

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

**and**

**An Application by British Columbia Hydro and Power  
Authority (BC Hydro) for the Approval of the  
2008 Long-Term Acquisition Plan (2008 LTAP)**

**Vancouver, B.C.**  
**June 1, 2009**

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**ORAL ARGUMENT**

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**BEFORE:**

<b>A. J. Pullman,</b>	<b>Chairperson</b>
<b>B. Milbourne,</b>	<b>Commissioner</b>
<b>M. Harle,</b>	<b>Commissioner</b>

**VOLUME 16**

## APPEARANCES

G.A. FULTON	Commission Counsel
C. GODSOE K. THRASHER	British Columbia Hydro and Power Authority
D. CURTIS	British Columbia Transmission Corporation
M GHIKAS	Terasen Gas Inc., Terasen Gas (Vancouver island) Inc., Terasen Gas (Whistler) Inc.
G. MacINTYRE	Columbia Power Corporation
E. WALKER	Pristine Power Inc.
C. BOIS	NaiKun Wind Energy Group Inc.
D. AUSTIN	Independent Power Producers of British Columbia
B. WALLACE K. SEYMOUR	Joint Industry Electricity Steering Committee
C. WEAVER	Commercial Energy Consumers of British Columbia
J. QUAIL L. WORTH	B.C. Old Age Pensioners' Organization, the Active Support Against Poverty, B.C. Coalition of People with Disabilities, Council of Seniors' Organizations of B.C., End Legislated Poverty, Federated Anti-Poverty Groups of B.C., and the Tenants' Rights Action Coalition
W. ANDREWS	B.C. Sustainable Energy Association; Sierra Club Of Canada, B.C. Chapter
R. GATHERCOLE	Peace Valley Environmental Association
L. BERTSCH	Horizon Technologies Inc./Energy Solutions for Vancouver Island Society; Okanagan Environmental Industry Alliance; Island Transformation.Org; Rental Owners and Managers Society of BC
M. OULTON L. WINSTANLEY	COPE 378
P. COCHRANE	City of New Westkminster

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**CAARS**

VANCOUVER, B.C.

June 1, 2009

**(PROCEEDINGS RESUMED AT 9:03 A.M.)**

THE CHAIRPERSON: Please be seated.

Mr. Fulton, I understand Ms. Worth is on her way over.

MR. FULTON: That's my understanding as well, Mr. Chairman.

THE CHAIRPERSON: I take it no one will object if I read my opening statement?

MR. FULTON: I think that would be fine, Mr. Chairman.

THE CHAIRPERSON: Let's do that, then.

Good morning, everyone. Welcome to the oral phase of argument on B.C. Hydro's 2008 long-term acquisition plan application. By letter dated February the 12<sup>th</sup>, 2009, the Commission issued Exhibit A-17, which established the rules for the proceedings, and made the following comments concerning the oral phase of argument, and I quote:

"The Commission Panel may hold an oral phase on the final argument after delivery of the final argument, including any reply argument of B.C. Hydro. The purpose of this phase is to allow the Commission Panel an opportunity to ask any questions the Commission Panel

1           may have arising from the written final  
2           arguments. Participants are not allowed to  
3           re-argue their respective positions taken in  
4           final argument during this phase. Nor are  
5           participants allowed to comment on the final  
6           argument of others during this phase, unless  
7           in response to a question asked by the  
8           Commission Panel. The Commission Panel may  
9           not have questions of all participants."

10                   As noted in the Commission's letter dated  
11           May 11<sup>th</sup>, 2009, which is Exhibit A-18 to these  
12           proceedings, this oral phase of argument was  
13           originally scheduled for May 21<sup>st</sup>, but was re-scheduled  
14           to today because of the extension granted to parties  
15           for intervenor argument, and to B.C. Hydro for reply,  
16           and because of the long Victoria Day weekend.

17                   In Exhibit A-20, dated May 25<sup>th</sup>, 2009,  
18           Commission Panel set out the ground rules for the  
19           eight issues on which it wishes to hear submissions.  
20           The ground rules are supplementary to those found in  
21           Exhibit A-17 and I do wish to emphasize that  
22           participants are not permitted to re-argue the  
23           positions they have taken in final argument during  
24           this phase.

25                                   **Proceeding Time 9:06 a.m. T2**

26                                   "The Commission Panel invites oral

1           submissions from the parties directed  
2           towards its achieving a better understanding  
3           of the parties' positions in respect of the  
4           matters listed below. The parties are  
5           cautioned that the manner in which the  
6           matters are framed is not to be taken as any  
7           indication of the direction as to the  
8           determinations, if any, that the Commission  
9           Panel may make in respect of any of these  
10          matters. Submissions are to be confined to  
11          the evidentiary record."

12                   Exhibit A-20 also dealt with the issue of  
13          any new authorities parties may have wished to  
14          introduce, and from my review of the responses to  
15          Exhibit A-20 only Mr. Austin intends to rely on a new  
16          authority, which is the *Concise Oxford English*  
17          *Dictionary*, for a reference to the word "capable".

18                   By letters to the Commission secretary,  
19          B.C. Hydro and the intervenors who responded to  
20          Exhibit A-20 have indicated which of the items they  
21          intend to address. The Texada Action Now Community  
22          Association has filed a written response to the  
23          issues, as Mr. Fletcher, it's representative, is not  
24          able to attend today.

25                   As is customary, the Panel proposes to hear  
26          from B.C. Hydro first, followed by those intervenors

1           who wish to support B.C. Hydro's position, followed by  
2           those who oppose B.C. Hydro's position, and B.C. Hydro  
3           will have the right of reply. We will hear the issues  
4           *seriatim*. Mr. Fulton has, I believe, canvassed each  
5           of you on each of the issues as to the order of go, as  
6           they say.

7                                So, Mr. Fulton, do you want to add anything  
8           to that?

9   MR. FULTON:    Yes, I have two things, Mr. Chairman.  
10           First, in terms of the order of submissions, I have  
11           circulated a list that I prepared that indicates who  
12           is making submissions to Exhibit A-20 and who is not,  
13           itemizing the issues that they have expressed an  
14           intention to speak to, and then have two additional  
15           columns, one for those who support B.C. Hydro and one  
16           for those who oppose B.C. Hydro.

17                                So, and just in terms of the order of  
18           submissions on the oral phase, Terasen Gas Inc. is a  
19           blank but they will not be making any submissions.

20    **Proceeding Time 9:08 a.m. T03**

21                                So that the proposal that I have then is  
22           that as we deal with each of the item numbers  
23           individually, those who support B.C. Hydro will come  
24           and speak to that item number according to their place  
25           on this list, and then those who oppose will speak to  
26           the item number according to their place on the list.

1                   The second matter that I have relates to  
2                   the written submission that was received from the  
3                   Texada Action Now Community Association, and the  
4                   practice before the Commission has been on the oral  
5                   phases that it is oral argument, there are not written  
6                   submissions. In the case of Mr. Fletcher, he did  
7                   circulate his comments to all parties and has  
8                   indicated that he is not able to be here today. I  
9                   have canvassed the room, and the room is content that  
10                  those written submissions remain on the record, in the  
11                  circumstances of this particular application.

12                  That, I believe, then, concludes my  
13                  preliminary remarks, Mr. Chairman. I would ask people  
14                  when they come to speak to an item, if they use this  
15                  microphone, and we'll leave B.C. Hydro at its  
16                  customary microphone.

17 THE CHAIRPERSON: Thank you, Mr. Fulton.

18                  So, Mr. Godsoe, the floor is yours, the  
19                  first item.

20 MR. GODSOE: Customary microphone. That scares me a  
21                  little.

22 **ARGUMENT BY MR. GODSOE ON ITEM #1:**

23 MR. GODSOE: Good morning, Commission Panel, Mr. Chair.  
24                  Item 1 of Exhibit A-10 reads:

25                  "Pursuant to B.C. Hydro's reference to  
26                  voltage optimization, does voltage

1 optimization fall within the definition of  
2 DSM provided in Regulation M-271?"

3 Item 1 is correct that B.C. Hydro in its  
4 reply argument responded to the only two intervenors  
5 raising the characterization of voltage optimization  
6 as an issue in their arguments, namely, IPPBC and  
7 JIESC. And I would refer the Commission Panel to the  
8 reply argument of B.C. Hydro, pages 68 and 69. For  
9 this reason, because in my submission we have squarely  
10 addressed this issue, I'm going to be brief.

11 Item 1 is incorrect, however, in its  
12 assertion that there is a definition of DSM or demand-  
13 side measure or demand-side management anywhere in the  
14 demand-side measure regulation, which is Regulation M-  
15 271. There are no such definitions. As stated at  
16 page 68 of B.C. Hydro's reply argument, the definition  
17 of demand-side measure is found in Section 1 of the  
18 *Utilities Commission Act*. It's not found in the  
19 Regulation.

20 **Proceeding Time 9:11 a.m. T04**

21 I would refer the Commission Panel to pages  
22 116 and 117 of B.C. Hydro's final argument, where the  
23 entire definition of demand-side measure is laid out.  
24 And let me just quote it for the convenience of  
25 everyone in the room.

26 "Demand-side measure means a rate, measure,

1           action or program undertaken (a) to conserve  
2           energy or promote energy efficiency; (b) to  
3           reduce the energy demand a public utility  
4           must serve; or (c) to shift the use of  
5           energy to periods of lower demand."

6                   As set out at page 16 of B.C. Hydro's  
7           argument, this is a broad definition. Further, as set  
8           out at page 68 of B.C. Hydro's reply argument, voltage  
9           optimization is a demand-side measure pursuant to both  
10          branch (a) and branch (b) of the definition. It  
11          conserves energy and it reduces the demand B.C. Hydro  
12          must serve in the form of electricity savings on the  
13          customer side of the customer's meter.

14                   Finally, I would also refer the Commission  
15          to Appendix K in Exhibit B-1-1, which is the DSM plan,  
16          pages 140 and 141 of 213, for further evidentiary  
17          support of what I've said. And in lieu of any  
18          questions, that concludes my submissions on item 1.

19 THE CHAIRPERSON:   Thank you, Mr. Godsoe.

20 MR. AUSTIN:    I think the drill is slightly different than  
21           as proposed, as I understand from Mr. Fulton we're  
22           supposed to come up to the mike whether we support or  
23           oppose B.C. Hydro, so --

24 MR. FULTON:    I apologize if I've confused everyone. If  
25           you support B.C. Hydro at this point, you should come  
26           up in the order of the list. If you oppose, then you

1           wait until everyone who has supported B.C. Hydro has  
2           spoken.

3 MR. AUSTIN:     Thank you. I shall be sitting down for a  
4           few minutes.

5 THE CHAIRPERSON:   Thank you, Mr. Austin. Is there anyone  
6           who has indicated a desire to speak to item -- Mr.  
7           Weafer, I guess.

8 **ARGUMENT BY MR. WEAFER ON ITEM #1:**

9 MR. WEAFER:     Thank you, Mr. Chairman, members of the  
10           panel. Good morning.

11                   The CEC does support B.C. Hydro in its  
12           position, as B.C. Hydro identified at page 68 of its  
13           reply argument that the difference between voltage  
14           optimization and other transmission system  
15           improvements is that voltage optimization reduces the  
16           energy demand that B.C. Hydro must serve electricity  
17           savings on the customer side of the customer's meter.

18                                   **Proceeding Time 9:14 a.m. T5**

19           And this was in response to CEC IR 2.3.2 set out in  
20           Exhibit B-4, so we think Mr. Godsoe has set out the  
21           definition and the treatment of voltage optimization  
22           properly as a demand-side measure.

23 THE CHAIRPERSON:   Thank you.

24 MR. WEAFER:     Thank you.

25 THE CHAIRPERSON:   Anyone wish to speak in favour?

26 MR. BERTSCH:     Yes.

1 THE CHAIRPERSON: Mr. Bertsch.

2 **ARGUMENT BY MR. BERTSCH ON ITEM #1:**

3 MR. BERTSCH: We note that the definition for demand-side  
4 measure does not restrict how or where the measure  
5 originates from. There is no specific location  
6 requirement for DSM and we believe there is good  
7 reasons for this. Let's think about a device that  
8 mounts inside the house or business and makes products  
9 inside the house or business more energy efficient.  
10 It would be logical and appropriate to consider this  
11 product a demand-side measure as defined in M-271 or  
12 the *Utilities Commission Act*.

13 There is a product which optimizes the  
14 voltage for the house or business, which improves the  
15 energy efficiency of the products, and this was  
16 installed by B.C. Hydro in several locations. If you  
17 look at Exhibit B-4, CEC 2.3.4, which once again we  
18 consider logical and appropriate to consider these  
19 Legend power products as demand-side measures.

20 Now consider two neighbours installing  
21 them. They would be both demand-side measures.  
22 Instead of repeating for each and every customer, if  
23 we provide a bigger one to feed all the customers,  
24 essentially combining them, it would have the same  
25 effect and it would be logical and appropriate to  
26 consider this larger product also DSM.

1                   If it happened to be housed in the  
2                   substation, this should not affect its suitability as  
3                   DSM. What we end up with the voltage optimization  
4                   program proposed by B.C. Hydro in the 2008 LTAP.

5                   Now, if we take another look at having  
6                   flexibility for location on the DSM device itself, yes  
7                   we can have energy efficient light bulbs or better  
8                   insulation which are installed in the end customer's  
9                   location, and these are appropriately considered DSM,  
10                  but we can also have a brochure or TV ad which  
11                  encourages a customer to turn off the lights, and  
12                  these are considered DSM. In fact the customer might  
13                  not even see the brochure or TV program in his or her  
14                  house. The customer might be at the office, but if  
15                  that brochure or TV ad influenced the customer to turn  
16                  off the lights at his or her home it is an appropriate  
17                  DSM.

18                  So we submit that the location of the  
19                  measure is not key. The key is the end effect of the  
20                  measure. It should improve energy efficiency in the  
21                  home or business.

22                  In the voltage optimization program we have  
23                  a technology in which the end effect is higher energy  
24                  efficiency in the home or business, but it happens to  
25                  be installed in the substation. Yes, the location is  
26                  not in the customer's premise, but the end effect of

1 the energy efficiency is inside the customer's  
2 premise. This is the same as the brochure or TV ad  
3 and we submit appropriate for DSM.

4 The definition of demand-side management  
5 indicates conservation or shifting, but what is this  
6 compared to? A demand-side measure is compared to the  
7 status quo or normal operation in the absence of DSM.  
8 So what is normal as it relates to the voltage coming  
9 into a home?

10 If we look at Appendix B-1 -- Appendix K,  
11 page 140, we see a description of normal operation,  
12 and that is, settings are higher than necessary during  
13 the off-peak times of the year, and we have variations  
14 on a daily and seasonal basis. In there we see the  
15 normal operating criteria, which is a certain standard  
16 called CAM3CT35-883. This allows for a low voltage of  
17 110 volts and a high voltage as high as 125.

18 Without a focus on reducing demand-side  
19 measure of end customers the normal practice for B.C.  
20 Hydro would be to leave it as is.

21 **Proceeding Time 9:18 a.m. T06**

22 The voltage in the home or business varies  
23 up or down during the day, but that is normal and  
24 perfectly adequate for what B.C. Hydro is obligated to  
25 provide. And this is the level of service that  
26 products in homes or businesses would normally need to

1 handle or, for that matter, throughout Canada. So  
2 that is the normal operation.

3 Now, does the voltage optimization conserve  
4 power -- energy compared to this normal operation?  
5 Throughout the evidence, we have seen from the George  
6 Trips substation trial and others that there is  
7 significant savings to be had. And there is lots of  
8 evidence supporting that. If we -- in fact, there is  
9 even a report, Exhibit B-3, BCUC IR 1.167.2,  
10 attachment 1, in which there is initiative by 13  
11 utilities in the Northwest Energy Efficiency Alliance  
12 which indicates, and I will read, that:

13 "Operating a utility distribution in the  
14 lower half of the acceptable voltage range,  
15 120 to 114, saves energy, reduces demand,  
16 and reduces reactive power requirements  
17 without negatively impacting the customer."

18 So B.C. Hydro's findings are supported also by other  
19 utilities and they all show energy savings. These  
20 results satisfy the energy requirement measure that  
21 they should conserve or reduce energy demand a public  
22 utility must service.

23 Now, I imagine, and maybe I could ask if  
24 it's appropriate at this point, to refer to some of  
25 the arguments of the other intervenors. Is that an  
26 appropriate process?

1 THE CHAIRPERSON: I don't think so, Mr. Bertsch.

2 MR. BERTSCH: Okay, that's fine.

3 THE CHAIRPERSON: I think you've given us quite enough --

4 MR. BERTSCH: Sure.

5 THE CHAIRPERSON: -- to certainly to be going on with.

6 MR. BERTSCH: Yes, I will move on on that.

7 That will be all my points, then.

8 THE CHAIRPERSON: Thank you, Mr. Bertsch.

9 **ARGUMENT BY MR. AUSTIN ON ITEM #1:**

10 MR. AUSTIN: In relation to the question, the IPPBC  
11 agrees with B.C. Hydro that there is no definition of  
12 demand-side in Regulation 326(2008) or M-271/2008. It  
13 is in Section 1 of the *Utilities Commission Act*. The  
14 IPPBC does not agree that the definition within the  
15 demand-side measures act -- the definition of demand-  
16 side measure in the *Utilities Commission Act*, is  
17 sufficiently broad to cover something like the voltage  
18 optimization program.

19 Demand-side has to mean something, and if  
20 you look at Section 1, it's -- the word "demand" is  
21 referred to in no fewer than three places. "Demand-  
22 side measure" in section (b) and in section (c). So  
23 common sense tells you that we're dealing with demand,  
24 we're not dealing with supply. And when we're dealing  
25 with voltage optimization, we're dealing with supply.

26 With respect to the demand-side measures

1 regulation, there would be a -- there might be a  
2 possibility that the concept of portfolio could catch  
3 the concept of voltage optimization. And I believe  
4 that the IPPBC was the only party to ask any questions  
5 during cross-examination about what a portfolio means.  
6 Because a portfolio is such a broad concept, you could  
7 throw anything into it. For example, you could say  
8 that an investment in a 500 kV transmission line might  
9 reduce losses, so therefore it should be included  
10 within the concept of "portfolio" in the regulation.

11 And I'd like to refer the Panel to Volume  
12 of the transcript, pages 2287 to 2288, and this is  
13 where the IPPBC did a brief cross-examination of the  
14 concept of portfolio. And very briefly, what the  
15 IPPBC asked is:

16 "With respect to deciding what a DSM  
17 portfolio is or isn't, what sort of test do  
18 you use, or what sort of logic do you use,  
19 for the purposes of determining what goes  
20 into a portfolio and what stays out?"

21 **Proceeding Time 9:23 a.m. T07**

22 MR. AUSTIN: And the response back from B.C. Hydro in  
23 part was:

24 "So when we take a look at putting a DSM  
25 plan together, in this case we were taking a  
26 look at putting together a broad DSM plan,

1           so we're looking to make sure that we --  
2           we're doing our best to put in place options  
3           that are going to provide opportunities for  
4           a broad range of customers to participate."

5           So the key word is "customers".

6                        So at a bare minimum, demand-side measure  
7           has to involve a customer. And in the IPPBC's  
8           argument on page 28, the IPPBC drew attention to the  
9           fact that, in terms of voltage optimization, it  
10          doesn't necessarily result in energy conservation.  
11          And I'll use a baseboard heater as an example. If you  
12          reduce the voltage, the baseboard heater will just  
13          stay on longer. There's no net reduction in energy  
14          use. And similarly, if you reduce the voltage, an  
15          electric motor may simply draw more amperage to get  
16          the same job done.

