs are fixed costs reflecting the
26 demand tolls that would be paid to provide firm

1 service. But we also assume within the modelling
2 methodology that there is a compressor fuel
3 requirement for Terasen.

4 MR. WALLACE: Q: Okay. And so for modelling purposes
5 on dispatch, they would be -- the Terasen costs, that
6 would be a fixed cost not a variable cost for --

7 MR. SIMPSON: A: Well, the compressor fuel component
8 would be a variable cost.

9 MR. WALLACE: Q: Okay, thank you. And where do those
10 negotiations with Terasen stand today? I know there's
11 been reference earlier on that it looked like both
12 sides were taking positions. But has any agreement
13 been reached?

14 MR. SIMPSON: A: No, I don't believe an agreement's
15 been reached.

16 MR. WALLACE: Q: Okay, and there's a B.C. Hydro letter
17 setting out its position dated December 13th. Is that
18 the last word on B.C. Hydro's position?

19 MR. SIMPSON: A: As far as I know it is, yes.

20 MR. WALLACE: Q: Okay. And have you had any response
21 from Terasen with respect to it yet?

22 MR. SIMPSON: A: I believe there's been some meetings
23 of executives of both Terasen and B.C. Hydro, but I'm
24 not aware of any progress towards a long-term
25 agreement.

26 **Proceeding Time 4:29 p.m. T28A**

1 MR. WALLACE: Q: Okay. In the letter you take the
2 position LNG costs should not be assigned to B.C.
3 Hydro?

4 MR. SIMPSON: A: We take the position that the LNG
5 costs should be allocated to the core market.

6 MR. WALLACE: Q: Okay. And how are they treated for
7 the respect -- for this application?

8 MR. SIMPSON: A: I believe in this application, and the
9 estimates that Terasen provided to us, they allocated
10 the LNG costs on a system-wide basis.

11 MR. WALLACE: Q: Okay. And so that would be included,
12 allocating them then to B.C. Hydro.

13 MR. SIMPSON: A: Yes, it would include some allocation.
14 But it would include not an allocation just of the
15 cost, but also of the mitigating revenues that they've
16 identified.

17 MR. WALLACE: Q: Okay. You also take the position that
18 you should be able to terminate or reduce the volumes
19 under the contract after ten years with no fee, and
20 before ten years with 50 percent undepreciated rate
21 base fee?

22 MR. SIMPSON: A: I'm going by memory, I'd have to check
23 that, but I think that sounds about right.

24 MR. WALLACE: Q: Okay. And why are you looking to be
25 able to terminate that agreement, on what would be
26 considered relatively early basis, given your long-

1 term commitment to the EPA?

2 MR. SIMPSON: A: Well, I guess part of the
3 consideration there, and I think it's identified in
4 some of the IR responses, is the potential for other
5 options to come along, such as direct delivery LNG,
6 which may prove to be more economic than using the
7 Terasen system on a long-term basis.

8 MR. WALLACE: Q: Okay. And have you had any response
9 to whether you're going to be able to succeed in
10 getting that term in place?

11 MR. SIMPSON: A: Well, I think if you look at Terasen's
12 term sheet that they filed, it has a different
13 termination provision.

14 MR. WALLACE: Q: Okay. With Mr. Gunther in his
15 evidence has identified two sources of increased risk
16 that might come up down the road, and I just want to
17 discuss those with you. One is the financing of
18 existing no-cost government loans. As I understand
19 it, Terasen has \$75 million in zero-cost loans from
20 the government at this time. Is that your
21 understanding?

22 MR. SIMPSON: A: Yes, I believe that's correct.

23 MR. WALLACE: Q: And they're going to have to be
24 refinanced, and the costs paid by customers down the
25 road.

26 MR. SIMPSON: A: I'm not sure that there's -- it's

1 necessarily a given that those loans will be repaid.