17                       So at this point in time, in terms of B.C.  
18          Hydro's voltage optimization program, the IPPBC is of  
19          the view it's not a demand-side measure, and if the  
20          Commission is to conclude it is a demand-side measure,  
21          the IPPBC would point out that, technically, that may  
22          not be the case, and B.C. Hydro really hasn't made  
23          that case so far.

24                       And those are the submissions on behalf of  
25          the IPPBC on this point.

26   THE CHAIRPERSON:    Thank you, Mr. Austin.

1 **ARGUMENT BY MR. WALLACE ON ITEM #1:**

2 MR. WALLACE: Mr. Chairman, Commissioners, I'd like to  
3 start out by being clear that JIESC supports voltage  
4 optimization, just doesn't think it's about DSM. It  
5 thinks it's about system efficiency, a point we made  
6 in argument. And we think that DSM should have an  
7 element of customer involvement to it.

8 We agree with those who have gone ahead  
9 that Section 1 definition in the *Utilities Commission*  
10 *Act* governs, and that definition, as has been pointed  
11 out by Mr. Godsoe, includes (a) and (b) to conserve  
12 energy or promote energy efficiency. And in our  
13 submission, that goes widely enough to include line  
14 losses and a lot of things that people traditionally  
15 don't think are DSM. And we think this is one of  
16 them.

17 We've conceded in argument that you can  
18 stretch the definition to make voltage optimization  
19 fit DSM, but we urge you not to. We think, as I've  
20 said, that it should have an element of customer  
21 involvement. All you're talking about here is fixing  
22 some inefficiencies at a substation, settings that are  
23 higher than normal, and in our submission getting the  
24 system to a point where it should be, and in our view  
25 that simply isn't DSM, that's just smart operation,  
26 and should be done, but not done under the rubric of

1 DSM. Thank you.

2 THE CHAIRPERSON: Thank you, Mr. Wallace.

3 **ARGUMENT BY MR. TENNANT ON ITEM #1:**

4 MR. TENNANT: Good morning, Mr. Chairman and Panel.

5 Voltage optimization. My understanding is  
6 that voltage optimization results from the supply-side  
7 management of a spinning reserve, and that voltage  
8 optimization is not sourced from or applied to demand-  
9 side management, because temporal and resistive losses  
10 on the demand side would lower the reliability of the  
11 spinning reserve, which operates on a thin margin of  
12 about one percent of generating capacity. I stand to  
13 be corrected on that, but that's my understanding.

14 Therefore I would argue that voltage  
15 optimization does not fall within the definition of  
16 demand-side management, because demand-side management  
17 resource, or market response mechanisms, cannot  
18 efficiently be tasked with maintaining a fast response  
19 spinning reserve that is needed for voltage  
20 optimization, and that it is essentially a mechanical  
21 generator problem, and there is no, as I say, market  
22 mechanism that would enable voltage optimization to  
23 occur on the demand side.

24 THE CHAIRPERSON: Thank you, Mr. Tennant.

25 MR. FULTON: Mr. Chairman, before we proceed down the  
26 list of those opposed, I've spoken to Ms. Worth and

1 she says that BCOAPO supports the B.C. Hydro position,  
2 so perhaps she should make her submission now.

3 THE CHAIRPERSON: Certainly.

4 MR. FULTON: And then we'll go back to those opposed.  
5 And then we'll -- we're back to the order where we  
6 should be.

7 **ARGUMENT BY MS. WORTH ON ITEM #1:**

8 MS. WORTH: My apologies for making submissions out of  
9 order. My submissions will be very brief on this  
10 matter.

11 BCOAPO does not see any general definition  
12 of DSM in the regulation, and the definition in  
13 Section 1 of the Act does seem to support B.C. Hydro's  
14 position that voltage optimization is at least  
15 potentially DSM, because it is a measure that will  
16 reduce the energy the utility needs to provide by  
17 conservation measures aimed at reducing energy loss.

18 Those are my submissions, thank you.

19 **Proceeding Time 9:28 a.m. T08**

20 THE CHAIRPERSON: Does that take care of all parties who  
21 wish to speak to this matter? Mr. Andrews?

22 **ARGUMENT BY MR. ANDREWS ON ITEM #1:**

23 MR. ANDREWS: BCSEA would express the view that  
24 demand-side measures should be interpreted as relating  
25 to reduction of load on the customer side of the  
26 meter. That said, my instructions are that BCSEA is

1 not in a position to take a position for or against  
2 the question whether the voltage optimization program  
3 in particular meets the definition of DSM in the Act  
4 simply due to a lack of technical understanding of the  
5 effect in physics terms of the voltage optimization  
6 and whether there is a case that there is a reduction  
7 in load on the customer side of the meter.

8 THE CHAIRPERSON: Thank you. Anyone else? It's back to  
9 you, Mr. Godsoe.

10 **REPLY BY MR. GODSOE ON ITEM #1:**

11 MR. GODSOE: Very briefly, Mr. Chairman, I need to go  
12 back again to the text of demand-side measure. I  
13 don't see in there anywhere customer involvement.  
14 Those words are not there. My friends, Mr. Wallace  
15 and Mr. Austin, are asking you to read those in, and I  
16 think that's not correct.

17 I also note with respect to line losses  
18 what the definition says is "A measure, action or  
19 program undertaken to...". Well, building transmission  
20 isn't undertaken to conserve energy or to reduce  
21 energy. So, in my submission the line loss issue is a  
22 complete red herring. It's the purpose -- and here  
23 voltage optimization is clear. We are undertaking it  
24 to conserve energy and reduce the energy demand served  
25 on the customer side of the meter. So in my  
26 respectful submission it squarely falls within the

1 definition and there is no reason not to have it fall  
2 within the definition. Nothing advanced leads me to  
3 conclude that we are incorrect in our reading of the  
4 definition.

5 THE CHAIRPERSON: Thank you.

6 MR. GODSOE: Thank you.

7 COMMISSIONER MILBOURNE: Just, Mr. Godsoe, your last  
8 point. This is purely hypothetical. I'm a bright-  
9 eyed, bushy tailed young engineer working for B.C.  
10 Hydro and I come up with a scheme to progressively  
11 upsize all the wires in the distribution system in  
12 order to reduce line losses in the distribution  
13 network. That would seem to meet your definition of  
14 DSM. Help me understand if I'm wrong.

15 MR. GODSOE: If I go back to my friend Mr. Andrew's  
16 submission about impact on the customer side of the  
17 meter, in my view your hypothetical with respect to  
18 distribution lines does not fit into that category,  
19 whereas voltage optimization very much does.

20 COMMISSIONER MILBOURNE: With respect, the definition  
21 that you seem to be relying on says "a measure to  
22 improve efficiency". It doesn't say which side of the  
23 meter it is on.

24 MR. GODSOE: I agree with that.

25 COMMISSIONER MILBOURNE: So I come back to the question  
26 I'm asking.

1 MR. GODSOE: Right. So in order to make sure that not  
2 everything under the sun is a demand-side measure, in  
3 our view, whether it impacts the customer side of the  
4 meter is an appropriate test.

5 COMMISSIONER HARLE: Is or isn't?

6 MR. GODSOE: Is.

7 THE CHAIRPERSON: Thank you, Mr. Godsoe. That takes  
8 care of item one.

9 Mr. Godsoe, are you ready to address item  
10 2?

11 **ARGUMENT BY MR. GODSOE ON ITEM #2:**

12 MR. GODSOE: Again, Mr. Chairman, I'm going to be brief  
13 because in my submission item 2, as noted, we have  
14 responded in our reply argument.

15 Just by way of introduction, item 2  
16 references certain parties. Let's be clear. Only  
17 CECBC and IPPBC took issue with B.C. Hydro's load  
18 forecast, and I would refer the Panel to page 35 of  
19 B.C. Hydro's reply argument in that regard.

20 **Proceeding Time 9:33 a.m. T9**

21 Now, there are two issues raise by item 2.  
22 The first is a basic trend line issue. The item 2  
23 wording strongly implies that B.C. Hydro's load  
24 forecast is generated via a simple trend line  
25 approach. In other words, take a ruler from the  
26 previous year's billed sales and generate a new load

1 forecast. This is simply not the case. The two 2008  
2 LTAP forecasts, those being the 2007 load forecast and  
3 the 2008 load forecast update, were not generated on  
4 this basis.

5 As set out at page 37 of its reply, B.C.  
6 Hydro uses current and forward-looking economic  
7 information in preparing its forecasts and each new  
8 forecast is informed by the most recent tracking of  
9 actual sales. So the starting point of the forecast  
10 is appropriately adjusted using current information.  
11 Therefore, in B.C. Hydro's respectful submission, the  
12 issue of changing the number of years of prior data  
13 considered is largely irrelevant.

14 Issue 2 deals with the effect of economic  
15 cycles and, let's be clear, at least in the near-term  
16 portion of the forecast does consider the effects of  
17 current and reasonably foreseeable economic  
18 conditions. This is obvious from the issuance of the  
19 2008 load forecast update, which is down from the 2007  
20 load forecast. However, beyond approximately three  
21 years out neither B.C. Hydro nor, in my respectful  
22 submission, any credible forecaster, would admit the  
23 ability to predict the timing or even the existence of  
24 future economic cycles. I would refer the Panel to  
25 pages 38 and 39 of B.C. Hydro's reply argument in that  
26 regard.

1                   Here's the punch line. As described at  
2                   page 38 of reply argument, B.C. Hydro uses economic  
3                   driver information that assumes average economic  
4                   conditions over the remainder of the forecast period.  
5                   This information over the long term inherently  
6                   incorporates periods of high and low economic growth  
7                   because it's average.

8                   If there are no questions, those conclude  
9                   my submissions on item 2.

10 THE CHAIRPERSON: Thank you. No questions, I don't  
11 think. Oh --

12 COMMISSIONER HARLE: With respect to the forecast, my  
13 understanding is you do a lot of detailed analysis on  
14 a customer-by-customer basis or groups of customers  
15 and whatnot as the starting point to get going and  
16 then you project into the future. Am I right in  
17 understanding your comments that beyond that you start  
18 to take average information rather than trying to  
19 anticipate when cycles may actually come in?

20 MR. GODSOE: Yes, that's correct.

21 COMMISSIONER HARLE: Okay, thank you.

22 THE CHAIRPERSON: Thank you, Mr. Godsoe. Those who wish  
23 to support?

24 **ARGUMENT BY MR. WALLACE ON ITEM #2:**

25 MR. WALLACE: Thank you, Mr. Chairman. We support B.C.  
26 Hydro and adopt the comments of Mr. Godsoe.

1                    JIESC does not agree that more work should  
2                    be done on trend lines and economic cycles in this  
3                    LTAP, both for the reasons Mr. Godsoe suggested and  
4                    also because we just don't see it as being fruitful.  
5                    JIESC is very concerned that if one wants, B.C. Hydro  
6                    would undoubtedly go out and spend an incredible  
7                    amount of money trying to refine matters further and  
8                    do so without gaining any further precision in the  
9                    forecast.

10                    Clearly the industrial forecast was a major  
11                    concern because it's been affected largely by the  
12                    current recession. JIESC looked at it and just  
13                    couldn't figure out how it could do a better forecast.  
14                    That's not to say Hydro is right or Hydro is wrong;  
15                    it's just in current economy how do you do it any  
16                    better. Nobody knows where we're going. This current  
17                    recession, the worst since the thirties, was missed by  
18                    most of the consensus forecasters as coming on. Sure,  
19                    some people saw it, but if Hydro is going to do  
20                    forecasts they're going to be on the consensus line,  
21                    and we don't see how you can any better build coming  
22                    out of that recession than people were forecasting  
23                    going into it.

24                    So, again, we think that this is one of  
25                    those things that simply has to wait. We're going to  
26                    be back here on another LTAP in two to three years.

1 Hydro, in our submission, has done a good job and it  
2 is something we should see with time, rather than  
3 spend money and hold up this LTAP by rejecting the  
4 load forecast or telling Hydro to do something more.

5 Thank you.

6 THE CHAIRPERSON: Thank you.

7 COMMISSIONER MILBOURN: Excuse me.

8 THE CHAIRPERSON: Mr. Wallace.

9 COMMISSIONER MILBOURNE: Just one question. Your  
10 comments emphasized doing further work on this  
11 forecast. Do you have any observations about how  
12 forecasting might be improved or otherwise amended or  
13 changed for future forecasts?

14 MR. WALLACE: No. In fact we support Hydro and the work  
15 it did in the industrial sector. It brought out  
16 independent experts in Temenex. We read those  
17 reports. We made them part of our submissions, I  
18 believe.

19 **Proceeding Time 9:39 a.m. T10**

20 And we think Hydro looked at the industry  
21 in a way almost the industry can't itself, in that  
22 none of our companies can say they're going down until  
23 the day they do it.

24 So, I would suggest that a lot of work has  
25 been done there. If the Commission wants to suggest  
26 to Hydro it consider something for the next forecast,

1           then by all means. I can see that. But I urge some  
2           caution in doing that, because Hydro has this tendency  
3           to follow Commission directives very expensively,  
4           spend a lot of money on them, and there may not be  
5           much of a gain. So, I'd almost say, if you're  
6           interested in trend lines and trying to forecast  
7           economics, that you simply ask them to report back,  
8           but put some caution to it, or we'll have three expert  
9           reports of a couple of hundred pages each at very high  
10          cost, again without not gaining much and the customers  
11          will be paying for it.

12                         So, I agree with Mr. Godsoe, it appears  
13          that they've done a very good job in this case. When  
14          -- we would not want to urge excessive expenditures  
15          trying to get refinements that are beyond what the  
16          real world will allow.

17   COMMISSIONER MILBOURNE:    Thank you.

18   THE CHAIRPERSON:    Who else wishes to speak in favour?

19   **ARGUMENT BY MR. ANDREWS ON ITEM #2:**

20   MR. ANDREWS:    BCSEA and SCCBC have historically been  
21          quite vigilant regarding B.C. Hydro's load forecasts,  
22          with a -- particularly regarding a concern that, at  
23          least in the past, there was a perception that Hydro  
24          over-estimated the amount of load growth in order to  
25          justify generation additions. In this particular  
26          LTAP, BCSEA/SCCBC are satisfied with both the

1 methodology and the implementation of it, used for  
2 load forecasting by B.C. Hydro.

3 BCSEA takes a view, I think, somewhat along  
4 the lines of JIESC as expressed by Mr. Wallace, which  
5 is that one has to keep in mind what the potential  
6 impact of refinements in the forecasting methodology  
7 are going to be in making a decision about the degree  
8 of refinement that is warranted, and that applies both  
9 -- that applies I would say particularly to the  
10 economic trend -- economic cycles aspect of the  
11 question.

12 So in terms of this LTAP, BCSEA supports  
13 B.C. Hydro's -- both the methodology and the  
14 application of it, and I would say that there -- BCSEA  
15 is not aware of any evidence on the record that would  
16 support particular directions to B.C. Hydro to modify  
17 its load forecast, in terms of methodology.

18 Subject to any questions, those are my  
19 submissions.

20 THE CHAIRPERSON: Thank you. Anyone else wish to speak  
21 in favour of? I can see you're wishing to get to your  
22 feet, Mr. Austin. Champing at the bit.

23 **ARGUMENT BY MR. AUSTIN ON ITEM #2:**

24 MR. AUSTIN: With respect to the IPPBC's position, the  
25 IPPBC is not necessarily opposed to B.C. Hydro's way  
26 of putting the load forecast together. What it is

1       opposed to, and has set out extensively in its  
2       argument at pages 3 through 28, is there are certain  
3       omissions and there are certain oversights, such as  
4       the absence of fuel switching and also an  
5       overoptimistic idea of what DSM is going to achieve  
6       and what it's not going to achieve. And we're  
7       certainly not going to go through pages 3 through 28  
8       of the argument, but I would like to basically  
9       summarize it as this.

10               For many, many years, B.C. Hydro has been  
11       engaged in energy conservation, and if you think of  
12       the trend line as going down the middle, you can think  
13       of DSM as being a downward force on the trend line.  
14       There is the upward force coming from things such as  
15       technological change, whether it's computers, flat-  
16       screen TVs, or other matters such as population growth  
17       putting upward pressure on that trend line.

18                               **Proceeding Time 9:44 a.m. T11**

19               So what's happened is that it seems to have  
20       achieved a level of equilibrium of about 1.5, 1.6 or  
21       1.7 percent in terms of load growth. And what the  
22       IPPBC wishes to point out is all of a sudden through  
23       DSM this trend line is supposed to essentially be  
24       pushed down for at least the next ten years to  
25       essentially zero, and the IPPBC just cannot see how  
26       that is going to happen, because you've had DSM for a

1 very very long period of time. It's been about 30  
2 years. And in the same period you've had multiple  
3 economic cycles and you've had multiple technological  
4 change, and that's where the upward pressure is going  
5 to come from, or has been coming from.

6 With respect to the future, we are going to  
7 have upward pressure continuing to come from those  
8 same factors, but more importantly, now we are  
9 probably going to have it coming from fuel switching.  
10 And so as far as the statistical basis and the way  
11 B.C. Hydro put its load forecast together, the IPPBC  
12 has no objection. However, there's just some  
13 fundamental omissions or too optimistic assumptions.

14 With respect to the second point of trying  
15 to anticipate economic cycles within the load  
16 forecast, the IPPBC agrees with B.C. Hydro that that's  
17 just not going to be possible or practicable. If we  
18 could all do that then we would have an awful lot of  
19 money that we would probably use to greater effect  
20 than being in this room. And in this respect, I'd  
21 like to draw the panel's attention to Exhibit C-22,  
22 which is B.C. Hydro's annual report from 1982 to 1983,  
23 and in that material, and it wasn't numbered in any  
24 sort of page sequence for the purpose of exhibit,  
25 there is a passage at the top of the page. And we've  
26 heard about all this greatest recession since the

1 depression and the world is coming to an end, to  
2 everything else, so back in 1982 it says in the annual  
3 report:

4 "Over the past year British Columbians have  
5 suffered through a recession of the longest  
6 duration and with the largest decline in  
7 economic activities since the great  
8 depression of the 1930s. The severity of  
9 these economic conditions was not foreseen  
10 by economists. Because the province's  
11 economy is so heavily dependent on export  
12 sales, any significant improvement in the  
13 economy will only follow the gradual  
14 economic recovery of British Columbia's  
15 customers and export markets."

16 So there's more in there. However, I would just point  
17 out that there are always economic cycles in this  
18 province, there always will be economic cycles in this  
19 province and they are going to be a function of  
20 economic cycles elsewhere as well, including, as  
21 pointed out here in the export markets, which  
22 essentially for British Columbia is the world.

23 So we don't see it as practicable or cost  
24 effective to try and do a load forecast that takes  
25 into account economic cycles. They will be there and  
26 B.C. Hydro has done its best to reduce its load

1 forecast or modify its load-casting in a sense in  
2 relation to the economic cycle that we are in. But we  
3 will come out of it and we will need additional  
4 supplies of electricity and those are my submissions.

5 THE CHAIRPERSON: Thank you.

6 COMMISSIONER HARLE: You heard earlier Mr. Godsoe talk  
7 about their approach that relies on averaging into the  
8 future as opposed to forecasting specific timing of  
9 economic cycles. Do you accept that as a legitimate  
10 approach?

11 MR. AUSTIN: Yes, we do accept that as a legitimate  
12 approach, because practically and cost effectively I  
13 don't think anybody can do anything except that.