2 MR. WALLACE: Q: Okay. Do you know if they're built in
3 to your Terasen rate? The restructuring of those
4 loans?

5 MR. SIMPSON: A: Sorry, could you repeat the question?

6 MR. WALLACE: Q: Do you know if -- how the
7 restructuring of those loans, whether they -- how
8 they've been handled, in your proposed rate for the
9 purposes of the EPA?

10 **Proceeding Time 4:32 p.m. T29A**

11 MR. SIMPSON: A: It's my understanding that the
12 modeling that Terasen did to come up with the toll
13 estimates that were used for the CFT evaluation is
14 essentially the same toll modeling that they did for
15 the LNG CPCN application, and within that, I believe
16 they were assuming that the loans would become
17 repayable in two thousand -- start to become repayable
18 in 2012.

19 MR. WALLACE: Q: Okay. Now, Terasen customers also get
20 -- or Terasen gets royalty credits of \$37.1 million.

21 MR. SIMPSON: A: Well, I'm not sure I can confirm that
22 number, but they do get a royalty credit.

23 MR. WALLACE: Q: And it's approximately in that range.

24 MR. SIMPSON: A: Yes, I believe it's of the order of 30
25 to 40 million.

26 MR. WALLACE: Q: Okay, and that will need to be

1 replaced with rates paid by customers.

2 MR. SIMPSON: A: Yeah, my understanding is the current
3 arrangement with the province, where a royalty credit
4 is provided through 2011, will expire and at that time
5 the Terasen core customers will have to pay the full
6 price for natural gas commodity.

7 MR. WALLACE: Q: Okay, is that the assumption that's
8 made here is that that shortfall in revenue or drop
9 off in revenue will be made up by the core customers.

10 MR. SIMPSON: A: That is the -- again, you won't find
11 it in the documentation that's been provided here.
12 But you will, if you look at the information they've
13 provided in the LNG proceeding, which results in
14 essentially the same tolls, at least at the beginning
15 of the process, they did assume that there would be a
16 step change in the commodity cost for natural gas for
17 the core market customers in 2012.

18 MR. WALLACE: Q: Okay, and if -- and you're saying that
19 it would be handled through the commodity cost of gas
20 rather than the general revenue requirement.

21 MR. SIMPSON: A: Yes, that's the way they showed it in
22 the modeling, yes.

23 MR. WALLACE: Q: Okay, and you're aware that basically
24 the core market is priced on a soft cap of competitive
25 fuels on Vancouver Island?

26 MR. SIMPSON: A: Yes, I'm aware of that.

1 MR. WALLACE: Q: And if the soft cap continues to cause
2 a problem is there a risk in your view that that
3 reduced royalty credits would have to be made up from
4 other customer classes as well as the core market?

5 MR. SIMPSON: A: I suppose there is a risk of that,
6 although if you look at, again, the modeling that
7 Terasen provided in the LNG proceeding, they showed
8 that even with that step change in gas commodity in
9 2012 they would be very close to the step -- to the
10 soft cap under their base case assumptions.

11 And I guess the other thing I'd like to
12 point out is this issue is there whether or not the
13 Duke Point project proceeds, that -- the fact that the
14 royalty credit goes away in 2011, if that's in fact
15 what happens, is going to be an issue whether or not
16 Duke Point proceeds. The Duke Point project doesn't
17 make it any worse.

18 MR. WALLACE: Q: Well, what it does though is means
19 that B.C. Hydro, if it's distributed proportionately,
20 might pick up a bigger portion of it.

21 MR. SIMPSON: A: Again, I believe that's a matter that
22 comes under the purview of the Commission, so I'm not
23 going to prejudge how it would be distributed.

24 MR. WALLACE: Q: No, I'm just suggesting to you that
25 there is a difference whether Duke Point proceeds or
26 not, or there may be. We don't know that now.