14 COMMISSIONER HARLE: Okay. Now, you've also -- if you  
15 were to reject the load forecast as you suggest, does  
16 that mean rejecting the whole LTAP?

17 MR. AUSTIN: The answer to that is there's a Call before  
18 the Commission as part of this LTAP. IPPs have spent  
19 a lot of money responding to that Call, and we thought  
20 about it very carefully in terms of what would cause  
21 the LTAP to be rejected, and in our argument in the  
22 answer to one of the questions -- it was posed by the  
23 Commission and if you'd just bear with me for a minute  
24 I'll -- it's question number 1.

25 The IPPBC's position is it's up to the  
26 Commission to make that determination, because what

1 the IPPBC doesn't have is what's in your minds in  
2 relation to all matters in relation to the LTAP. It's  
3 a decision that will have to be made on balance as  
4 opposed to one particular item of the LTAP.

5 **Proceeding Time 9:48 a.m. T12**

6 It could be that if there are a sufficient  
7 number of items that are rejected, then that could  
8 cause the whole LTAP to be rejected. However, we  
9 don't have that information. So in the answer to  
10 question number 1, what the IPPBC has said, and this  
11 is on page 50 of the argument,

12 "In the absence of any instrument that  
13 defines PART, the IPPBC respectfully submits  
14 that the BCUC take a reasonable approach to  
15 the interpretation..."

16 Because you were asking whether part of the LTAP would  
17 cause the whole plan to fail or not.

18 "...If sufficient number of parts or a part  
19 that goes to the core of the plan are  
20 objected, with the result that the plan  
21 becomes meaningless, it must be rejected."

22 But again that's the Commission's decision.

23 "...It's up to the BCUC to exercise its  
24 judgment as to when the meaningless  
25 threshold is crossed and the IPPBC can think  
26 of no hard and fast rule they can propose."

1                   So that's the IPPBC's position on that  
2                   question and that's the answer.

3 THE CHAIRPERSON:    Thank you, Mr. Austin.

4 **ARGUMENT BY MR. WEAVER ON ITEM #2:**

5 MR. WEAVER:       Mr. Chairman and members of the panel, the  
6                   CEC in its final argument at pages 47 through 85 set  
7                   out its position on the B.C. Hydro load forecast.

8                   This morning, just to deal specifically  
9                   with the two questions posed by the Commission on the  
10                  load forecast, I do intend to touch briefly on the  
11                  points raised in the written argument in the context  
12                  of these questions. I think Mr. Godsoe referred to  
13                  his reply argument, but I will not obviously go into  
14                  the level of detail we put in our written argument.

15                  Just to deal with the first speakers before  
16                  me in terms of the cost issue, in terms of improving  
17                  the veracity of the load forecast and the potential  
18                  accuracy, I accept there may be costs and we are yet  
19                  to develop the best concepts to improve the load  
20                  forecast, but the impact of having a poor load  
21                  forecast is immense in terms of costs to customers.

22                  This Commission is faced with a challenge  
23                  of making some very significant acquisition decisions  
24                  in the short term. I think this Panel can take notice  
25                  in terms of the Section 5 inquiry, this load forecast  
26                  is also a critically important document to that very

1 material proceeding. So it's important, and what  
2 flows out of it will be paid for by customers. Those  
3 expenses could be very significant in comparison to  
4 the cost of efforts to improve the veracity of B.C.  
5 Hydro's forecast.

6 So we come to the podium not necessarily  
7 with the complete answer as to what can improve it,  
8 but we do believe that it is essential that all  
9 stakeholders in this proceeding take steps to try and  
10 improve it, and we believe in the short term.

11 With respect to the specific questions, Mr.  
12 Ince set out the statistical criteria for evaluating  
13 load forecasting as being symmetrical, 50 percent too  
14 high and 50 percent too low. That's at the transcript  
15 Volume 7, page 1102.

16 The CEC agrees with that test, but would  
17 add that the low amplitude of swings is important  
18 because of the dependence on these forecasts for  
19 making critical investment decisions, as just  
20 mentioned. We referred in our argument to Exhibit B-  
21 1-1, Appendix D, figures 5.2, and that was the feather  
22 duster graph, as Ms. Van Ruyven referred to it, which  
23 shows that historically B.C. Hydro has certainly not  
24 met that 50/50 test. The evidence in this proceeding,  
25 in terms of Mr. Ince's watch on the load forecast over  
26 the last three or four years, B.C. Hydro has certainly

1 not met that test in terms of 50 percent above, 50  
2 percent below.

3 The significant trend right now is they are  
4 well off on that statistic and they are typically over  
5 forecasting requirements. It's a statistical problem  
6 from the past as well, in that the B.C. Hydro system  
7 was significantly, some would say overbuilt based on  
8 optimistic load forecasts in the past, and so we would  
9 urge the company to get back to closer to what their  
10 test is, in terms of the 50/50 result, and with low  
11 amplitude.

12 So the evidence we have before us in terms  
13 of B.C. Hydro's tests and whether the methodology  
14 utilized is successful in meeting that test is non-  
15 existent. They have not been successful in meeting  
16 that objective. So there's clearly a problem, in  
17 terms of what information is being utilized, how --  
18 and challenges to make it more accurate.

19 **Proceeding Time 9:53 a.m. T13**

20 Mr. Godsoe defends the load forecast in  
21 terms of its -- we took a simplistic approach to it,  
22 and we've ignored the background work that goes into  
23 the load factor forecast, but the evidence speaks for  
24 itself. They're not doing a very good job, whatever  
25 analysis is being undertaken.

26 In terms of the short term, and taking the

1 -- and this is the second question in terms of taking  
2 economic cycles into account in the Commission  
3 assessing the load forecast and whether B.C. Hydro  
4 should do so, the evidence in this proceeding is very  
5 clear. We are in a serious economic recession, and we  
6 have the chairman of B.C. Hydro testifying, agreeing  
7 with the CFO from the revenue requirement proceeding  
8 that it's going to get worse before it gets better.  
9 So that's the context in terms of this Commission  
10 looking at whether economic cycles should be taken  
11 into account in the load forecast. We're in one, and  
12 we would urge you to take that into account in terms  
13 of your reliance on this load forecast for making  
14 material investment decisions on behalf of the  
15 ratepayers and in the public interest.

16 And Mr. Elton's testimony was also around  
17 the need for business flexibility in planning in this  
18 economic time, where we are all facing uncertainties,  
19 but we know things are not as good as we would like to  
20 be -- as we would like them to be. And Mr. Elton, I  
21 think, in his testimony, was -- in dealing with Mr.  
22 Quail in cross-examination, acknowledged the need for  
23 some flexibility. And essentially when we look at the  
24 utilization of the load forecast, it cannot be  
25 perfect, but we would urge the Commission to have some  
26 flexibility in terms of its utilization of the load

1 forecast, given -- whether you accept whether economic  
2 recessions or not should be factored into the load  
3 forecast, we would urge this Commission in the face of  
4 an economic recession to be cautious with how it uses  
5 the load forecast. We don't have any immediate  
6 improvements to what we see Hydro has done for the  
7 purpose of what you have before you. We accept that.

8 So, in conclusion, Mr. Chairman and members  
9 of the Panel, the CEC does not support the load  
10 forecast of B.C. Hydro in terms of its accuracy and  
11 its usefulness to the Commission in terms of imminent  
12 investments decisions that need to be made by this  
13 Commission, and now and in the Call process coming up,  
14 and we would ask the Commission to direct B.C. Hydro  
15 to strive to improve in future filings. We've asked  
16 for B.C. Hydro to come back with a load forecast as  
17 part of an LTAP one year from now. We will have more  
18 experience with the economic challenges and the  
19 Commission can then be in a position to assess a more  
20 robust load forecast for the next 20 years, having a  
21 better understanding of what the impacts of this  
22 recession are.

23 And in closing, the issue in British  
24 Columbia, and the evidence was clear in this  
25 proceeding, it's not simply about an economic  
26 recession and its impact on British Columbia, it's

1           whether there are structural changes in the B.C.  
2           economy and in the customers of B.C. Hydro who have  
3           material impact on its load forecast.

4                           Thank you, Mr. Chairman.

5 THE CHAIRPERSON:    Thank you, Mr. Weafer. Ms. Worth,  
6           you're free to go.

7 **ARGUMENT BY MS. WORTH ON ITEM #2:**

8 MS. WORTH:    The Commission's question made specific  
9           reference to seeking submissions in regard to the  
10           statistical basis underlying the basic trend line, the  
11           number of years that were going to be considered. I  
12           can begin by saying that BCOAPO sees significant  
13           ratepayer benefit in including the maximum number of  
14           years of prior data possible, or practicable on a  
15           statistical basis, used to generate the basic trend  
16           line. It stands to reason that the larger the data  
17           field used to calculate the averages used in the trend  
18           line, the better the economic forecast will be going  
19           forward, because it will include a greater number of  
20           the economic cycles of the past, leading to an  
21           improved ability to predict similar patterns into the  
22           future.

23   **Proceeding Time 9:58 a.m. T14**

24                           Now, I agree absolutely with my friend Mr.  
25           Godsoe that to accurately predict economic trends is  
26           impossible. Our expert economist has often told me

1       that every forecaster must accept the sad truth that  
2       their efforts will be wrong 100 percent of the time  
3       and at the end of their career they can only hope that  
4       they were over-optimistic 50% percent of the time and  
5       overly pessimistic the other 50.

6                If any concrete evidence is necessary to  
7       illustrate this point, one need only look at our  
8       current situation because this recession did not  
9       appear anywhere in B.C. Hydro's previous forecasts  
10       that showed constant strong growth. Therefore we do  
11       not labour under the expectation that B.C. Hydro can  
12       accurately built into its load forecasts future  
13       economic downturns and recessions, as well as the  
14       booms, but rather that these events in the past should  
15       continue to be a strong, or perhaps stronger part of  
16       the trend inputs that are used to predict future load.

17               Another use for an expanded number of  
18       years, considered in generating B.C. Hydro's trend  
19       line is that it could predict a better -- or sorry, it  
20       could provide a better basis upon which to predict  
21       probabilities of these kinds of events while not  
22       actually being expressly built into the load forecast  
23       itself.

24               BCOAPO has similar concerns to Mr. Weafer  
25       regarding the value of the current load forecast when  
26       considering undertaking potentially expensive

1 commitments like the clean power Call. There will be  
2 significant rate impacts that flow from this LTAP and  
3 the depth and continued deepening of the current  
4 recession should be accurately reflected in the  
5 forecasts used to justify taking any of these kinds of  
6 actions, or in determining the timing and volume of  
7 any endorsements related to these kind of actions. It  
8 was for that reason that BCOAPO took the position that  
9 it did in regards to the clean power Call.

10 Subject to any questions, those are my  
11 submission.

12 THE CHAIRPERSON: Thank you, Ms. Worth.

13 MS. WORTH: Thank you.

14 THE CHAIRPERSON: Thank you. Anyone else wishing to  
15 speak?

16 **ARGUMENT BY MR. TENNANT ON ITEM #2:**

17 MR. TENNANT: My submission is that the statistical basis  
18 underlying the basic trend line does not account for  
19 the development of base-load generation needed for  
20 operating large pump storage and other energy storage  
21 facilities that will soon be needed, I believe, to  
22 deal with both an imminent shortfall in the WECC  
23 market and for peaking capacity, as well as to supply  
24 large volumes of hydrogen that will be needed for  
25 running the hydrogen economy. Therefore the number of  
26 years of prior data being considered, including for

1 demand-side management, is largely irrelevant to  
2 either the short- or long-term development of energy  
3 storage facilities and hydrogen economy.

4 That's my submission, thank you.

5 THE CHAIRPERSON: Thank you.

6 **ARGUMENT BY MR. BERTSCH ON ITEM #2:**

7 MR. BERTSCH: We wish to bring up one point in regards to  
8 the methodology. We believe that the DSM savings have  
9 traditionally been underestimated and there's evidence  
10 on the record of that, and that we believe it's still  
11 under-estimated in the 2008 LTAP.

12 THE CHAIRPERSON: You mean ten --

13 MR. BERTSCH: The DSM savings.

14 THE CHAIRPERSON: You promised us a reference.

15 MR. BERTSCH: Sorry?

16 THE CHAIRPERSON: You alluded to a reference?

17 MR. BERTSCH: Yes, there are -- the ESVI final argument,  
18 pages 1 through 4.

19 THE CHAIRPERSON: Thank you. Anyone else wishing to  
20 speak? Hearing nothing, Mr. Godsoe, do you wish to  
21 reply?

22 **REPLY BY MR. GODSOE ON ITEM #2:**

23 MR. GODSOE: I do, Mr. Chairman.

24 What I've just heard confirms my fear  
25 outlined in my letter of 28 May 2009 that we're going  
26 to be hearing a lot of re-argument, which I will

1 strongly emphasize per Exhibit A-17, I think is  
2 entirely inappropriate. So I don't intend to reply  
3 point by point for my friend Mr. Weafer in particular.

4 To answer Commissioner Harle with respect  
5 to whether you reject the load forecast, are you  
6 rejecting the LTAP, at page 11 of our reply argument,  
7 we agreed with BCOAPO that there was a materiality  
8 test. In my submission, if you reject the load  
9 forecast, you are rejecting the LTAP. It is a core  
10 part of the long-term resource plan.

11 And to put it into perspective, we only  
12 heard one party take issue, really, with the  
13 methodology and that is CECBC. IPPBC said they don't  
14 necessarily oppose the methodology, and I think the  
15 record speaks clearly on how we treated  
16 electrification, which I think is a separate issue  
17 from what you've asked in item 2.

18 So I have no further submissions on item 2.

19 **Proceeding Time 10:03 a.m. T15**

20 THE CHAIRPERSON: Thank you very much. Are you ready to  
21 address item 3?

22 MR. GODSOE: You were looking at the clock. This is an  
23 item that is -- there's a couple of items where I'm  
24 going to keep saying we've squarely addressed in  
25 reply. This is a new item, in my view, and I'm going  
26 to be lengthier, so I don't know if that influences

1           you with respect to a break or not.

2   THE CHAIRPERSON:    Why don't we hear what you have to say,  
3           and then we'll break for coffee, if that's convenient?

4   **ARGUMENT BY MR. GODSOE ON ITEM #3:**

5   MR. GODSOE:        With respect to item 3, to remind everybody  
6           in the room, B.C. Hydro is seeking two Clean Power  
7           Call related endorsements.  First, a proposed Clean  
8           Power Call pre-attrition target of 3,000 gigawatt  
9           hours per year, or post-attrition target of 2100  
10          gigawatt hours per year; and secondly, the Clean Power  
11          Call clean or renewable eligibility requirement.

12                    Item 3 refers to B.C. Hydro's response to  
13          Commission Panel IR 1.24.2 found in Exhibit B-12.  And  
14          that IR compares the following:  first, the profile of  
15          monthly load increases for a set annual 2,000 gigawatt  
16          hour load increase with (2) the monthly profile of a  
17          combination of new resources, those being DSM, small  
18          hydro and wind.

19                    It appears to B.C. Hydro that through item  
20          3, the Commission appears to be reflecting on the  
21          difference in load shape.  Now, with respect to the  
22          target endorsement, in my submission this monthly  
23          profile shape is something for a Clean Power Call  
24          design in terms of pricing, et cetera, and I'll get to  
25          that in a minute.  It has nothing to do with the  
26          actual target itself.

1                   By way of background, B.C. Hydro operates a  
2                   system. New supply is aggregated into the system such  
3                   that the system, once aggregated, can meet current and  
4                   new load. This is nothing new. It is a natural  
5                   outcome of system planning and operation.

6                   The portfolio analysis contained in Chapter  
7                   5 of the 2008 LTAP was based on analysis of the  
8                   effects of the aggregated loads of the various  
9                   portfolios in meeting the forecast load. Therefore,  
10                  in my respectful submission, Chapter 5 expressly  
11                  considers the timing differences alluded to in item 3.  
12                  Further, policy action number 25 of the 2007 Energy  
13                  Plan reads as follows:

14                  "Ensure the procurement of electricity  
15                  appropriately recognizes the value of  
16                  aggregated intermittent resources."

17                  In my submission, policy action number 25 encourages  
18                  B.C. Hydro to consider aggregation of intermittent  
19                  resources. Precisely what was done in Chapter 5.

20                  Further, policy action number 25  
21                  specifically mentions wind and water flow energy  
22                  sources.

23                  "Intermittent resources are those for which  
24                  the fuel supply to the generator (e.g., the  
25                  wind or the water flow) is not always  
26                  available and cannot be ordered when

1                   needed."

2                   Turning now to the Clean Power Call design  
3                   and how this issue is addressed, let me use freshet  
4                   energy as an example. Freshet energy was expressly  
5                   considered in developing the Clean Power Call request  
6                   for proposals. In particular, the delivery table set  
7                   out in the electricity purchase agreement term sheet  
8                   considers the time value of the energy through the  
9                   time of the delivery table. And the reference for  
10                  that is Appendix M, Exhibit B-1-1, pages 28 and 29.

11                  This delivery table, or 3-by-12 table as it  
12                  was referred to in the oral testimony phase of the  
13                  LTAP, found at page 28 of Appendix M, is designed to  
14                  incent IPPs to supply in the higher need periods.  
15                  Thus, there is a price premium during the November to  
16                  March period. Conversely, there is a price discount  
17                  during the lower demand months of April to July.

18                  Let's be clear. B.C. Hydro has requested  
19                  endorsement of the annual Clean Power Call volumes.  
20                  In my respectful submission, the Commission would be  
21                  reaching a long way into B.C. Hydro' management of the  
22                  system without any evidence if it were to modify the  
23                  Clean Power Call volumes based on intra-year energy  
24                  shapes.

25                  Let me now turn to the second endorsement,  
26                  which relates to the clean or renewable requirement.

1 As set out at page 167 of B.C. Hydro's final argument,  
2 B.C. Hydro's evidence is clear. A Clean Power Call is  
3 expected to be cost-effective as compared to an all-  
4 source call. In addition, a Clean Call supports the  
5 government's energy objectives set out in Section 1 of  
6 the *Utilities Commission Act*, to encourage public  
7 utilities to acquire electricity from clean or  
8 renewable sources. Further, the Call also supports  
9 the 2007 energy plan objectives.

10 **Proceeding Time 10:08 a.m. T16**

11 I would also refer the Commission Panel to  
12 page 6 of B.C. Hydro's reply argument. No intervenor  
13 has opposed the clean or renewable requirement and  
14 several explicitly support it.

15 If there are no questions, those conclude  
16 my submissions on item 3.

17 COMMISSIONER MILBOURNE: One point of clarification. I  
18 probably should know the answer to this. The 2100 or  
19 the 3,000, whichever one you want, that's firm energy,  
20 is it not?

21 MR. GODSOE: Yes.

22 COMMISSIONER MILBOURNE: So help me understand how that  
23 fits with aggregating intermittent resources.

24 MR. GODSOE: So as I referred to you in Chapter 5, what  
25 B.C. Hydro did was aggregate a number of clean energy  
26 sources with different profiles and through that

1 aggregation and through its FELCC studies determined  
2 the firm component of those sources and then compared  
3 them to thermal sources.

4 Does that answer your question? You look--

5 COMMISSIONER MILBOURNE: I'll leave it at that.

6 The second question I have relates to your  
7 comment about "the commercial terms of the Clean Power  
8 Call incenting IPPs to deliver". Could you tell me if  
9 my understanding that the IPPs that have responded to  
10 the Clean Power Call don't have any control over when  
11 their power becomes available is correct or not? That  
12 they are dependent on when the rivers run and when the  
13 wind blows and they have no ability to store and  
14 otherwise control the delivery of that energy?