1 **Proceeding Time 4:35 p.m. T30A**

2 MR. SIMPSON: A: And I can't answer whether it would be
3 different or not.

4 MR. WALLACE: Q: Thank you. And the TGVI toll that you
5 use for the purpose of this application drops after
6 2011?

7 MR. SIMPSON: A: Yes, we've assumed a change -- or
8 Terasen assumed -- they gave us two scenarios. One
9 was where they assumed a revenue-to-cost ratio of 1.25
10 would continue for the full 25-year term of the EPA.
11 They gave us another scenario where the revenue-to-
12 cost ratio would be 1.25 until 2011, and then it would
13 drop to 1.1. And we elected, for the purpose of the
14 CFT evaluation, to select the latter scenario.

15 MR. WALLACE: Q: Okay. Is the former scenario part of
16 the evidence in this record? The prices under that?

17 MR. SIMPSON: A: Is it part of this record?

18 MR. WALLACE: Q: Yes.

19 MR. SIMPSON: A: Yes, I believe it's -- you will find
20 it in Terasen's report, which is attached to the
21 response to BCUC IR 1.23.5.

22 MR. WALLACE: Q: Okay. And would it be fair to say
23 that Terasen has not made any commitment on rates but
24 simply has projected what might be anticipated rates?

25 MR. SIMPSON: A: That's correct. They've done a
26 projection based on the current rate design.

1 MR. WALLACE: Q: Thank you.

2 Mr. Chairman, that completes my questions.

3 THE CHAIRMAN: Thank you. You are excused until tomorrow
4 morning at 8:30.

5 MR. WALLACE: Actually, I have one formality part, if I
6 could just ask about some responses that were
7 provided.

8 THE CHAIRMAN: Please proceed.

9 MR. WALLACE: And it comes out of the supplemental
10 responses. I was provided with some tables as a
11 result of question 2.10.0 -- or JIESC IR 2.10.0, and
12 I'd simply like to have those tables marked as an
13 exhibit. And I don't have additional copies at this
14 point, I only have the --

15 MR. SANDERSON: We'll take care of filing that overnight,
16 if that's acceptable to Mr. Wallace, Mr. Chairman.

17 **Proceeding Time 4:38 p.m. T31A**

18 MR. WALLACE: And the other was -- that it came up
19 earlier, was, and I think Mr. Hemmingsen referred to
20 it, and that was I think what's being referred to as
21 the stress test, where the model is run with the high
22 gas/low electricity forecast reducing the average
23 capacity factor over the initial term of the Duke
24 Point Power Project to about 11 percent. And I think
25 it was mentioned that that may have been provided on a
26 confidential basis, but it's not one I believe we've

1 seen. But if we have, we'd like to have it pointed
2 out to us where it is, or else provided.

3 MR. SANDERSON: Sorry, Mr. Chairman, I guess I'm not
4 quite following. That response is one we're quite
5 prepared to make on the record. That is, the 11
6 percent number and the text that goes with that, we're
7 quite happy to file as an undertaking. But what is it
8 in addition?

9 MR. WALLACE: Well, it states as -- Mr. Chairman, it
10 might be easiest, I think, for the record to be
11 cohesive is if I just read the request and respond,
12 and then I think it'll become clear. The request was:

13 "Provide the net present value of the
14 incremental cash flows, assuming Duke Point
15 does not run to meet either capacity or
16 energy requirements after the 230 kV
17 transmission line is installed in fiscal
18 2009."

19 The response was:

20 "As noted in its IR response, B.C. Hydro did
21 not analyze this scenario as part of the QEM
22 evaluation, the reason being B.C. Hydro does
23 not believe this to be a realistic scenario.
24 As well, B.C. Hydro included a stress test
25 scenario in its cost-effectiveness analysis
26 called the high gas/low electricity

1 forecast, which had the effect of reducing
2 the average capacity factor over the initial
3 term of Duke Point Power Project to about 11
4 percent."

5 And I guess we just want the details of the test
6 scenario.

7 **Proceeding Time 4:40 p.m. T32A**

8 MR. SANDERSON: Well, that can be found in Appendix J of
9 Exhibit B-1 at page 4.

10 MR. WALLACE: Okay. The details, not just the
11 conclusion?

12 MR. SANDERSON: Well, no, Appendix J sets out the result
13 of that analysis in tabular form, comparing the three
14 awards. Sorry, comparing the three scenarios of Tier
15 1, Tier 2 and no award under that assumption. So it
16 gives a net present value of this test that's
17 referenced here in Appendix J at page 4.

18 MR. WALLACE: Okay, and I guess what we are asking for is
19 can we get the QEM spreadsheet for that stress test
20 analysis.

21 MS. HEMMINGSEN: A: But that test was done for the
22 purposes of the cost effectiveness analysis. It was
23 based on dispatching the DPP unit under the QEM
24 methodology.

25 MR. WALLACE: So if we could have that QEM spreadsheet,
26 then that will assist us with Panel 4. Thank you.

1 MR. SANDERSON: We'll take that under advisement over
2 night just to make sure we understand what he asked
3 for, but it sounds like we can respond.

4 **INFORMATION REQUEST**

5 THE CHAIRPERSON: Just at the risk of complicating this,
6 my understanding of what you've just agreed to is that
7 the QEM inputs into the cost-effectiveness model will
8 be made available for the high gas/low electricity
9 price scenario.

10 MS. HEMMINGSEN: A: Yes.

11 THE CHAIRPERSON: Thank you.

12 MR. BOIS: Mr. Chairman, and I just rise because it
13 strikes me in the back of my mind and I'm a little
14 foggy now, but it strikes me in the back of my mind
15 that Appendix J was amended in one of the IRs.

16 THE CHAIRPERSON: GSX CCC 1.25.3 was amended, but I
17 assume that Ms. Hemmingsen is aware of that and she's
18 going to be providing the numbers that correlate to
19 the amended --

20 MS. HEMMINGSEN: A: Yes.

21 MR. BOIS: That's all I wanted to say, thank you.

22 THE CHAIRPERSON: That brings us -- you are excused. Till
23 8:30 tomorrow morning.

24 **(PANEL STOOD DOWN)**

25 **Proceeding Time 4:42 p.m. T33A**

26 THE CHAIRPERSON: That brings us to Mr. Andrews'

1 reconsideration application. As I mentioned in my
2 opening comments this morning, I said at the end of
3 the day we would speak to the issue as to the
4 appropriate procedure to deal with that
5 reconsideration application.

6 The panel's view, subject to any
7 objections, would be that we deal with it in a written
8 process, with the written process calling for
9 submissions from parties on Wednesday at the end of
10 the day, with a reply from Mr. Andrews due at the end
11 of the day on Friday.

12 Are there any objections to that process?

13 Hearing none, that simplifies that. Are
14 there any other matters that we should deal with at
15 this time, Mr. Weisberg?

16 MR. WEISBERG: Not on this, Mr. Chairman, but I have
17 other matters that --

18 THE CHAIRMAN: Yes.

19 MR. WEISBERG: I have four items, each one will be very
20 brief.

21 First of all, as you're aware, Mr.
22 Chairman, we've last week on Friday voluntarily filed
23 Green Island's price information form on a
24 confidential basis. To ensure that the Commission has
25 access to all of the information that B.C. Hydro had
26 available to it, to evaluate Green Island's Gold River

1 power project if it chose to, we're today taking the
2 additional voluntary step of filing the entire balance
3 of Green Island's bid submission in the CFT and we
4 request that that be done on a confidential basis.

5 **Proceeding Time 4:44 p.m. T34A**

6 I have with me, if that's acceptable to the
7 Chair, I have with me copies of a cover letter that we
8 will distribute to all parties. That cover letter, to
9 be clear, will not be confidential. It describes --
10 it identifies the material that we are filing. It
11 also identifies that the basis for us seeking
12 confidential treatment of this material is that
13 there's a proprietary nature to the information, and
14 there are non-disclosure agreements outstanding signed
15 by Green Island with its various suppliers, vendors
16 and partners. And it's on that basis that we request
17 confidential filing.