15 MR. GODSOE: Okay, we're quickly getting into evidence,  
16 but let me draw on the argument on this. I think the  
17 evidence is clear that different clean resources in  
18 different regions have different profiles. Broadly  
19 speaking, while it's true an intermittent resource  
20 can't control the flow, we're simply incenting to the  
21 extent possible for delivering in the time periods  
22 where we actually need the energy, where we have a  
23 strong demand. The freshet energy really is the big  
24 problem here, and so that's why that 3 by 12 table is  
25 there, is to incent delivery, to the extent possible,  
26 during months when B.C. Hydro thinks the energy is

1 higher-value.

2 COMMISSIONER MILBOURNE: Not to be argumentative, but to  
3 incent, to represent something as an incentive when  
4 there is no ability to respond to the incentive, I  
5 have a bit of a problem with.

6 THE CHAIRPERSON: Well let me -- I'll give evidence then,  
7 because I do remember Ms. Van Ruyven, and I stand to  
8 be corrected if it was Ms. Van Ruyven or not,  
9 mentioned the concept of head ponds or something, as a  
10 way that you could conceivably incent run of river  
11 hydro to deliver more. That, I think, is the only  
12 piece of evidence we had on that.

13 MR. GODSOE: I just -- I don't want to be in the position  
14 of giving further evidence, so I'm going to let the  
15 record speak for itself on this.

16 THE CHAIRPERSON: Do you have, Panel, 124.2 in front of  
17 you, or handy to you?

18 MR. GODSOE: I do.

19 THE CHAIRPERSON: I guess the reason, and I think I tried  
20 to have a conversation in this regard with Mr.  
21 Reimann, is that the power you acquire in the DSM, as  
22 you point out, have a different load profile, I guess,  
23 than the load growth. I'm wondering if that doesn't  
24 imply that there should be some recognition of the  
25 cost of the firm capacity to firm this up.

26

**Proceeding Time 10:13 a.m. T17**

1 MR. GODSOE: I'm not clear from your question whether  
2 you're talking about wind or DSM. Wind, we clearly do  
3 have a cost integration figure in Appendix M.

4 THE CHAIRPERSON: No, I'm just looking at the numbers as  
5 they fall out, and I mean, the -- it is clear that,  
6 based on your response to 124.2, that you have a mis-  
7 match. And the mis-match has to be addressed by  
8 shaping and storage and things like that. And I'm not  
9 sure if that cost is -- when you say that you compared  
10 the cost of a clean portfolio and a non-clean  
11 portfolio, whether that cost was factored in.

12 MR. GODSOE: It was explicitly modeled in Chapter 5.

13 THE CHAIRPERSON: Thank you. I think that takes care of  
14 that.

15 So we'll break for 15 minutes, then.

16 **(PROCEEDINGS ADJOURNED AT 10:15 A.M.)**

17 **(PROCEEDINGS RESUMED AT 10:28 A.M.)** **T18/19**

18 THE CHAIRPERSON: Please be seated.

19 Okay. Having heard from B.C. Hydro, then,  
20 on item 3 can we hear from those intervenors who wish  
21 to support B.C. Hydro's --

22 MR. BOIS: Good morning, Mr. Chairman, Commissioners.

23 THE CHAIRPERSON: Mr. Bois.

24 **ARGUMENT BY MR. BOIS ON ITEM #3:**

25 MR. BOIS: I just have a brief remark, really, it's quite  
26 short.

1                   B.C. Hydro's load forecast indicates that  
2                   the winter months results in the highest demand for  
3                   its customers. And it also supports the high -- the  
4                   commonly accepted belief that wind, particularly in  
5                   the north and on the north coast, generates the  
6                   highest power curve during the winter months. So  
7                   NaiKun Wind Energy is shape-advantaged, if you will,  
8                   and with respect to B.C. Hydro customer load profile,  
9                   because our peak energy cycle is complementary to and  
10                  provides needed energy for B.C. Hydro's customers at  
11                  times when their demands are the highest, and the  
12                  water levels in the reservoirs are typically their  
13                  lowest. And this is one of the reasons why NaiKun has  
14                  chosen to develop its north coast project.

15                   Thus in NaiKun's view, B.C. Hydro -- it  
16                   supports B.C. Hydro's view the seasonal differences  
17                   are and should be taken into account.

18                   Those are my submissions. Thank you.

19 THE CHAIRPERSON: Thank you.

20 MR. BOIS: Subject to any questions.

21 THE CHAIRPERSON: Yes. No.

22 MR. BOIS: Thank you.

23 **ARGUMENT BY MR. WALLACE ON ITEM #3:**

24 MR. WALLACE: We were having an argument back there about  
25 who supported most strongly for getting up next. We  
26 got it settled, I think.

1                   Mr. Chairman, JIESC supports the proposed  
2                   price differentials for delivered electricity. In  
3                   response to Commissioner Milbourne, while it may be  
4                   true that the price differentials don't incent an  
5                   individual project to deliver, because they have no  
6                   control to deliver, it's the customer's hope that they  
7                   will incent the development of those projects or  
8                   resources that can deliver off the freshet period in  
9                   particular. And for example, in the figures put out  
10                  in BCUC IR 1.24.2, presumably wind will be more  
11                  rewarded for the fact that it's delivering on a more  
12                  even basis than would be small hydro, and we believe  
13                  that is appropriate.

14                                   Thank you.

15 THE CHAIRPERSON:    Thank you, Mr. Wallace.

16 **ARGUMENT BY MR. AUSTIN ON ITEM #3:**

17 MR. AUSTIN:        The IPPBC's support for B.C. Hydro's  
18                   position is a lot more complicated.

19                                   With respect to the concept of incentives,  
20                   that's the one I'd like to deal with first, is, the  
21                   contract was not designed to incent IPPs to do certain  
22                   things. The contract is structured on the basis of  
23                   concrete goal posts that are concreted into the ground  
24                   to the depth of 500 metres. They don't move. You  
25                   have to design and build your project and operate your  
26                   project in accordance with the contract, or you will

1 suffer severe financial penalties, whether it's a  
2 system -- if B.C. Hydro wants to call it incentive,  
3 that's fine, but the IPPs look upon it as penalties.

4 And in relation to question number 3, and  
5 Exhibit B-12, Panel IR 124.2, the answers and  
6 responses to the profiles of how the energy will be  
7 delivered are not necessarily those that will be bid.  
8 Because you can have a situation on the run of river  
9 side where somebody may be able to create a larger  
10 head pond and have some ability to store. There is  
11 also the ability to say, for example, have a lake  
12 within the watershed that may be able to be utilized  
13 as storage by building a control structure. With  
14 respect to wind, the IPPBC is not sure where B.C.  
15 Hydro got the delivery profiles for wind. They  
16 probably came out of the Garrard-Hassan study, but  
17 they're not necessarily correct. The only way to find  
18 out exactly what the profiles will be is to conduct a  
19 competitive bid process, and look at what each IPP  
20 thinks it's going to be able to deliver.

21 So you may have certain wind sites, say for  
22 example in the Peace, that don't match the Garrard-  
23 Hassan profile, if that's what was used. And you just  
24 heard from NaiKun, saying, "Well, our profile is  
25 different again."

26

**Proceeding Time 10:32 a.m. T20**

1                   And I think the key thing to look at in  
2                   terms of this whole area is Exhibit C17-17, and this  
3                   is an information request that was responded to by  
4                   B.C. Hydro by a question put by Commissioner Milborne  
5                   in the revenue requirements hearing, and the IPPBC  
6                   filed it is Exhibit C-17.    And if I may, I just want  
7                   to go through a little bit of it, and it won't take  
8                   too long to go through it on the record, just so you  
9                   have a sense of what it's saying.

10                                 First of all:

11                                 "B.C. Hydro optimizes the operation of its  
12                                 system based on forecasts of load, inflow  
13                                 and market prices."

14                   So the first concept is B.C. Hydro is going to be  
15                   optimizing its system.    So the concept of reservoir  
16                   storage and fluctuations is as much a part of inflows  
17                   as it is about the pattern of B.C. Hydro's sales.    So  
18                   that's another important point that will come up again  
19                   in another question, but it's optimizing its system on  
20                   a financial basis.    So what the reservoirs levels look  
21                   like can often be a function of how much B.C. Hydro  
22                   has sold domestically and also into the export market.

23                                 And it says:

24                                 "...as well as forecast availability of all  
25                                 resources included IPP purchases."

26                   So that it knows what kind of profile it's got from

1           IPPs and what goes -- comes in, and that's highlighted  
2           in the answer, and that's coming up.

3           "This optimization also takes into account  
4           B.C. Hydro's licences, coordination and  
5           operating agreements as well as the Columbia  
6           Treaty and water use plans and explicitly  
7           considers the uncertainty in inflows and  
8           forward prices in the process."

9           So all that is mixed into where the reservoir levels  
10          will be at any point in time in any given year. It's  
11          not -- the system is not run strictly on the basis of  
12          a critical water sequence.

13          "The optimization is implemented by  
14          specifying price signals for releases from  
15          generating plants, production from thermal  
16          plants and purchases and spot market.  
17          System resources that are surplus to  
18          domestic needs are made available to Powerex  
19          for trade."

20          So that just emphasizes that point. Your reservoir  
21          levels are going to be a function of the optimization.

22          "Under some conditions, for example during  
23          high inflows and/or low market prices, B.C.  
24          Hydro will attempt to refill its system  
25          reservoirs."

26          So there will be many years where this so-called

1 surplus generation, surplus generation or energy from  
2 IPPs is not a problem for B.C. Hydro. As a matter of  
3 fact, the evidence will show that for the most part it  
4 isn't.

5 "However, an unexpected change in inflow  
6 pattern due to, for example, sudden weather  
7 changes, may cause the need for system sales  
8 and/or spill. Such conditions can happen  
9 regardless of the existence of IPP  
10 purchases."

11 So this whole idea that IPP purchases are this huge  
12 problem during the freshet has really become a myth.

13 The other thing is if you look at what B.C.  
14 Hydro's forecast requirements from the IPP sector are,  
15 of roughly net 2,000 gigawatt hours, you divide that  
16 by two and you get maybe 1,000 gigawatt hours of  
17 spring freshet and 1,000 of wind, and this is just a  
18 hypothetical example. You put that over B.C. Hydro's  
19 total system requirements of 60,000 Gwh and you can  
20 see that the percentages are extremely small.

21 "Such conditions can happen regardless of  
22 existence of IPP purchases. These sales or  
23 spills, if they occur, will typically be  
24 after the freshet low-price period when  
25 system reservoirs are close to full."

26 So what you have to do there is look at attachment 1

1 to IPPBC IR1.19.1 which just shows you system storage  
2 levels in graphic form over a ten-year period. And  
3 you will see that in the ten-year period that's shown,  
4 there was only a spill once in ten years.

5 So it's very important to remember that  
6 through the optimization process, B.C. Hydro has got  
7 flexibility in terms of what it's reservoir levels  
8 are.

9 Now, this question goes on to say, and this  
10 is a very important point:

11 "The amount of energy provided by IPPs per  
12 Table 3-4 of the RRA is 8,593 gigawatts  
13 hours and 9,516 gigawatt respectively for  
14 F09 and F10. In the evidentiary updates,  
15 the amount is increased by 300 gigawatt  
16 hours in F09 due to the addition of the  
17 expected Alcan Tier 2 energy, and decreased  
18 by the same amount in F10 due to forecast  
19 IPP attrition."

20 But the point -- and here's the key point. It says:

21 "A large portion of this IPP energy..."

22 **Proceeding Time 10:37 a.m. T21**

23 And in this answer B.C. Hydro says it's approximately  
24 70 percent. The IPPBC thinks it's actually higher  
25 than that, more like 70 --

26 "...comes from projects that have

1 characteristics that are complementary to  
2 the B.C. Hydro generation profile."

3 In other words, they're not coming in in the spring  
4 freshet period for the most part.

5 "For example, B.C. Hydro has contracts with  
6 Island Co-Gen and McMahon Thermal Co-  
7 Generation projects to re-dispatch  
8 production during periods of low market  
9 prices, while generation from Arrow Lakes  
10 Hydro, Brilliant Expansion and Alcan are  
11 shaped by storage reservoirs."

12 So the largest amount of energy that comes from IPPs  
13 is actually in a profile that's not seasonal as per  
14 the question.

15 Then it goes on to say,

16 "For the test period the impact of the IPP  
17 energy purchases relative to the market will  
18 depend on the particular circumstances of  
19 inflows and market prices and may be  
20 financially positive or negative to the  
21 ratepayer."

22 So again there's this concept of all this energy from  
23 the Call is going to come in in the freshet period is  
24 simply not correct, and it's also simply not correct  
25 that it can't be handled.

26 The answer then goes on to say,

1 "It should be noted that should the amount  
2 of future IPP purchases increase  
3 significantly during the freshet period  
4 there may be times -- may be times when B.C.  
5 Hydro is unable to absorb this energy and  
6 some of that energy will be needed to sold  
7 [sic] into the market. The design of future  
8 energy calls and the LTAP takes this  
9 possibility into consideration and shapes  
10 the prices paid of firm and non-firm energy  
11 deliveries accordingly."

12 The sample form of -- or specimen form of  
13 electricity purchase agreement for the Call is  
14 Attachment 1 to B.C. Hydro's response to IPPBC IR  
15 2.10.1. I'm not going to go through it in full detail  
16 but there's a few sections that should be brought to  
17 the Panel's attention because they clearly anticipate  
18 the concept of deliveries during the freshet energy  
19 and clearly put in penalties for delivery of certain  
20 amounts or certain quantities during the freshet  
21 period. For example, section 7.9. An IPP can't  
22 delivery seasonably firm energy in amount exceeding  
23 one-quarter of the annual firm energy amount.

24 So in other words, you just can't go out  
25 and design and build a project that will deliver 75  
26 percent of the annual firm energy output during the

1       spring freshet period. It's not going to -- in a  
2       sense it's not going to happen, and if you do the  
3       prices you'd get paid are going to be very, very low  
4       and it will be financially impossible to go forward  
5       with a project.

6                Section 7.10 is affectionately known as the  
7       ratchet clause. The five-year review and adjustment  
8       of seasonally firm energy amounts. So if your  
9       deliveries aren't what you say they're going to be,  
10      then you're continually going to be ratcheted down in  
11      terms of how much you're going to get paid for firm.  
12      Again there is this basic misunderstanding about firm  
13      and non-firm. What IPPs need to make their project  
14      work is a combination of firm and non-firm to make it  
15      financially viable.

16              If you start to get too much non-firm  
17      energy out of your project it's not going to be  
18      financially viable. It's just not going to be  
19      competitive in any kind of Call process. Often when  
20      the figures are publicly announced for the cost of IPP  
21      projects, the emphasis is always on what is paid for  
22      firm. Meanwhile there is this whole -- there may be a  
23      significant amount of non-firm energy that's at a much  
24      lower price that B.C. Hydro can actually store in most  
25      circumstances and then essentially turn it into firm  
26      energy, but for the purposes of the announcement it

1 always seems the emphasis is on what the firm energy  
2 cost or price is.

3 In Section 13.2 of the agreement there are  
4 liquidated damages for delivery shortfalls. So if you  
5 say you're going to have a certain amount of firm  
6 energy deliveries and you don't make it subject to the  
7 parameters that are set out in the agreement, you're  
8 looking at liquidated damages.

9 In Appendix 2 of the Electricity Purchase  
10 Agreement, this is the energy profile that the IPP has  
11 to set out and in a sense its payments are going to be  
12 -- and penalties are going to be based on the energy  
13 profile. There's the whole concept in Appendix 3 of  
14 energy price seasonally firm, so that's an important  
15 point, and then also there's the concept, and I've  
16 touched on that briefly in Appendix 3 of non-firm  
17 energy.

18 **Proceeding Time 10:42 a.m. T22**

19 So there are many provisions in the  
20 electricity purchase agreement that deal with  
21 deliveries, and that is tied back to the answer that  
22 B.C. Hydro gave in the revenue requirements hearing,  
23 saying "We structure the contract according to the  
24 profile that essentially we need, and we want," and  
25 they're certainly aware of it. It's not as if all of  
26 a sudden there's going to be all this electricity

1 during the freshet period that B.C. Hydro's not going  
2 to be able to handle.

3 And finally, in Schedule A to Appendix 3,  
4 there is the table -- and you can look at the table,  
5 and you can see what the differences in prices are  
6 going to be for the firm energy. And also, there is  
7 the non -- there is also some provisions in there with  
8 respect to non-firm energy. But it's a highly complex  
9 contract, with a multiple number of features, that are  
10 concrete goal posts, concreted 500 metres into the  
11 ground, and they are not incentives. They are -- this  
12 is what we need, this is what we want, and if you  
13 don't deliver it, then you're not going to have a  
14 financially viable project.

15 And subject to any other questions, those  
16 are my submissions.

17 THE CHAIRPERSON: All right. Thank you, Mr. Austin.

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

19 THE CHAIRPERSON: Mr. Weaver, are you for or opposed?

20 MR. WEAVER: We are for, Mr. Chairman.

21 THE CHAIRPERSON: Okay, thanks.

22 **ARGUMENT BY MR. WEAVER ON ITEM #3:**

23 MR. WEAVER: In a less complicated and more  
24 straightforward way.

25 We do -- let me just go to the question  
26 first, Mr. Chairman, and because I do have a comment.

1 Most of the commentators before me have spoken about  
2 IPP energy production. But the question, given the  
3 seasonal differences between IPP energy production and  
4 B.C. Hydro's customer requirements demonstrated by  
5 Exhibit B-12, I just wanted to take the opportunity to  
6 highlight the terms "customer requirements", would  
7 take into account that this Commission's first  
8 requirement is to pursue all cost-effective DSM. And  
9 I would just make that point in terms of the  
10 discussion before us, dealt primarily with IPP  
11 production. We think for the purpose of the Call in  
12 this proceeding we'd agree with Mr. Godsoe's comments  
13 that all has probably been done, they've taken the  
14 freshet issue into account, they've taken the  
15 aggregation of intermittent supply to get firm  
16 requirements into account. And what we would simply  
17 say in terms of on a go-forward basis and future  
18 LTAPs, and 20-year to 30-year terms, that there  
19 probably needs to be improvement around the  
20 comparative values of DSM to IPP supply, and we're not  
21 sure in this proceeding there's been enough looked at  
22 in terms of all costs associated with IPP supply.

23 And as we move forward with DSM being a  
24 more important part of B.C. Hydro's portfolio, we  
25 would look to more accurate and more in-depth  
26 assessment as to whether we're truly capturing all

1 costs associated with IPP supply which were borne by  
2 customers and not necessarily captured in the existing  
3 LTAP. But for the purpose of this LTAP, we are  
4 satisfied that progress has been made.

5 Thank you.

6 THE CHAIRPERSON: Any questions? Thank you, Mr. Weafer.  
7 Mr. Tennant?

8 **ARGUMENT BY MR. TENNANT ON ITEM #3:**

9 MR. TENNANT: I believe that to solve the problem of  
10 seasonal intermittency, the renewable, IPP industry  
11 needs to be integrated into massive pump storage,  
12 hydro energy storage facilities that will absorb and  
13 condition the power so that only dispatchable power  
14 comes out. Much like natural gas has to be processed  
15 at the wellhead to develop a consistent product.

16 You may be aware that in Japan all their  
17 wind generation is integrated into the storage before  
18 it goes into the grid, where it is used primarily for  
19 load leveling of gas turbines to achieve better  
20 efficiency and less greenhouse gas emissions.