18 The material filed consists of three
19 binders, the first of which contains what was the
20 contents of Envelope 1 in the bid submission, bidder
21 and project information which includes the tender form
22 that's already been filed last week on a confidential
23 basis. It includes Part 1 bidder and project
24 information, Part 2 supplementary financial
25 information, Part 3 development risk information, and
26 Part 4 fuel supply certainty information. It includes

1 the agreement information form and the tender security
2 material.

3 In addition, Binders 2 and 3 enclose the
4 many appendices to the tender submission. And
5 finally, we're taking the additional step of filing
6 Envelope 2, which contains financial information.
7 That is particularly sensitive, in terms of the
8 confidentiality, of the project proponent, Green
9 Island Energy.

10 You will note, Mr. Chair, that the numbers
11 used in the various model evaluations in the Green
12 Island evidence filed on January 7th are identical to
13 those, of course, both in the price information form
14 already filed, and the material which I will file
15 today. We believe that these materials will
16 substantiate our analysis of the two -- I'm sorry, of
17 the four potential portfolios, and enable you to
18 arrive at the conclusion that they represent 53
19 percent, 48 percent, 68 percent, and 65 percent
20 respectively of the cost of the Duke Point Project.
21 And further, these materials will confirm that Green
22 Island, not B.C. ratepayers, will bear the entire fuel
23 risk for the Gold River Power Project.

24 The only other point on this matter, Mr.
25 Chair, is that if it would assist the Commission, we
26 will accommodate any schedule requests for an *in*

2 Proceeding Time 4:48 p.m. T35A

9 MR. SANDERSON: Mr. Chairman, before those get filed, and
10 I'll wait for Mr. Weisberg to finish his submissions,
11 but I would like to make some comments before the
12 actual filing occurs.

16 MR. WEISBERG: Certainly.

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1 ruling that in the absence of evidence from
2 developers, the potential findings in this hearing
3 would be limited. And it is specifically in response
4 to that comment that we are -- the primary objective
5 of this filing is intended.

6 **Proceeding Time 4:50 p.m. T36A**

7 MR. SANDERSON: Mr. Chairman, I don't think I want to
8 debate this particular point tonight. Mr. Weisberg
9 had the opportunity to file evidence on behalf of his
10 client which he did on January 7th, made certain claims
11 for the benefits of the Green Island project in that
12 evidence. This really amounts to further and more
13 complete support, I suppose, for that. I don't know
14 whether we take any objection because I don't have
15 instructions and my client will know, I'm sure, what's
16 in those three volumes, but I certainly don't. They
17 are not volumes I've ever seen. That gives me some
18 concern at this point of the process in and of itself,
19 but I'm not going to voice that concern as an
20 objection until I've had a chance to talk to my client
21 and just see what the logistics of trying to deal with
22 three volumes are at this point.

23 There is the ongoing issue of one set of
24 documents and bid documents and information being
25 fully public and out there for everybody, that is the
26 Duke Point information, and then others coming in

1 piecemeal, or at least on a confidential basis which
2 is somewhat troubling. I think I'll let Mr. Keough
3 deal with that if he wants to. That's a concern he's
4 raised before. But I guess I also want to reflect on
5 that overnight.

6 So my suggestion would be that -- nothing
7 is happening with respect to that information tomorrow
8 in any event -- that I'll either advise the Commission
9 in the morning that we take no objection, in which
10 case I guess it can be filed as an exhibit. If that's
11 not the case then maybe after hours tomorrow we can
12 debate the merits of whether it should go in, if I am
13 instructed to take an objection.

14 THE CHAIRPERSON: Mr. Weisberg, I have a point of
15 clarification before Mr. Keough speaks, and that is,
16 when you wish the information to be held
17 confidentially, do you intend by that to exclude the
18 release of it to DPP?