21 This seasonality issue was also the subject  
22 of a recent white paper that was published in the  
23 March issue of the *Journal of the Institute of*  
24 *American Chemical Engineers.*"

25 MR. GODSOE: Mr. Chairman, I am going to object to this.  
26 We're hearing evidence in an oral argument phase, and

1 I think it's inappropriate.

2 THE CHAIRPERSON: You should not introduce new evidence  
3 at this time, Mr. Tennant.

4 MR. TENNANT: Okay, so that would be the journal that I'm  
5 talking about.

6 So, if you have, for example, a 100  
7 megawatt wind farm, what you need is an energy storage  
8 plant with 20 megawatts of capacity in order to  
9 economically condition the non-dispatchable raw  
10 renewable power into a containerized product package  
11 that is dispatchable.

12 For the generators employing this ratio,  
13 they end up with converting almost all of their power  
14 into a product with a higher market value, which in  
15 turn decreases the need for the high rate long term  
16 EPAs and thereby simplifies the regulatory process.

17 **Proceeding Time 10:48 a.m. T23**

18 Such integration also makes for a much more  
19 robust transmission grid that is much more economic to  
20 build and run. Therefore, I would urge the Commission  
21 to consider that all renewable generation, including  
22 wind and run of river be dispatched only by massive  
23 energy storage facilities, because this would largely  
24 relieve the Commission of taking the seasonal  
25 production difference into account when considering  
26 endorsements for any clean energy Call.

1 THE CHAIRPERSON: Thank you.

2 MR. TENNANT: Thank you.

3 **ARGUMENT BY MR. ANDREWS ON ITEM #3:**

4 MR. ANDREWS: BCSEA and SCBC supports B.C. Hydro's  
5 position on question 3. BCSEA understands that the  
6 fundamental purpose of the seasonal price  
7 differentials in the clean Call terms is to affect the  
8 selection of projects rather than to incent behaviour  
9 within a completed EPA. So in essence the seasonal  
10 price differentials level the playing field between  
11 one IPP project and another, so as to more closely  
12 correspond to the value of the produce to B.C. Hydro.  
13 And again, BCSEA does not view these price  
14 differentials as incentive in the sense of causing on-  
15 going operational decisions by the successful IPPs.

16 Subject to any questions, those are my  
17 comments.

18 THE CHAIRPERSON: Thank you, Mr. Andrews.

19 **ARGUMENT BY MR. BERTSCH ON ITEM #3:**

20 MR. BERTSCH: We support that seasonal differences should  
21 be taken into account into the pricing. We believe  
22 this will help towards a more efficient overall system  
23 and what will help encourage the appropriate types of  
24 IPPs for the B.C. Hydro system, not only now but also  
25 in the future.

26 Those are our comments, thank you.

1 THE CHAIRPERSON: Thank you, Mr. Bertsch.

2 **ARGUMENT BY MS. WORTH ON ITEM #3:**

3 MS. WORTH: In BCOAPO's respectful submission, the  
4 seasonal differences between IPP energy production and  
5 B.C. Hydro's peak season are not relevant to the  
6 second endorsement that B.C. Hydro is speaking, that  
7 is the cleaner renewable eligibility requirement, but  
8 my clients do see the seasonal differences between IPP  
9 Energy production and the peak season as being a  
10 relevant consideration for this panel to take into  
11 account when making the determination regarding the  
12 target level endorsement B.C. Hydro is currently  
13 seeking.

14 We do note that the Commission Panel should  
15 take notice of the fact that B.C. Hydro has built into  
16 its evaluation and valuation of energy, the value to  
17 the system, depending on that energy's firmness and  
18 delivery timing, but we do not feel that that  
19 precludes this Commission Panel from taking into  
20 account all relevant facts when determining whether  
21 this energy will be valuable to the ratepayers in  
22 general.

23 Thank you. Subject to any questions?

24 THE CHAIRPERSON: Thank you.

25 MS. WORTH: Thank you.

26 THE CHAIRPERSON: Anyone else wish to address this? Mr.

1 Oulton.

2 **ARGUMENT BY MR. OULTON ON ITEM #3:**

3 MR. OULTON: Good morning, Mr. Chair, Commissioner.

4 I'm not sure whether COPE can be seen to be  
5 supporting what B.C. Hydro says, because we agree with  
6 certain things, that at heart, this is a Call design  
7 issue, but COPE does submit that the seasonal  
8 variations between the IPP energy production and B.C.  
9 Hydro's customer requirements is a relevant factor  
10 that must be considered in determining whether the  
11 endorsements, and in particular I agree with what my  
12 friend Ms. Worth said just a moment ago, that COPE  
13 takes no position on the endorsement of the clean  
14 eligibility requirement, I think is how it's been  
15 phrased.

16 **Proceeding Time 10:53 a.m. T24**

17 COPE does, as indicated in its written  
18 submissions, take a position contrary to B.C. Hydro's  
19 on the endorsement of the target, and it's in that  
20 regard that COPE says this submission is relevant, and  
21 it flows from COPE's concern that's expressed in its  
22 written argument, and I won't go back through it, but  
23 just that if this is a Call design issue, this is a  
24 factor that ultimately must be addressed, I would  
25 think, is a Section 71-type proceeding where you're  
26 considering the overall public interest of the

1 contracts awarded and whether or not they're cost  
2 effective, and that falls within that.

3 COPE's concern, as set out in its written  
4 submissions, is that the endorsement that's being  
5 sought by B.C. Hydro will limit or somehow fetter the  
6 Commission's jurisdiction in that regard. And COPE  
7 says that this Commission must -- there's a real and  
8 present danger if the endorsement is sought on the  
9 terms that B.C. Hydro says that the subsequent  
10 proceeding will somehow be limited in a manner that  
11 doesn't permit a full consideration of the impacts of  
12 these seasonal differentials.

13 In that regard, I acknowledge what my  
14 friend said for B.C. Hydro and what some of the other  
15 parties have said this morning, that B.C. Hydro has  
16 taken some steps that have been talked about at length  
17 in this proceeding to create price incentives and the  
18 like, to create incentives and to account for  
19 seasonality variations. However, in COPE's submission  
20 that doesn't end the issue.

21 At the end of the day Section 71, if a  
22 proceeding takes place under that, there's going to be  
23 a determination about whether or not the proposed  
24 contract terms adequately reflect or address the  
25 seasonal differences, and in particular the value or  
26 cost to B.C. Hydro of those. In that regard COPE just

1 wishes to point out there's two things that  
2 immediately come to mind dealing with seasonality that  
3 B.C. Hydro admitted that they have not fully accounted  
4 for in their LTAP. The first being that the shaping  
5 issue in particular, I'm thinking of the wind  
6 integration cost issue, and B.C. Hydro admitted that  
7 their formal analysis and the extensive analysis that  
8 they refer to, I believe it's in Appendix J, I may  
9 have that reference incorrect in my head, but it's  
10 incomplete.

11 The transcript reference for that is Volume  
12 9, page 1474, line 22 through to the following page,  
13 1475, line 14. And nor has B.C. Hydro included any  
14 consideration for the value of dispatchability which,  
15 given the seasonal nature of the IPP resources, is  
16 something that they don't have. The transcript  
17 reference for that is Volume 9, page 1469, line 18 to  
18 page 1470, line 15.

19 So at the end of the day what COPE's  
20 submission is here is that the seasonal difference is  
21 something that this Commission ought to consider in  
22 determining whether or not to give the endorsement  
23 that B.C. Hydro seeks. In that regard it must be  
24 remembered that that's what we're talking about here,  
25 an endorsement of the clean Call. If this Commission  
26 does not endorse the amount sought by B.C. Hydro right

1           now, it doesn't preclude them from proceeding with the  
2           clean Call and addressing all of these issues in a  
3           subsequent Section 71 consideration of any electricity  
4           purchase agreements entered into under the Call.

5                         Subject to any questions, those are my  
6           submissions.

7 THE CHAIRPERSON:     Thank you, Mr. Oulton.

8 MR. OULTON:         Thank you.

9 THE CHAIRPERSON:     Any intervenors wish to speak to this  
10           matter?

11                         Mr. Godsoe?

12 MR. GODSOE:         I have no further submissions on item 3.

13 THE CHAIRPERSON:     Thank you. Doubtless preparing your  
14           energy for item 4, are you?

15 **ARGUMENT BY MR. GODSOE ON ITEM #4:**

16 MR. GODSOE:         Moving to item 4, my submissions on item 4  
17           are relatively short because B.C. Hydro has, through  
18           three IR responses, which I'm going to name in a  
19           minute, clearly set out its interpretation of "capable  
20           of", as used in Section 3 of Special Direction 10.

21   **Proceeding Time 10:57 a.m. T25**

22                         Before I get to our definition, two other  
23           definitions have been offered. First, the definition  
24           in the 2004 Integrated Electricity Plan, and second,  
25           the *Concise Oxford English Dictionary* referred to in  
26           IPPBC's letter of 29 May 2009.

1                   In my submission, the definition in the  
2                   2004 Integrated Electricity Plan is very high-level  
3                   and is not sufficiently complete for reasons I'll get  
4                   to in a moment.

5                   The *Concise Oxford English Dictionary*  
6                   defines "capable of" as:

7                   "Having the ability or quality necessary to  
8                   do something."

9                   And I think that is the essence of the meaning.  
10                  However, the Commission must turn its attention to, in  
11                  my respectful submission, the entire language found in  
12                  Section 3(d) of Special Direction 10.

13                  "By becoming capable of meeting by 2016 and  
14                  each year thereafter ..."

15                  "Each year thereafter" is critical. Thus, capability  
16                  is an ongoing obligation, and this is where we submit  
17                  the concept of social licence is very important. Just  
18                  because a particular generating facility, and I won't  
19                  name it because I don't want to get back into the  
20                  debate on it, has an existing air emission permit  
21                  doesn't mean that it's capable of each year  
22                  thereafter. So you must look at the text of Special  
23                  Direction 10.

24                  As set out in Section 6.2.2 of B.C. Hydro's  
25                  final argument, and Section 6.2.2.1 of its reply  
26                  argument, B.C. Hydro's interpretation is found in

1 three IR responses. First, Exhibit B-3, response to  
2 BCUC IR 1.96.1. Second, Exhibit B-3, B.C. Hydro  
3 response to IPPBC IR 1.7.1, and finally, Exhibit B-4,  
4 B.C. Hydro response to BCUC IR 2.215.2.

5 For the benefit of the room, there were two  
6 main criteria B.C. Hydro states a B.C.-based  
7 electricity generating facility must meet in order to  
8 be capable of meeting B.C. Hydro's electricity supply  
9 obligations. First, the facility must have the  
10 technical ability to meet B.C. Hydro's electricity  
11 supply obligations and, second, the facility must have  
12 the ability to be permitted, or the ability to  
13 maintain existing permits.

14 Now, there was a third criterion mentioned  
15 in Exhibit B-3, B.C. Hydro's response to Commission IR  
16 1.96.1. That third criterion was:

17 "Economically capable of meeting B.C.  
18 Hydro's electricity supply obligations."

19 However, as explained in the response to BCUC IR  
20 1.96.1, this additional criterion was necessary to  
21 ensure computer simulations that function with perfect  
22 foresight of future events, more appropriately reflect  
23 real-world conditions. And by "perfect foresight" I  
24 mean exact knowledge of the future.

25 In particular, the computer simulations in  
26 the 2008 LTAP selected B.C.-based simple cycle gas

1 turbines based on economics that included the models'  
2 perfect foresight that the units would never ever run.  
3 So that third criterion, in B.C. Hydro's submission,  
4 is of a lesser importance than the first two I  
5 mentioned, and it was driven by the computer modeling  
6 found into Section -- in Chapter 5 of the 2008 LTAP.

7 And if there are no questions, those  
8 conclude my submissions on item 4.

9 THE CHAIRPERSON: Mr. Wallace? Thank you, Mr. Godsoe.

10 **ARGUMENT BY MR. WALLACE ON ITEM #4:**

11 MR. WALLACE: Mr. Chairman, a very brief -- very briefly,  
12 JIESC supports B.C. Hydro. It believes that "capable"  
13 means physically capable of meeting those criteria.  
14 It is self-sufficiency, and clearly it has to be able  
15 to meet that criterion. We don't think that it has to  
16 meet it -- well, it has to always be capable, and we  
17 take Mr. Godsoe's point there.

18 The only point I would make is that that  
19 does not preclude, if it's financially wiser  
20 temporarily to purchase elsewhere, that B.C. Hydro  
21 shouldn't do that. And I think it has been stated in  
22 terms of capability, not in terms of B.C. Hydro must  
23 generate all power within British Columbia. And  
24 accordingly, we think that distinction is important.

25 Thank you.

26 THE CHAIRPERSON: Thank you.

1 **Proceeding Time 11:03 a.m. T26**

2 **ARGUMENT BY MR. AUSTIN ON ITEM #4:**

3 MR. AUSTIN: The IPPBC's response is yet again a little  
4 bit more complicated.

5 In relation to the definition that attached  
6 to the Commission's letter of May 25<sup>th</sup>, which is  
7 Exhibit A-20, the IPPBC agrees with B.C. Hydro that  
8 it's not broad enough. The definition of capable or  
9 capability is simply not broad enough. It does not  
10 include the factors which B.C. Hydro cited and the  
11 IPPBC understands to be technical or engineering,  
12 social and economic.

13 At this point in time I'd just like to hand  
14 up the definition of "capable" out of the *Oxford*  
15 *English Dictionary*, but it's in the letter verbatim, I  
16 don't know whether you want it or not.

17 THE CHAIRPERSON: I don't think so.

18 MR. AUSTIN: Okay. And what the IPPBC's is concerned --

19 THE CHAIRPERSON: I'm sorry, yes, probably if you don't  
20 mind. Yes. Thank you.

21 So I get the definition of "Cape  
22 Gooseberry" as well as "capable".

23 MR. AUSTIN: Added bonus.

24 THE CHAIRPERSON: Yes.

25 MR. AUSTIN: And the definition in the *Concise Oxford*  
26 *English Dictionary* is about what most people in this

1 room would think it would be. In other words, you  
2 have to be able to do it. It's not theoretical, it's  
3 not on paper only. And as set out in the IPPBC's  
4 argument at length is the concept of a power plant on  
5 paper is not capable of meeting the requirements of SD  
6 No. 10. It has to be something that is a form of  
7 generation that is capable of meeting your  
8 requirements in SD10 in practical terms and not just  
9 in theory.

10 And certainly I am not going to go through  
11 all the arguments with respect to this so-called  
12 unnamed power plant, but it applies equally to all  
13 B.C. Hydro's generation facilities, or IPP generation.  
14 As you can see through my brief run-through of the  
15 clean power Call, the IPP generation is not  
16 theoretical. It has to be there, because if it is not  
17 there, there are penalties for not providing the firm  
18 generation. And the same type of standard has to be  
19 applied in terms of the assessment of B.C. Hydro's  
20 generation. It's not generation in theory only, it's  
21 -- I wanted at one point of time call it a paper power  
22 plant, but somebody might think we finally came up  
23 with the power plant that just burns paper. It's a  
24 paper plant on power -- a power plant on paper.

25 So that's the essence of the IPPBC's  
26 position with respect to capability. It's in all

1 senses, whether it is engineering, technical, whether  
2 it's financial, whether it's social, it is just not  
3 something that is pure theory for the purposes of a  
4 piece of paper that's handed in, in the course of a  
5 long-term acquisition plan hearing, or any other type  
6 of hearing.

7 And those are my submissions subject to any  
8 questions you might have.

9 COMMISSIONER MILBOURNE: I have one question. Are you  
10 talking about capable or capability?

11 MR. AUSTIN: Capable.

12 COMMISSIONER MILBOURNE: Because the term that I believe  
13 is specified or defined in the 2004 IEP is  
14 "capability".

15 MR. AUSTIN: It is, but the response is the same.

16 COMMISSIONER MILBOURNE: Well, perhaps, but then I would  
17 take you to your *Oxford English Dictionary* and if I'm  
18 allowed I'll look at the definition of "capability"  
19 there versus the definition of "capable". And it  
20 says:

21 "The power or ability to do something."

22 And then it's got an arrow and it says:

23 "An undeveloped or unused facility."

24 Which is something that is not used but it's capable  
25 of being used, as I understand it.

26 I'm just trying to understand whether your

1 point is around what the Panel asked about here, which  
2 is the definition of "capability" in a utility sense.

3 MR. AUSTIN: Well, when we looked at the definition of  
4 capability in the utility sense, it's not appropriate  
5 for the purposes of SD10.

6 COMMISSIONER MILBOURNE: Could you help me understand  
7 that? Because again, I'm not going to read it in the  
8 record, it's here. It says "Facilities" -- excuse me.

9 "Facilities that can be used under specified  
10 conditions for a given purpose."

11 That's what is in the 2004 Energy Plan.

12 **Proceeding Time 10:53 a.m. T24**

13 MR. AUSTIN: That's correct, and in SD10 it said,  
14 "As the Commission must use the criterion  
15 that the authority is to achieve energy and  
16 capacity self-sufficiency by becoming  
17 capable..."

18 So we're using the word "capable" as opposed to  
19 "capability".

20 So when you look at the definition that was  
21 attached to the letter, it's really in relation to  
22 under what special circumstances. That's not what  
23 SD10 is talking about. It doesn't say special  
24 circumstances under which it's capable. That's why  
25 the IPPBC has brought forward the definition of  
26 capable out of the *Concise Oxford Dictionary*.

1                   There is no list of special circumstances.  
2                   It's in all circumstances it's capable of doing what  
3                   it's supposed to do. It's not just limited  
4                   circumstances. And that's the difference between a  
5                   power plant on paper and a power plant that will  
6                   actually be able to do what it's claimed it can do,  
7                   which is produce energy. And in other circumstances  
8                   if that's part of the package, whether it can provide  
9                   the necessary capacity.

10 COMMISSIONER MILBOURNE: Not to labour it, but is there  
11                   anywhere in capable, your understanding of capable,  
12                   that says its has to be being used, that it can't be  
13                   in reserve? I believe the record in this proceeding  
14                   is fairly clear that notwithstanding SD10, there's no  
15                   requirement for B.C. Hydro to change its economically  
16                   sensible management of its facilities and where it  
17                   gets its energy from.

18 MR. AUSTIN: I certainly don't disagree with that, but it  
19                   becomes a point at which if something is capable but  
20                   let's say it's not going to be financially operable  
21                   because of its high cost, it makes the whole concept  
22                   of capable being totally superfluous. There is a  
23                   threshold that I would -- the IPPBC would agree that  
24                   we'll -- up to which something may not be used, but as  
25                   long as its actually physically capable of doing it,  
26                   then yes, it would agree that it's capable of doing

1           it. But if, for example on the financial side, if  
2           it's never going to be used because it's so  
3           financially unattractive to use it, it just makes a  
4           mockery of the self-sufficient requirements of SD10.

5 THE CHAIRPERSON: I thank you, Mr. Austin.

6 **ARGUMENT BY MR. WEAVER ON ITEM #4:**

7 MR. WEAVER: Mr. Chairman and members of the Panel, the  
8 CEC does not accept the utilization of the definition  
9 of capable which includes an economic test. That's a  
10 second test. That's a prudence test to be dealt with  
11 in a different stage by this Commission.

12                   The CEC submits that the term "capable" in  
13 SD10 has the normal utility meaning, which is has the  
14 capability to provide. The CEC submits that this  
15 means that B.C. Hydro must -- that the unit must have  
16 the physical, technical and legal ability to provide.  
17 There is no economic restriction. That again is a  
18 second step.

19                   Commissioner Milbourne, your question in  
20 terms of a unit, for example Burrard Thermal, a unit  
21 may be under repair and it's out of commission but  
22 it's still capable, may still come back into use, and  
23 Burrard is a good example of a facility, whether on  
24 paper or real, which at times is not economic but at  
25 other times, such as when gas prices come down, it's a  
26 very economic alternative for customers, particularly

1 in a peaking situation.

2 So we would adopt this definition, further  
3 in support of this is that which was put forward by  
4 Mr. Austin in terms of the dictionary definition.  
5 It's very clear, there's no economic restriction in  
6 the definition of capable, and there is no legislative  
7 direction to read economic into that term in Special  
8 Direction 10.

9 Those are my submissions.

10 THE CHAIRPERSON: Thank you, Mr. Weafer.

11 **ARGUMENT BY MS. WORTH ON ITEM #4:**

12 MS. WORTH: BCOAP's submissions in this regard are very  
13 similar to a number of the other intervenors, so I'll  
14 make it very brief.

15 We agree with the first two aspects of B.C.  
16 Hydro's definition.

17 **Proceeding Time 11:12 a.m. T28**

18 We agree with Mr. Weafer's submissions  
19 regarding the inappropriateness of the inclusion of  
20 the economic considerations in this definition. We  
21 see that the definition of "capable" requires only  
22 that B.C. Hydro be able to produce or procure the  
23 prescribed levels of energy by certain dates to be in  
24 compliance with SD10, not that they must actually  
25 generate that energy, or that they are required to do  
26 so when it is uneconomic.

1                   Basically, we see that "capable" is a  
2                   requirement that B.C. Hydro can physically produce  
3                   certain levels of energy, but not that it is obligated  
4                   to do so. And we see that as being consistent with  
5                   the definition of "firm energy capability" which is  
6                   found in SD10.

7                   Thank you. Any questions?

8 THE CHAIRPERSON: No.

9 MS. WORTH: No?

10 THE CHAIRPERSON: No, thank you, Ms. Worth. Thank you.

11 MS. WORTH: Thank you.

12 **ARGUMENT BY MR. ANDREWS ON ITEM #4:**

13 MR. ANDREWS: BCSEA/SCCBC support B.C. Hydro's position  
14                   on question 4. I would simply add to the points that  
15                   have been made previously that the Commission's  
16                   operating definition of "capable of", as used within  
17                   SD10, has to be arrived at in the context of SD10  
18                   itself. That is, it has to fit within the intention  
19                   of SD10.

20                   Subject to any questions, those are my  
21                   submissions.

22 THE CHAIRPERSON: Thank you, Mr. Andrews.

23 **ARGUMENT BY MR. TENNANT ON ITEM #4:**

24 MR. TENNANT: I'd like to make a reference to capability  
25                   in relation to capacity, in a specific power plant,  
26                   Jordan River, if I may. Jordan River has a generating

1 capacity of 170 megawatts, but it has a very low  
2 energy capability of about 242 gigawatt hours a year.  
3 And what this says to me is that capability is a very  
4 valuable commodity. And I would also like to say that  
5 basically Jordan River's being operated in a drought  
6 mode most of the time.

7 Thank you very much.

8 THE CHAIRPERSON: Thank you. Mr. Bertsch?

9 **ARGUMENT BY MR. BERTSCH ON ITEM #4:**

10 MR. BERTSCH: The word "capable", let's maybe go a little  
11 different direction and try an analogy. Let's say we  
12 were looking for a Porsche. I found one on the  
13 Internet, and it says "Porsche 9-11, 355 kilometres  
14 per hour capable." Now, would we run it at 355  
15 kilometers? I doubt it. But the point is, it's  
16 capable of doing so within a number of conditions.  
17 You realize that you will find very few places that  
18 have a road that you can actually do this. But it is  
19 capable.

20 In our case, we interpret SD10 that the  
21 system is capable of meeting electricity supply  
22 obligations under certain conditions. Yes, those  
23 conditions have to be defined, but we would agree that  
24 the definition is as B.C. Hydro is submitting.

25 So we really find that for a particular --  
26 the lack of other words, I think, is just as important

1 than the use of capable. Words such as "usually",  
2 "normally" were not used, and we think that is  
3 important, and clarifies the intent of the use of the  
4 words capable.

5 Thank you.

6 THE CHAIRPERSON: Thank you, Mr. Bertsch. Mr. Oulton?

7 **ARGUMENT BY MR. OULTON ON ITEM #4:**

8 MR. OULTON: I figured it had to be my turn because I  
9 think everybody else has spoken, but I -- as with the  
10 last issue, I'm a little -- I think the distinction  
11 between whether one is supporting B.C. Hydro or  
12 opposing their position is somewhat blurred on this  
13 issue.

14 **Proceeding Time 11:17 a.m. T29**

15 As I understand the question asked by the  
16 Commission, it's whether or not the Panel should  
17 consider the definition from the 2004 IEP. COPE's  
18 position on that is absolutely. COPE further submits  
19 that the definition set out in the 2004 IEP LTAP  
20 application is precisely what was intended by the use  
21 of "capable". It's speaks to the ability to generate  
22 energy over the course of the year, not whether or to  
23 what extend that capability is actually used in any  
24 given circumstance.

25 COPE further submits that this Commission  
26 ought properly to take into account the ordinary

1 meaning of the word "capable" as set out in the  
2 dictionary definition that my friend for the IPPBC  
3 handed up, and says that the IEP 2004 decision of  
4 capability is wholly is consistent with that meaning,  
5 which refers to something having the ability or  
6 quality necessary to do something.

7 In our submission there's nothing in the  
8 language of SD10 that imports any different meaning to  
9 the term "capable". It refers to having the ability  
10 to do it. My friend for B.C. Hydro and I may disagree  
11 about the weight that is to be given to the social  
12 licence evidence on the as heretofore unnamed  
13 facility, but that's an issue that we've dealt with in  
14 our written submissions and I don't purport to go  
15 there here.

16 My friend points to the use of "each and  
17 every year". Respectfully, in COPE's submission, that  
18 doesn't change the content of the meaning "capable".  
19 What the "each and every year" refers to is B.C.  
20 Hydro's obligation to be self-sufficient year after  
21 year. It's precise resource mix and capability of  
22 each of those resources that it looks to may change,  
23 in any given year. The issue is whether looking at  
24 its broad picture, it satisfies the definition by  
25 having resources that are capable of meeting it in any  
26 given year, and I don't think that that changes the

1 meaning of capable, and I would submit that it does  
2 not.

3 Other than that, picking up on a point that  
4 my friend Mr. Bertsch made about the language and the  
5 failure of the legislature, or the Lieutenant Governor  
6 in Council to use certain language such as "normally"  
7 or "usually" in SD10, it's our submission that if the  
8 government wanted to import a different definition  
9 from the ordinary meaning of "capable" it would have  
10 made that manifest in SD10, and having not done so,  
11 it's our submission that the definitions that we've  
12 speaking about this morning ought to be considered and  
13 are applicable.

14 Subject to any questions, those are my  
15 submissions on issue number four.

16 THE CHAIRPERSON: Thank you, Mr. Oulton

17 MR. OULTON: Thank you.

18 THE CHAIRPERSON: Mr. Godsoe, do you have any reply?

19 MR. GODSOE: I have no submissions in reply.

20 THE CHAIRPERSON: Item 5.

21 **ARGUMENT BY MR. GODSOE ON ITEM #5:**

22 MR. GODSOE: Item 5 asks four separate questions, and in  
23 my submission B.C. Hydro squarely addressed each and  
24 every one, so I'm going to try to be brief, but there  
25 are four questions and I want to walk through each of  
26 them.

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The first question asked:

"To what extent should the Commission use the 2007 Energy Plan 'as a contextual aid' to ensure that the 2008 LTAP complies with the direction given to the Commission by Special Direction 10?"

B.C. Hydro has clearly laid out it's position on the 2007 Energy Plan. There are two main points. First, it is B.C. Hydro's position that the 2007 Energy Plan "should be accorded significant weight", and that is found in Section 2.2 of B.C. Hydro's final argument and in particular pages 46 to 48.

Second, B.C. Hydro also stated that the 2000 [*sic*] Energy Plan is not legally binding on the Commission and I would refer the Commission to page 46 and Table 2 in B.C. Hydro's final argument.

So let me come back to point one, because I think that's what you were asking. As Exhibit B-4, response to COPE IR2.1.4 B.C. Hydro cited case law that concluded legislative history is not a good indicator of "the intent of the government". And I haven't produced those cases here because I think it is beyond debate that the 2007 Energy Plan reflects the intent of the B.C. government.

**Proceeding Time 11:22 a.m. T30**

1                   For example, it contains an opening message  
2                   from both the Premier and the B.C. Minister of Energy,  
3                   Mines and Petroleum Resources. So I submit it's  
4                   beyond dispute that the 2007 Energy Plan clearly  
5                   reflects the intent of the B.C. government.

6                   Also, as recognized by the Chair in these  
7                   proceedings, the 2007 Energy Plan should be read in  
8                   conjunction with the shareholder's letter of  
9                   expectations. And our argument on that is found at  
10                  pages 47 and 48 of the final argument. As noted by  
11                  Mr. Elton, the shareholder letter of expectation  
12                  "obliges" B.C. Hydro to undertake certain 2007 Energy  
13                  Plan actions, including implementing policy action  
14                  number 10 of the 2000 Energy Plan, which speaks to  
15                  self-sufficiency.

16                  I'm going to move now to the second  
17                  question. That asks,

18                  "Can the Commission Panel assume that the  
19                  self-sufficiency requirement is a  
20                  reliability criterion, and that the need for  
21                  3,000 gigawatt-hours a year of insurance is  
22                  a sub-set of the self-sufficiency  
23                  requirement, and is itself a reliability  
24                  criterion?"

25                  Again, I submit, B.C. Hydro squarely  
26                  addressed this issue, and I would refer the Panel to

1 pages 84 and 85 of the B.C. Hydro final argument.  
2 B.C. Hydro has been clear since the filing on 12 June,  
3 2008 of the LTAP that its reliability planning  
4 objective as it applies to the integrated system has  
5 been modified to reflect the requirements of Section 3  
6 of Special Direction 10.

7 To remind everybody, there were two  
8 modifications in particular. First, the removal of  
9 the 2,5000 gigawatt hour non-firm/market reliance for  
10 firm energy from 2016 onward. And second, the removal  
11 of the 400 megawatts of market reliance for dependable  
12 capacity from 2016 onwards.

13 Now I'm going to move to the third  
14 question. The third question assets that

15 "B.C. Hydro's evidence is that it has not  
16 considered the nature of the insurance or  
17 the timing of its acquisitions..."

18 And then it goes on to reference a single transcript  
19 citation.

20 With respect, this assertion is simply not  
21 correct. B.C. Hydro considered the 3,000 gigawatt  
22 hours of insurance in sufficient detail to determine  
23 that now is not the time to acquire that energy. And  
24 I would refer the Commission Panel to Exhibit B-4,  
25 B.C. Hydro response to Commission IR 2.187.2, which is  
26 cited at pages 32 and 33 of B.C. Hydro's final

1 argument.

2 For the reasons set out at Section 2.1.2.5  
3 of B.C. Hydro's final argument, and Section 2.2 of its  
4 reply argument, the Commission should accept the 2008  
5 LTAP on the basis, among other things, of its  
6 treatment of insurance. In particular, it has not  
7 been demonstrated that it is cost-effective now to use  
8 the 3,000 gigawatt-hours a year as an insurance. It  
9 has also not been established that the insurance  
10 should be used on IPPs. As you recall, B.C. Hydro has  
11 at least one self-build option, namely Site C.

12 This position is supported by all of B.C.  
13 Hydro's customer intervenors, and COPE 378. Only two  
14 IPP-related intervenors, IPPBC and NaiKun, oppose this  
15 position.

16 Lastly, the fourth question. This question  
17 correctly states that B.C. Hydro did not remove the  
18 2500 gigawatt hour year, non-firm/market reliance from  
19 its resource stack until 31 December 2015. The  
20 question goes on to question whether this complies  
21 with the self-sufficient provisions of Special  
22 Direction 10, and B.C. Hydro's clear answer is "Yes,  
23 it does." No party argued that B.C. Hydro's treatment  
24 of the 2500 gigawatt hour year non-firm/market  
25 allowance was at odds with Special Direction 10. No  
26 party.



1 understand, was but the nature wasn't.

2 MR. GODSOE: Almost correct. So I think we did consider  
3 that the insurance must be fit with supply side. What  
4 I'm saying is we didn't determine whether it should be  
5 IPPs or Site C. We think it's too early to determine  
6 that.

7 THE CHAIRPERSON: Because there is certain, and if I  
8 listen to -- as I did listen, to Mr. Wallace's opening  
9 statement, Mr. Wallace implied that the insurance  
10 would probably be the result of purchases from IPPs  
11 and that there would be what I've referred to, heard  
12 referred to as a buy high/sell low situation. I think  
13 Ms. Van Ruyven implied when she was being examined, I  
14 think by Mr. Austin, or that she felt that in a high  
15 water year that could be 13,000 gigawatt hours of  
16 surpluses power which could not be exported. Which  
17 also, I think, implied that there would be purchases  
18 from IPPs. But I mean, as an example to me it seems  
19 that when you acquire and you insure your car you  
20 don't buy another car, put it in your garage and lock  
21 it up. You know, you find -- and I'm wondering if,  
22 for instance, Burrard could be considered to be, as  
23 Mr. Weafer suggested in his argument somewhere, that  
24 Burrard might be considered to be insurance for 3,000  
25 gigawatt hours.

26 MR. GODSOE: Well, I didn't want to get into the Burrard

1 debate but I'm going to have to. You've dragged me  
2 there kicking and screaming.

3 THE CHAIRPERSON: All right.

4 MR. GODSOE: Our submission is if Burrard is not capable  
5 of running, and it is not capable of running, in our  
6 submission, at 6,000 gigawatt hours a year, it cannot  
7 fulfill the insurance requirement. It must be capable  
8 of doing that.

9 THE CHAIRPERSON: Thank you.

10 MR. GODSOE: Just one more point. In Section 2.2 of our  
11 reply argument, we agree with JIESC, that caution --  
12 that extreme caution must be exercised with respect to  
13 the insurance because it might -- it's largely going  
14 to be surplus to domestic needs. So we are urging  
15 caution. We don't believe that any test of cost of  
16 cost effectiveness has been met yet and we don't  
17 propose to use it in the clean power Call at this  
18 time.

19 Sure, of course if bids came in at a  
20 certain price we would look at it again, but I think  
21 right now in the analysis we're saying we need more  
22 time and perhaps the Section 5 inquiry will help us  
23 further determine whether we can shape the insurance  
24 for an export market, et cetera. It's all in Section  
25 2.2 of the reply argument.

26 COMMISSIONER MILBOURNE: Just one follow-up on the

1 Chair's questions. Your reference to cost  
2 effectiveness here, that's something B.C. Hydro is  
3 reading into SD10, is it?

4 MR. GODSOE: The argument we laid out is that because  
5 SD10 issued pursuant to the *Utilities Commission Act*,  
6 and section 3 in particular, there must be a cost  
7 effectiveness lens, not only to what resources you  
8 fill the insurance but when you fill it.

9 So, I heard from my friends, IPPBC and  
10 NaiKun, they accept the first premise, it's not just a  
11 blank cheque, you have to determine what the  
12 appropriate supply sources are, and I hear them  
13 departing from our position on the second.

14 COMMISSIONER MILBOURNE: Thank you.

15 THE CHAIRPERSON: Mr. Godsoe, I'm not finished. Do you  
16 have a copy of the B.C. Energy Plan handy?

17 MR. GODSOE: I have policy action number 10, if that's  
18 what you're referring to. I have a couple of --

19 THE CHAIRPERSON: I'm at page 10, and I'll read it to  
20 you, the first paragraph says, achieving electricity  
21 self sufficiency is fundamental and that's why the  
22 government is committed that B.C. will be electricity  
23 self-sufficient within the decade ahead, and then it  
24 goes on, in the second paragraph:

25 "Through the B.C. Energy Plan, government  
26 will set policies to guide B.C. Hydro in

1 producing and acquiring enough electricity  
2 in advance of future need. However,  
3 electricity generation and transmission  
4 infrastructure require long lead times.  
5 This means that over the next two decades  
6 B.C. Hydro must acquire an additional supply  
7 of (insurance power) beyond the projected  
8 increases in demand to minimize the risk and  
9 implications of having to rely on  
10 electricity imports."

11 I guess that is where I'm having a certain  
12 amount of problem in squaring that paragraph with the  
13 testimony of your executives and --

14 **Proceeding Time 11:32 a.m. T32**

15 MR. GODSOE: So I believe they are entirely consist.  
16 What the Special Direction says is "practical but no  
17 later than 2026". We say that "no later than 2026"  
18 must inform any inform any definition of  
19 "practicable". To say now in 2008 that it is cost  
20 effective to acquire, we say we haven't made that  
21 determination yet. We have another LTAP, depending on  
22 the planning cycle, that we would file in 2011 and at  
23 that time we can look further at the insurance having  
24 the benefit of the Section 5 Inquiry process.

25 THE CHAIRPERSON: I'm probably more concerned with this  
26 means that over the next two decades B.C. Hydro must,

1           their words "must", acquire an additional supply of  
2           insurance power.

3 MR. GODSOE:     Right, over the next two decades.

4 THE CHAIRPERSON:   That doesn't mean in year 19 to me. It  
5           means -- this almost, if you like, to me reading it,  
6           is a moving of a part of the contingency plan out of a  
7           contingency plan and into the base plan.

8 MR. GODSOE:     Right. I think we were clear in Section 2.2  
9           that we haven't decided that we would leave it till  
10          the last three years. That is not our position.  
11          NaiKun asserted that was our position. It was not.

12                         We are simply saying that we have not done  
13           the necessary analysis to conclude definitively it is  
14           cost effective to acquire that insurance now as part  
15           of the clean power Call, and I've given myself a  
16           slight escape hatch that if the bids come in at a very  
17           low level, we would take another look at that.

18                         But there are too many future resources out  
19           there right now to pin the tail to the donkey on the  
20           3,000 gigawatt hours at this time, is essentially our  
21           submission.

22 THE CHAIRPERSON:   Thank you.    Could we hear from  
23           intervenors who wish to oppose B.C. Hydro's position.

24 VOICES:          Support?   Support first?

25 THE CHAIRPERSON:   Support.    I'm sorry, yes.

26 MR. GODSOE:        We do have support on this.

1 THE CHAIRPERSON: Yes, I'm sure you do. I apologize.  
2 Those who wish to support B.C. Hydro's  
3 position?

4 **ARGUMENT BY MR. TENNANT ON ITEM #5:**

5 MR. TENNANT: I just briefly want to make a statement  
6 that I agree with B.C. Hydro that the self-sufficiency  
7 is a subset of reliable energy storage capacity, and  
8 that B.C. Hydro has stated that it is agreeable to  
9 renewables generated contracting with a pump storage  
10 hydro plant operator, so employing a storage to firm  
11 up non-dispatchable renewables could be viewed as a  
12 contribution to achieving self-sufficiency.

13 THE CHAIRPERSON: Thank you.

14 MR. TENNANT: Thank you.

15 **ARGUMENT BY MR. WEAVER ON ITEM #5:**

16 MR. WEAVER: Mr. Chairman, I didn't see others jumping  
17 up in support, and there are elements of Mr. Godsoe's  
18 responses that the CEC does support and there are two  
19 areas where we may differ a bit. So absent somebody  
20 jumping to say there's whole-hearted support, I'll go  
21 forward.