19 MR. WEISBERG: Yes, we do.

20 THE CHAIRPERSON: Mr. Keough.

21 MR. KEOUGH: Mr. Chairman, likewise, I would prefer to
22 defer the actual filing until I can discuss the matter
23 as well with my client. Again it is very troubling
24 that we are seeing materials being filed, whether it's
25 confidential -- on a confidential basis or not, on a
26 piecemeal basis. Obviously people see some advantage

1 to be gained by filing things periodically or just
2 extracts and when they see some movement going one way
3 or another they say, "Let's file something else. Why
4 don't we just file a little bit more information and
5 see if we can take advantage of something." It's
6 just troubling from a fundamental point of view to see
7 this type of process unfold before the Commission and
8 on a piecemeal basis.

9 **Proceeding Time 4:53 p.m. T37A**

10 That being said, I will reserve comment
11 until I consult, and I would ask that the filing be
12 held till tomorrow, and we can see if there is a
13 problem, and if so, debate it then. Thank you.

14 THE CHAIRMAN: Thank you. We are adjourned until 8:20
15 tomorrow morning, and then I'll hear from --

16 MR. WEISBERG: Mr. Chairman, I've got other items than
17 this.

18 THE CHAIRMAN: Proceed, please.

19 MR. WEISBERG: They're very quick. The Green Island
20 panel is scheduled for appearance on the afternoon of
21 Saturday, January 22nd. We have one witness that we
22 intended to put on that panel that is in Alberta in
23 another regulatory proceeding, that has been pre-
24 scheduled, and he's not available. The way I would
25 propose to deal with that is that if there are
26 questions asked that are within his area of

1 responsibility, we would make that witness available
2 for cross-examination the following week.

3 THE CHAIRMAN: Are you suggesting that we're not the only
4 administrative tribunal in Canada that sits on
5 Saturday?

6 MR. WEISBERG: I would -- he's already in Alberta. I
7 don't believe that they're actually sitting that day,
8 but he's on an on-site inspection for a hearing that
9 commences on Monday. So he's already there.

10 So, I would propose that if that was
11 acceptable, that we would make that witness available
12 on the 27th of January, in the time that's currently
13 allotted for other intervenors. And --

14 THE CHAIRMAN: You're not going to get a sympathetic ear
15 from me, Mr. Weisberg. We can return to this
16 tomorrow, but do not anticipate that I will grant you
17 the request that you have made.

18 **Proceeding Time 4:55 p.m. T38A**

19 MR. WEISBERG: Regarding Duke Point Information Request
20 to Green Island, there are a number of those that we
21 believe are out of scope. I don't want to take up
22 what's already limited hearing time with an argument
23 about those. What we've done, and pending some
24 direction from you now we will file today, is indicate
25 those which we believe to be out of scope. But in
26 addition, we have responded to them. We've assumed

1 that we're correct in our position that they're out of
2 scope, but if that's not the case, the responses will
3 be there and we don't take up time with an application
4 unnecessarily.

5 What I would ask is that the Commission
6 Panel, in the course of any cross-examination from
7 Duke Point Power of our panel, would consider the fact
8 that we've tried to accommodate the schedule in that
9 way and make rulings regarding relevance of whether
10 they're in scope or not in scope as we proceed through
11 that cross-examination.

12 THE CHAIRPERSON: Sorry. Are you --

13 MR. WEISBERG: So to recap, basically we've identified
14 the ones that we believe are out of scope. We've
15 responded to them nevertheless, but we do expect that
16 the Commission would exercise or would observe that
17 that's our position and make appropriate rulings as we
18 proceeded through any cross-examination by Duke Point
19 of our panel.

20 THE CHAIRPERSON: Mr. Keough?

21 MR. KEOUGH: Mr. Chairman, if I have the answers, I'm
22 prepared to fight the relevance of the question at the
23 time.