22 Certainly Mr. Godsoe's description of the  
23 use of the 2000 Energy Plan as a directional document,  
24 it's not a legal and binding document on the  
25 Commission. SD10 is legislation, the *Utilities*  
26 *Commission Act* is legislation and clearly those are

1           where you go to first in terms on decisions on this  
2           LTAP.

3                         So with that said, the issue of insurance  
4           and the use of Burrard came up in the discussion with  
5           Mr. Godsoe and Mr. Godsoe, I think inadvertently has  
6           characterized the CEC's position. What we have said  
7           is Burrard is capable of going to 4,000 and that is  
8           evidence on the record filed by B.C. Hydro and it's  
9           referred to on page 125 of our argument. So it also  
10          could be capable of 6,000. But that's not what we are  
11          arguing. We are saying it is clearly demonstrated at  
12          4,000 and there's an opportunity with that resource, a  
13          resource capable to help meet the self-sufficiency  
14          requirement and the insurance requirement.

15                        The other factor that we will point out,  
16          and we endorse B.C. Hydro's delay in terms of  
17          acquisition of the insurance power is, it is our  
18          interpretation of SD10 that conservation and demand-  
19          side management is also a very appropriate tool to be  
20          looked at on a go-forward basis in terms of properly  
21          establishing what the levels should be in terms of  
22          what insurance power should be required, and we think  
23          that taking the breath and taking the time, as opposed  
24          to jumping in and acquiring now is prudent and  
25          appropriate and consistent with the legislation which  
26          says demand-side management should be your first

1 acquisition, B.C. Hydro, and indeed, directs the  
2 Commission that that should be the first place to go.

3 So with those points, there is much of what  
4 Mr. Godsoe said that we would agree with.

5 THE CHAIRPERSON: Thank you.

6 MR. WEAVER: Thank you.

7 **ARGUMENT BY MR. WALLACE ON ITEM #5:**

8

9 MR. WALLACE: Mr. Chairman, my hesitation in getting up  
10 was not because we don't support B.C. Hydro, it was  
11 simply thinking Mr. Austin would get up behind me and  
12 say I'm simplistic again. And this time he's going  
13 to get up and say I'm simplistic and wrong, so I'll  
14 await that.

15 **Proceeding Time 11:38 a.m. T33**

16 JIESC supports B.C. Hydro on this.  
17 Clearly, Special Direction No. 10 is what you have to  
18 look to in the first instance, and 2007 Energy Plan,  
19 to the extent it doesn't contradict the Special  
20 Direction No. 10 is helpful and very -- well, very  
21 helpful.

22 With respect to the third item, insurance,  
23 which is obviously a very major concern of JIESC, I  
24 think it's clear that the government in the Energy  
25 Plan and in -- or has said that demand-side management  
26 comes first. Achieving self-sufficiency is second,

1 and insurance is third. And it's put time-frames on  
2 each of them, and I believed that it was prudent to do  
3 so. Each one of these plans has very substantial cost  
4 impacts and rate impacts for customers and, in our  
5 submission, that's a very large part of practicable.  
6 That you don't go out and try and do everything on day  
7 one. You work your way through them in a set of  
8 priorities from the situation we find ourselves in.

9 So, we don't disagree with Mr. Godsoe. We  
10 think that doing the work that they intend to do, in  
11 looking at what is practicable with respect to  
12 insurance, is very important that it be done. We have  
13 been given a basically 15-year timeframe, maybe a  
14 little over that, in which to put the insurance  
15 component in place. Mr. Godsoe's mentioned that there  
16 are options out there like Site C that need to be  
17 considered carefully, but, as you know, are not quite  
18 ready for consideration yet. The full costs aren't  
19 in. But that may well be a very important insurance  
20 component.

21 In our submission, it's also likely that,  
22 between now and 2026, there will be very major  
23 advances in clean energy production. To run out today  
24 and purchase it all without a clear examination of  
25 those options, what might happen -- clean coal, carbon  
26 sequestration, et cetera, in our submission would be

1 as irresponsible as to just say, "Oh, we'll do it all  
2 in 2025 without doing any of the analysis."

3 That analysis needs to be done and in our  
4 submission is perfectly appropriate to get started in  
5 the next LTAP. But at this time, B.C. Hydro, in our  
6 submission is very prudent and correct in its  
7 priorities; DSM, self-sufficiency and then  
8 conservation. Not ruling it out and, as Mr. Godsoe  
9 said, if we see some really low-cost power in the  
10 clean power Call, we may well look at it for that.  
11 But we're not going out there and planning for it.

12 With respect to reliance on market energy  
13 till 2015, in our submission again the Special  
14 Direction is very clear. Be self-sufficient by 2016.  
15 The ability to rely on market energy in part is  
16 prudent, and it does help to moderate increases as we  
17 move to self-sufficiency. And again, those rate  
18 increases are very substantial. The ability to  
19 moderate and the ability to have some time pick up the  
20 clean power and get it in place, and reasonable costs  
21 from a reasonable variety of projects is extremely  
22 important and should be taken advantage of.

23 Thank you.

24 THE CHAIRPERSON: Thank you. Before you stand up, I  
25 think Ms. Worth wishes to --

26 **ARGUMENT BY MS. WORTH ON ITEM #5:**

1 MS. WORTH: I'm finding that sitting in the back of the  
2 room makes it rather difficult to assert myself at  
3 times when I'm trying to get up.

4 I would like to adopt Mr. Wallace's  
5 submissions in regards to the 2007 Energy Plan.

6 And in regards to the second question,  
7 BCOAPO has interpreted this question regarding  
8 reliability criteria and to be asking whether or not  
9 the self-sufficiency requirement should be determined  
10 to be equivalent to B.C. Hydro's requirement to be  
11 able to reliably serve load 99.9999 percent of the  
12 time. BCOAPO, like B.C. Hydro, does not see anything  
13 in the self-sufficiency section, SD10, that requires  
14 such a high level of assurance. Based on this, BCOAPO  
15 does believe that the self-sufficiency requirement or  
16 the 3,000 gigawatt hours per year insurance  
17 requirement found in SD10 is a reliability criteria.

18 **Proceeding Time 11:43 a.m. T34**

19 BCOAPO also agrees with B.C. Hydro that  
20 they did, to some degree consider insurance. We  
21 believe that at this time it would be exceedingly  
22 difficult for B.C. Hydro to generate any kind of  
23 realistic plan outlining the nature and timing of  
24 insurance. We see the current instability in our  
25 economy as a barrier to this kind of planning, and at  
26 this time it is B.C. Hydro's evidence that it is not

1 practicable to begin adding resources to their  
2 planning stack for insurance purposes, or even to  
3 speculate on what form that insurance may take.

4 There is plenty of time in future LTAP  
5 filings to examine the various options, their cost  
6 effectiveness and their practicality. BCOAP views the  
7 results of the next load forecast, the Section 5  
8 transmission inquiry, and the final determination on  
9 Site C to be very important pieces of the puzzle to  
10 take into consideration, and expects that B.C. Hydro  
11 will indeed take these into consideration before  
12 presenting informed evidence on these points.

13 In regards to the market allowance, there  
14 is absolutely nothing, in our respectful submission,  
15 in SD10 that precludes or prevents B.C. Hydro from  
16 relying on the market allowance until December 31<sup>st</sup>,  
17 2015. Self-sufficiency is required by the wording of  
18 this Special Direction by 2016, and it does not say  
19 anything about one year sooner or one day sooner, nor  
20 does it limit the resources that can be used in the  
21 meantime to serve load prior to that deadline date.

22 Subject to any questions, those are my  
23 submissions.

24 THE CHAIRPERSON: Thank you, Ms. Worth.

25 MS. WORTH: Thank you.

26 **ARGUMENT BY MR. ANDREWS ON ITEM #5:**

1 MR. ANDREWS: BCSEA and SCBC support the submissions made  
2 by Mr. Godsoe on behalf of B.C. Hydro regarding the  
3 four sub-questions within the Panel's question 5. I  
4 would specifically also endorse the comments made by  
5 Mr. Wallace on behalf of JIESC.

6 Subject to any questions, those are my  
7 submissions.

8 THE CHAIRPERSON: Thank you.

9 **ARGUMENT BY MR. BERTSCH ON ITEM #5:**

10 MR. BERTSCH: I'd like to address the third question and  
11 the fourth question. We submit at this time that B.C.  
12 Hydro's treatment of insurance is sufficient, but one  
13 of the questions that was asked was, what shall the  
14 Commission accept and what circumstances. And we  
15 believe that a proposed timetable could be presented  
16 at the next LTAP. We suggest at that time B.C. Hydro  
17 should define under what conditions the self-  
18 sufficiency capability is being obtained and  
19 specifically what role, if any, DSM will be able to do  
20 based upon the information that it has at the start of  
21 the next LTAP.

22 In regards to the fourth question, on does  
23 the reliance comply with SD10, we submit that it does  
24 comply. The key dates are 2016 and 2026, and what  
25 actions are required before that time are not  
26 required. However, I think what it does bring into

1 point is, and what is key, does B.C. Hydro provide the  
2 appropriate preparation for meeting these dates before  
3 that time. I think the preparation at this point is  
4 appropriate, but I think that is an ongoing question  
5 that we can put before 2016, keying on the preparation  
6 for meeting those dates.

7 Thank you.

8 THE CHAIRPERSON: Thank you.

9 **ARGUMENT BY MR. BOIS ON ITEM #5:**

10 MR. BOIS: Mr. Chairman, Commissioners, I find myself  
11 both supporting and opposing. So in B.C. Hydro's  
12 final argument, and B.C. Hydro has stated this quite  
13 succinctly in its argument, that the Commission is  
14 bound by Special Direction 10 and can also take into  
15 account the energy plan and the policy actions that  
16 are set there. That was also set out quite clearly in  
17 the letter to the shareholders from the government.  
18 The British Columbia government stated quite clearly  
19 in that letter that Hydro's mandate includes  
20 undertaking and supporting the range of actions set  
21 out in the energy plan, and that B.C. Hydro was to  
22 "aggressively pursue all actions necessary to  
23 implement the objectives of the Energy Plan."

24 **Proceeding Time 11:47 a.m. T35**

25 The letter identifies policies to ensure  
26 energy self-sufficiency, including the insurance

1 requirement and that these requirements apply to B.C.  
2 Hydro. In his evidence, Mr. Elton also confirmed that  
3 B.C. Hydro must embrace and implement the Energy Plan.  
4 So to the extent that this Commission uses the Energy  
5 Plan as a contextual aid, I submit it has to be given  
6 more than that. It has to be given substantial weight  
7 in determining whether or not the LTAP meets the  
8 requirements of the Energy Plan.

9 And in meeting that test, or meeting the  
10 question, answering that question, there are five  
11 energy policies that I wanted to draw your attention  
12 to just briefly, that are set out in Energy Plan.

13 Policy Action 10 ensures self-sufficiency  
14 to meet the electricity needs, including the insurance  
15 requirement, by 2016. Now, there is a timeline to  
16 extend out to 2026, but you have to start in 2016.

17 Policy Action 18, all new electricity  
18 generation projects will have zero net greenhouse gas  
19 emissions. That, I think, deals with a lot of the  
20 issues around thermal generation until we get into  
21 clean technologies, and right now, to say that it's  
22 too soon to wait for those technologies, I think, is a  
23 little bit irresponsible as well, because those  
24 technologies may not come around.

25 Policy Action 19: Zero net greenhouse gas  
26 emissions from existing thermal resources by 2016,

1           which means that the existing thermal sources have to  
2           come up with offsets to cover their existing  
3           emissions.

4                       Policy Action 21:    Ensure clean and  
5           renewable electricity generation continues to account  
6           for at least 90 percent of the generation.  That means  
7           essentially wind, biomass, clean-fired coal if it's  
8           available, IPP run of the river projects, and other  
9           similar sorts of projects.

10                      And Policy Action 22, and this, I think,  
11           goes to your question, Mr. Chair, replace the firm  
12           energy supply from the Burrard Thermal plant with  
13           other resources.  B.C. Hydro can choose to retain  
14           Burrard for capacity purposes after 2014, but that's  
15           all it is permitted to do.  It is not permitted to use  
16           it as an energy supply source.

17                      Now, I'm not going to get into the  
18           arguments about Burrard, I'll let me colleagues deal  
19           with that, but that's the stated policy action.

20                      Now, I said that the Commission had to give  
21           special weight and evidence in regard to the Energy  
22           plan, and I think that that's really what is at the  
23           crux of Special Direction 10 and Section 6401 of the  
24           *Utilities Commission Act*.  Those sections, I think,  
25           and Special Direction 10, embody the principles set  
26           out in the energy plan that I just talked about.  They

1 don't specifically reference them, but I think if you  
2 take them in the context that I've put them, you'll  
3 see that the Special Direction 10 embodies these  
4 principles.

5 Now, B.C. Hydro has said that there's no  
6 evidence to prove that it's cost effective to obtain  
7 these supplies today. With all due respect to my  
8 friend, I'd submit that B.C. Hydro has failed to show  
9 that it's not cost effective to do that today.

10 Mr. Matheson in the transcript reference  
11 that you cited in the letter, Mr. Chair -- or that the  
12 Commission cited in the letter, transcript 12, page  
13 2285 said simply:

14 "It's too early to consider taking actions  
15 to gather the insurance in SD10."

16 Whether they considered it or not, or whether they  
17 considered the scope of the nature of the insurance, I  
18 think that there is less on the record about what they  
19 did consider and how they should acquire the insurance  
20 than there should be.

21 In the 2009 Throne Speech, which is at  
22 Exhibit C17-8, the government not only affirmed its  
23 commitment to the Energy Plan, it indicated that even  
24 with the 50 percent conservation target, so the DSM  
25 that everyone is talking about, more power would be  
26 needed to ensure that we are electricity self-

1 sufficient by 2016. The government also stated that  
2 it would be providing additional and further  
3 directions to the Commission and to B.C. Hydro with  
4 respect to power requirements in the province.

5 **Proceeding Time 11:52 a.m. T36**

6 I would suggest that that's -- implies that there's  
7 going to be more Special Directions.

8 The government also committed to building  
9 on its plan to ensure that at least 90 percent of its  
10 power, all new power produced in B.C. comes from clean  
11 sources, and that independent power production would  
12 play a significant role in meeting the needs of the  
13 province and producing new jobs in rural communities.  
14 In addition to the previously-announced northeast  
15 transmission line expansion, the government also  
16 indicated that it was working on expanding the  
17 transmission capacity along Highway 37 to open that up  
18 to new mining and energy opportunities in the  
19 northwest area of the province. And the government  
20 also emphasized the future of electrically-powered  
21 vehicles and other technologies aimed at reducing  
22 fossil fuels dependency in the province.

23 All of these activities will place more  
24 demands on the system. We will require more energy.  
25 Regardless of what the LTAP says today, these plans  
26 will require more energy. Now, I'm not criticizing

1 B.C. Hydro because the LTAP doesn't take these into  
2 account. Because obviously they filed their LTAP in  
3 2008, and these announcements are subsequent to that.  
4 But it's clear that those -- the LTAP doesn't meet  
5 those requirements. Its forecast doesn't have those  
6 requirements in it, and its forecast, even as an  
7 updated forecast and the load forecast that they came  
8 in with later on didn't address these issues.

9 Now, insurance as a subset of self-  
10 sufficiency. A purposeful reading of SD10 leads to  
11 the inevitable conclusion that obtaining the 3,000  
12 gigawatt hours per year of insurance is a mandatory  
13 requirement of self-sufficiency. SD10 expressly  
14 directs the Commission to use the criterion that B.C.  
15 is to achieve self-sufficiency by becoming capable of  
16 meeting by 2016 and each year thereafter as you've  
17 noted, Mr. Chair, the electricity supply obligations  
18 and B.C. Hydro must achieve as soon as practicable but  
19 not later than 2026 the electricity -- they must  
20 exceed those, the electricity supply obligations, by  
21 at least 3,000 gigawatt hours, solely from electricity  
22 facilities generating in the province. Assuming no  
23 more from their hydro -- the Heritage resources that  
24 have already been set out in the legislation.

25 It's a conjunctive and. It means that to  
26 achieve self-sufficiency, we need to achieve both the

1 requirements of SD10. NaiKun therefore submits that  
2 self-sufficiency is not fully achieved until both of  
3 these elements have been fully satisfied.

4 Now, should the Commission accept the LTAP,  
5 given B.C. Hydro's lack of consideration of the nature  
6 of the insurance? Well, as the Commission stated, and  
7 as I've already referenced, B.C. Hydro hadn't really  
8 produced any evidence that it had considered the  
9 insurance requirement of SD10 for the purposes of the  
10 LTAP. Rather, it's postponed that discussion. And I  
11 think that that may be an untimely or -- untimely  
12 choice, given where we are today.

13 However, the insurance requirement was  
14 considered in arguments by NaiKun and others,  
15 including supporting B.C. Hydro's position. But it  
16 clearly NaiKun's view that an opportunity exists today  
17 for B.C. Hydro to producer 3,000 gigawatt hours of  
18 energy through the Clean Power Call, and there's no  
19 evidence before this Commission that it's not  
20 practicable to do that today.

21 In deciding whether to accept or reject the  
22 LTAP, NaiKun submits that the Commission ought to  
23 consider the practical outcome of that decision.

24 An unqualified endorsement of the LTAP  
25 would mean that the Commission also endorses B.C.  
26 Hydro's plans of acquiring the insurance as -- in

1 F2027 as being the right answer. Now, B.C. Hydro has  
2 said it hasn't really planned it, but what we have  
3 before us is the last three years.

4 Before making that endorsement, NaiKun  
5 respectfully submits that it must be clear to the  
6 Commission today that there could be no practicable  
7 way to obtain the insurance from any year between  
8 F2017 and F2026, inclusive.

9 I've got about a page and a half left, Mr.  
10 Chair.

11 THE CHAIRPERSON: Keep going, Mr. Bois.

12 MR. BOIS: Rejecting the LTAP would mean that B.C. Hydro  
13 would need to consider whether to resubmit it, or a  
14 part of the LTAP if you chose to reject a portion of  
15 it, that was rejected for reconsideration to the  
16 Commission. Section 44 of the Commission's Act is  
17 clear that B.C. Hydro is not required to submit a  
18 rejected resource plan, but if it did choose to do  
19 that, or that portion of the LTAP that was rejected,  
20 and decided not to -- if it chose not to re-submit the  
21 rejected portion of the LTAP, NaiKun submits that that  
22 decision could lead to a cancellation of the current  
23 Call, and that would further set back achieving self  
24 sufficiency.

25 **Proceeding Time 11:57 a.m. T37**

26 The evidence on the record is it takes about seven

1       years to get a project from the ground up and online,  
2       so we're there today, so I don't think that's a  
3       likelihood.

4                   On the other hand, rejection of a plan or  
5       portion of it might mean that B.C. Hydro would have to  
6       increase the amount of energy from the call to account  
7       not only for what we've argued should be a higher  
8       attrition rate, but also the additional energy to meet  
9       the full requirements of SD10 including the insurance.  
10      And of course any increase in the Call volume would  
11      have to be addressed by B.C. Hydro through a Section  
12      71 application and that would also be subject to  
13      Commission approval.

14                   Increasing the size of the Call is the  
15      preferred result if the Commission were to reject all  
16      or a portion of the LTAP, because it's clear from Ms.  
17      Van Ruyven's evidence in the hearing that there was  
18      ample response to the Call. Ms. Van Ruyven testified  
19      that B.C. Hydro had received 68 proposals representing  
20      over 17,000 gigawatt hours a year of energy. In  
21      addition, B.C. Hydro has acquired energy supply  
22      commitments through the Phase 1 Biomass Call, as well  
23      as recently announced Biomass Call phase 2.