24 THE CHAIRPERSON: Okay.

25 MR. KEOUGH: Thank you.

26 THE CHAIRPERSON: That sounds fine, Mr. Weisberg.

1 MR. WEISBERG: And finally, Mr. Chair, you've indicated
2 that for Panel 3, I believe, that it's your intention
3 that if intervenors don't come up with their own
4 allotment of cross-examination time, that you will
5 indicate such an allotment. To assist us with
6 preparation of our questions and prioritizing them, is
7 it possible for you, perhaps tomorrow, to preview what
8 that time allotment would be? Just to give us some
9 indication as best you can.

10 **Proceeding Time 4:57 p.m. T39A**

11 THE CHAIRMAN: I think I can do that now. I have seven
12 intervenors, including Commission counsel. I have
13 seven who wish to cross-examine, including Commission
14 counsel, with a "maybe" from Mr. Steeves. I think you
15 can anticipate exactly the same allocation that was
16 given this morning, with respect to Panel 1. So
17 unless I hear from the intervenors with an allocation
18 that's different than that, that's, I think, a good
19 indication to you as to how the time will be
20 allocated.

21 MR. WEISBERG: That's helpful. Thank you.

22 THE CHAIRMAN: Okay. Mr. Lewis?

23 MR. LEWIS: I just have a couple of comments -- one
24 comment, one question, with regards to procedural
25 matters. Would now be the time to bring those
26 forward?

1 THE CHAIRMAN: Unless Mr. Fulton can deal with those
2 after we adjourn --

3 MR. LEWIS: One of them's very similar to what Mr.
4 Weisberg was just talking about.

5 THE CHAIRMAN: Okay.

6 MR. LEWIS: With regard to the Panel 2 questioning
7 tomorrow, I noticed with the -- Mr. Wallace's
8 presentation there wasn't any time allotment for
9 preparation tonight. Can I assume that there won't be
10 any time allotment tomorrow?

11 THE CHAIRMAN: I am endeavouring to accommodate the
12 intervenors with respect to the two core panels, from
13 my perspective, at least the panels that we want to
14 hear from -- Panel 2 and Panel 4. And I am
15 endeavouring to do that without establishing
16 allocation times, but I am committed to the schedule
17 that you have seen, and so I need to at some stage
18 make a determination as to what the steps that are
19 necessary are that need to be taken in order to
20 accomplish that schedule.

21 Mr. Wallace was the first to cross-examine
22 this afternoon. I'm anticipating that his cross-
23 examination will eliminate a lot of questions. And so
24 you should not assume that the length of time that was
25 given to Mr. Wallace is an indication as to the length
26 of time that will be given to you, or to any of the

1 other intervenors that are following Mr. Wallace.

2 **Proceeding Time 5:00 p.m. T40A**

3 Beyond that, I do not want to give you any
4 further indication of what steps I might take if we
5 are not able to be on schedule or close to being on
6 schedule at the end of the second panel.

7 MR. LEWIS: Thank you. Given that though, I'd like to
8 record the following comment for the record.

9 At the beginning of these proceedings I
10 asked about equality with regard to intervenors, and
11 by no means am I suggesting that my inquiries are as
12 important as the others, however there were questions
13 today that I didn't get to because of a time
14 constraint. It looks like that may be an issue going
15 forward and I'd like that put on the record, and I'd
16 like it noted that I wasn't prepared and I didn't see
17 any argument with regard to which parties would
18 receive which allotment of time.

19 THE CHAIRPERSON: It's on the record.

20 MR. LEWIS: Thank you very much.

21 THE CHAIRPERSON: Thank you. With that I think we are
22 adjourned until 8:20 tomorrow so that we can hear from
23 Mr. Sanderson and Mr. Keough with respect to Mr.
24 Weisberg's filing, only with respect to whether or not
25 you have instructions at that point. If we do deal
26 with the matter on its merits, we will find some time.

1 I won't commit to it being at the end of the day
2 tomorrow, but we can discuss that tomorrow morning as
3 well.

4 So we are adjourned until 8:20.

5 **(PROCEEDINGS ADJOURNED AT 5:01 P.M.)**

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