24                   All of the energy purchase agreements from  
25      these Calls and the biomass Calls will be justified  
26      and will be subject to the Commission approval under a

1 Section 71 application. I think that's the  
2 appropriate forum to deal with those issues.

3 NaiKun submits that the Commission should  
4 not reject the LTAP in its entirety as a result of  
5 B.C. Hydro's failure to adduce evidence on the  
6 insurance requirement of SD10, or the timing of its  
7 acquisition. Rather, the Commission ought to reject  
8 those elements of the LTAP that are not consistent  
9 with the government's objectives of SD10 and the  
10 energy plan. And if you found that these, as we've  
11 talked about, you'd have to go with what you find in  
12 terms of whether they're consistent or not.

13 But it is clear from the arguments that  
14 have been submitted, and I don't want to go through  
15 those, and the submissions today that the LTAP, SD10  
16 and the recent amendments to the *Utility Commission*  
17 *Act* have created a new framework in which to consider  
18 these applications and the Commission's decision on  
19 this LTAP will shape the electricity market in B.C.  
20 for decades to come.

21 Accordingly, if there is any risk of  
22 misinterpreting SD10 or its intent and the energy  
23 plan's action items that I've expressed, we suggest  
24 that the Commission may respectfully wish to seek  
25 further guidance and direction from the government  
26 with respect to the proper interpretation of SD10 and

1 the acquisition and timing of the insurance  
2 requirements and self-sufficiency. As I stated, in  
3 the recent Throne Speech the government indicated it  
4 intended to provide additional direction to B.C. Hydro  
5 and the Commission with respect to its policies and  
6 the newly announced policies in the Throne Speech and  
7 it may be timely, we submit it may be timely to seek  
8 that additional input now, prior to issuing a decision  
9 no the LTAP.

10 It would then be open to the Commission to  
11 reject those portions of the LTAP, or accept them, and  
12 provide further direction and guidance to B.C. Hydro  
13 on the basis of the additional guidance from the  
14 government.

15 Those are my submissions. If you have any  
16 questions, Mr. Chair or Commissioners?

17 THE CHAIRPERSON: Thank you, Mr. Bois.

18 MR. BOIS: Thank you.

19 THE CHAIRPERSON: Mr. Fulton, we are approaching  
20 lunchtime, those of us who got up at five o'clock this  
21 morning to be here. Is it a suitable time to break?

22 MR. FULTON: Yes, I think so, Mr. Chairman. I'm going to  
23 suggest that we only take an hour for lunchtime today,  
24 to ensure that we get finished today.

25 THE CHAIRPERSON: Okay, we will reconvene then at five  
26 after one.

1 MR. FULTON: Thank you.

2 **(PROCEEDINGS ADJOURNED AT 12:01 P.M.)**

3 **(PROCEEDINGS RESUMED AT 1:04 P.M.)**

**T38/39**

4 THE CHAIRPERSON: Please be seated.

5 Mr. Austin?

6 **ARGUMENT BY MR. AUSTIN ON ITEM #5:**

7 MR. AUSTIN: We were on question number 5 of Exhibit A-2,  
8 just to remind everybody where we are, after lunch.

9 The first question, and the IPPBC would  
10 like to be responsive to the questions, as opposed to  
11 re-arguing what it's already got in its argument, is  
12 that whether the Energy Plan is a contextual aid.

13 And reference was made briefly to this  
14 earlier this morning, or just before the lunch break,  
15 and it's the shareholder's letter that the IPPBC would  
16 like to draw the Panel's attention to. And in the  
17 IPPBC's argument, on page 30, the exchange is set out  
18 in full between you, Mr. Chairman, and Mr. Elton with  
19 respect to the shareholder's letter. And attached to  
20 the shareholder's letter is an appendix which  
21 essentially sets out the particulars of the Energy  
22 Plan that are applicable to B.C. Hydro. And the IPPBC  
23 respectfully submits that this shareholder's letter is  
24 a binding agreement between B.C. Hydro and the  
25 shareholder. And this goes above and beyond the  
26 concept of a contextual agreement, insofar as

1 provisions of the Energy Plan are incorporated into  
2 the shareholder's letter, in that appendix.

3 So rather than just being a contextual  
4 document, insofar as there is provisions in the Energy  
5 Plan in that appendix, it's a binding agreement at  
6 least between the B.C. Hydro and its shareholder. How  
7 the Commission is going to deal with that is something  
8 that is not entirely clear to me. There's no case law  
9 that I could find on this.

10 It would appear to the IPPBC is that it's  
11 yet another agreement that B.C. Hydro has entered  
12 into. There's no difference between any other  
13 agreement, and presumably, through its general  
14 regulatory powers, the Commission could override that  
15 agreement, void the agreement, or something in a  
16 similar vein. But it is a binding agreement as far as  
17 the IPPBC can sort out.

18 **Proceeding Time 1:07 p.m. T40**

19 So in answer to the question, "Is the  
20 Energy Plan a contextual aid?", the answer is,  
21 "Certainly is, but insofar as the Energy Plan  
22 provisions are incorporated in the shareholders'  
23 letter, it's a binding agreement." And how the BCUC  
24 is going to deal with that is not something that the  
25 IPPBC has a ready answered to, other than the BCUC  
26 presumably could override it in some way through it's

1           general regulatory powers.

2                       Then the next question is in terms of  
3           reliability and the IPPBC agrees with the concept of  
4           the insurance requirement being something that  
5           certainly could be considered as a reliability  
6           criteria with all that entails, but in addition to it,  
7           there's a slightly different aspect that should be  
8           viewed and it's really in relation to long-term firm  
9           exports, because when the Section 5 terms of reference  
10          are looked at, it would appear that for the purposes  
11          of Section 5, one of the things that the Panel in  
12          Section 5 hearing is going to have to deal with is can  
13          there be long-term firm exports, or should you be  
14          planning long-term firm exports if you have or haven't  
15          met the insurance requirements of SD10? And again,  
16          there's no ready answer to that.

17                      But the concept of the insurance may go  
18          beyond just the reliability criteria that we all think  
19          in terms of. We thought in terms of domestic  
20          customers, but there's also the concept of exports,  
21          and in SD10 is the concept of being able to export  
22          something that requires a 3,000 gigawatt hour  
23          insurance provision to be in place first. And if  
24          that's the case, then if B.C. Hydro was saying that,  
25          "We're really not going to get around to meeting that  
26          insurance requirements at least as of today, until



1                   In the first instance, the IPPBC, on cross-  
2                   examination of B.C. Hydro's executive panel, there was  
3                   the reference to the cost effective test. Fine. Then  
4                   the suggestion was to pursue that issue with respect  
5                   to a later panel. So that's what the IPPBC did. So  
6                   when it raised the concept of the cost effective test,  
7                   B.C. Hydro couldn't point to any cost effective test.

8                   So, the IPPBC respectfully submits that if  
9                   you're going to have a cost -effective test, and  
10                  you're arguing it's part of SD10, and if B.C. Hydro  
11                  can't show that there is a cost effective test, or  
12                  hasn't even set its mind to it, and it's got nothing  
13                  to do with "as soon as practicable", then the  
14                  requirements of SD10 are not complied with.

15                  The next question is in relation to whether  
16                  the Panel can accept an LTAP under the circumstances  
17                  of non-compliance, presumably, with SD10 and the  
18                  IPPBC's position is, as was set out to the previous  
19                  question about Burrard thermal, which is, that's  
20                  something only the Commission can decide. The IPPBC  
21                  does not have the capacity to enter into the minds of  
22                  you, the Commissioners, and assess what other issues  
23                  you may have on your mind with respect to the LTAP in  
24                  totality. And as previously stated, the IPPBC is very  
25                  concerned about the 2008 Clean Power Call, and whether  
26                  that will survive any demise of the LTAP.

1                   The IPPBC respectfully submits that there  
2                   is enough demand, irrespective of whether the LTAP is  
3                   accepted or rejected, to support that Call.

4                                   **Proceeding Time 1:12 p.m. T42**

5                   But may be an issue that might have to be addressed in  
6                   a Section 71 filing, but the IPPBC is not in any way  
7                   suggesting that the LTAP should fall. In other words,  
8                   it's not the IPPBC's position that it should fall.  
9                   It's up to the Commission to decide that.

10                   Then finally there is the concept of the  
11                   existing committed resources in relation to the market  
12                   allowance. The IPPBC's position is, as SD10 in  
13                   relation to the insurance requirements talks about as  
14                   soon as practicable. So B.C. Hydro doesn't have to  
15                   have an immediate 3,000 hours of insurance, but as  
16                   soon as practicable has to be interpreted in its  
17                   ordinary normal way. And it means what it says, it  
18                   says what it means, and there should be some movement  
19                   in that area and there simply isn't any movement in  
20                   that area.

21                   So that for the purposes of the market  
22                   allowance, there's an over-reliance on the market  
23                   allowance because there's actually no effort  
24                   whatsoever to try and put the insurance requirement in  
25                   place.

26                   Subject to any questions, those are the

1 IPPBC's submissions.

2 THE CHAIRPERSON: Thank you, Mr. Austin.

3 **ARGUMENT BY MR. OULTON ON ITEM #5:**

4 MR. OULTON: I think it again falls to me to bat cleanup  
5 on this issue. Similar to my comments on the other  
6 issues, COPE finds itself in a position where it's  
7 supporting B.C. Hydro, particularly with respect to  
8 this issue -- because there are four elements to it,  
9 supporting B.C. Hydro with respect to some of them and  
10 obviously taking issue with others.

11 In that regard, I accept my friend Mr.  
12 Godsoe's characterization of the four issues. I'd  
13 like to start with the last one and work my way up to  
14 the first one simply -- I think it will become clear  
15 why.

16 The last issue is the market allowance  
17 issue. In short, COPE submits that there is nothing  
18 in B.C. Hydro's reliance on the full market allowance  
19 of 2500 gigawatt hours per year up until December 31,  
20 2015 that is inconsistent with SD10. It's clear on  
21 the face of SD10 that the self-sufficiency requirement  
22 does not become mandatory until 2016, and COPE agrees  
23 with the treatment of the market allowance as B.C.  
24 Hydro has proposed in its 2008 LTAP in that regard.

25 The third issue, so the next one that I'd  
26 like to deal with working backwards, is this insurance

1 question. And again, COPE agrees and supports what  
2 B.C. Hydro has said with respect to insurance. COPE  
3 doesn't feel that it's necessary or appropriate to  
4 deal with the particular steps that are going to be  
5 taken to ensure that the insurance requirement is met  
6 by 2026.

7 **Proceeding Time 1:15 p.m. T43**

8 It's neither necessary or appropriate to  
9 deal with those at this time in this LTAP. That's a  
10 matter as we move forward. And that's particularly so  
11 in the particular circumstances facing not only the  
12 Commission, but B.C. Hydro and the ratepayers in the  
13 current situation, and the considerable uncertainty  
14 that has been created by the economic crisis, and the  
15 corresponding uncertainty that that creates in market  
16 projections, demand forecasts, the effect of DSM and  
17 the like. It would be a mistake, in COPE's  
18 submission, to impose requirements in this LTAP on  
19 B.C. Hydro vis-à-vis insurance. It's entirely open to  
20 the Commission, and COPE would support any direction  
21 that the Commission sees fit to give to B.C. Hydro  
22 about how to deal with this going forward, but again,  
23 that's a matter for other future applications.

24 The next point is the question of  
25 reliability criteria and self-sufficiency, whether or  
26 not that is a reliability criterion. And in COPE's

1 submission, care must be taken by the Commission not  
2 to confuse self-sufficiency requirements and other  
3 legal constraints that B.C. Hydro operates under with  
4 the reliability criteria. And it is clear from my  
5 friend Mr. Godsoe's comments, and COPE fully supports  
6 this, that self-sufficiency has implications for the  
7 reliability criterion -- criteria that are applied and  
8 my friend, Mr. Godsoe, has given some indication about  
9 how self-sufficiency has affected the reliability  
10 criterion going forward. Most notably, he referred to  
11 the treatment of the market allowance and the market  
12 reliance, the 40 gigawatt hours that is implicit -- or  
13 has been implicit in the past.

14 In that regard, COPE simply notes that the  
15 self-sufficiency requirement is one of the legal  
16 constraints affecting B.C. Hydro. Its reliability  
17 criteria that it applies to determine its planning and  
18 everything else go far beyond that. It in some senses  
19 could be seen as a sub-set, but it -- I don't think  
20 it's proper to characterize it as that. It's a legal  
21 constraint, constraining B.C. Hydro's business, that  
22 informs some of its reliability criteria, but economic  
23 considerations and the like also come into play, and  
24 that's how B.C. Hydro is obliged to plan its  
25 operations and move forward.

26 That brings us to the first question, which

1 is, I think, the one area in which COPE is at odds  
2 with B.C. Hydro, and that has to do with the role of  
3 the 2007 Energy Plan in this Commission's  
4 consideration of the 2008 LTAP.

5 The question that was asked by the  
6 Commission is whether or not -- or the extent to which  
7 the 2007 Energy Plan should be used as a contextual  
8 aid. And COPE acknowledges and accepts that SD10,  
9 being a legislative-type instrument, is governed by  
10 the modern approach to statutory interpretation. So  
11 you have to look at things in context. But to go so  
12 far as -- and it's clear that the energy plan provides  
13 part of that context. But you heard my friend Mr.  
14 Godsoe refer to the Energy Plan as part of the  
15 legislative history, and he did refer to some cases  
16 dealing with the utility of referring to that. COPE  
17 says the 2007 Energy Plan, while it may be properly  
18 construed as part of the legislative history, recourse  
19 does not need to be had to it. Legislative history  
20 only comes into play during the interpretation of  
21 statutory instruments like SD10, where there's  
22 ambiguity in the language. And what we're talking  
23 about, as I understand it, in this particular issue is  
24 the self-sufficiency requirement embodied in Section  
25 3.

26 In COPE's submission, that requirement is

1 clear and unambiguous. B.C. Hydro has to demonstrate  
2 certain milestones have been achieved by 2016 and by  
3 2026, and most notably that it's capable of meeting  
4 its demand-side resources and exceeding them by those  
5 dates, for reasons that have been exhaustively  
6 discussed here. There's no need to have recourse to  
7 the 2007 Energy Plan to inform that and to figure out  
8 what it is that is meant. The 2007 Energy Plan and in  
9 particular the elements of it relating to self-  
10 sufficiency are policy directions. They're not  
11 binding.

12 **Proceeding Time 1:20 p.m. T44**

13 What is binding are the legislative changes  
14 and the legislative instruments like SD10 that have  
15 been implemented by the province to specifically bind  
16 not only B.C. Hydro but this Commission in its  
17 considerations. Some of those amendments include the  
18 discussion of the government's energy objectives that  
19 have been codified in Section 1 of the *UCA*.

20 Recourse doesn't need to be had beyond  
21 those to the 2007 energy plan. It doesn't add  
22 anything in addition to that, in our submission, and  
23 rather than giving it great weight, which my friend  
24 Mr. Godsoe has said and I believe my friends for the  
25 various IPP intervenors have said, COPE says caution  
26 must be applied to giving undue -- by this Commission

1 in giving undue weight to the energy plan.

2 The first recourse must be had to the text  
3 of the actual binding instruments, and then it's only  
4 then, if there's any latent ambiguity that is found,  
5 that recourse has to be had, but again there are some  
6 concerns, as noted in the cases my friend alluded to  
7 earlier, in dealing with documents like the energy  
8 plan that caution decision-makers such as the  
9 Commission in giving undue weight to legislative  
10 history.

11 My friend points to the fact that the  
12 ministers have signed on on it. Respectfully,  
13 ministers make comments all the time that aren't  
14 necessarily to be construed as an expression of the  
15 full intent of legislative instruments that are in act  
16 enacted after full debate in the ordinary course of  
17 the legislature.

18 Subject to any questions you all may have,  
19 those are my submissions on issue 5.

20 THE CHAIRPERSON: Yes, you raise an interesting spectrum  
21 of ministerial relevance. I mean, on the scheme of  
22 things between a casual comment made by a minister all  
23 the way up, progressing up through a throne speech and  
24 a document like this, I mean, this comes a little  
25 higher on the spectrum, I think, than --

26 MR. OULTON: Well, with respect, I mean, if you look at

1 the authorities that my friend alluded to earlier,  
2 where you talk about legislative history, typically  
3 what they're talking about there are Hansard debates  
4 or documents produced by the government to explain why  
5 legislation was taken into account. The courts have  
6 said even when you look at something -- take the  
7 taxation context, for example, CRA, the Canadian  
8 Revenue Agency, is constantly issuing interpretive  
9 bulletins. Decision makers are not to be bound by  
10 those. Those are expressions of what the government  
11 feels is the proper interpretation of the legislation.

12 Similarly here, the 2007 energy plan -- I  
13 take your point that this is a public statement and an  
14 expression of what the province's overall policy is.  
15 If you look at it, it's for the most part broad brush  
16 strokes and where it isn't, where it deals with  
17 specific things, there have been legislative  
18 enactments brought into force to deal with them, and  
19 self-sufficiency is one of those. There are others,  
20 for example the discussions about Burrard, where it's  
21 simply a loosie-goosie discussion of, well we support  
22 B.C. Hydro's decision to do this. Well, B.C. Hydro  
23 isn't proposing to do that anymore and the weight that  
24 you give that ought to be discounted and the like.

25 When it talks about self-sufficiency, it's  
26 clear that the province, as expressed in the throne

1 speech and the energy plan, sees self-sufficiency as  
2 an important goal. What it has done to implement that  
3 goal is enact legislation, and the starting point for  
4 the analysis of what that requirement embodies is the  
5 language of the legislation. You look at that first,  
6 and you need not have recourse to the history or the  
7 policy documents that have been produced by the  
8 province to support its overall discussion of policy.  
9 That's only necessary if there's ambiguity, and we say  
10 there isn't in this regard.

11 THE CHAIRPERSON: Thank you. Is that the final  
12 intervenor's submission? In which case, Mr. Godsoe,  
13 it's back to you for reply.

14 **REPLY BY MR. GODSOE ON ITEM #5:**

15 MR. GODSOE: I do have reply. I apologize to NaiKun in  
16 advance if I've mischaracterized their submissions. I  
17 was struggling with it and I thought I heard that  
18 there might be temptation to rule on the volume as  
19 part of the clean power Call Section 71 filing itself  
20 as opposed to the LTAP. And B.C. Hydro is strongly  
21 opposed to that.

22 **Proceeding Time 1:25 p.m. T45**

23 We don't think that would be regulatory  
24 efficient to have yet another LTAP-like debate in the  
25 clean power Call Section 71 filing. So we would  
26 strongly urge you to either endorse the 3,000 gigawatt

1       hours, or if you turn that down, to give us some  
2       recommendations on what volume you think would be  
3       appropriate, so we would have that going forward into  
4       Section 71. To defer the entire debate to Section 71  
5       I think is extremely problematic. You've been through  
6       a very thorough process and to not have any kind of  
7       ruling on the volume I think would be a mistake and be  
8       inefficient.

9               I do also just want to clarify Mr. Austin's  
10       comments on the shareholder letter. I don't think  
11       it's necessary for the Commission to weigh in on what  
12       kind of relationship that establishes between B.C.  
13       Hydro and its shareholder. I think it simply goes to  
14       weight. So we say significant weight should attach to  
15       the 2007 Energy Plan. It would be inexplicable not to  
16       attach some weight to in the context of a long-term  
17       resource plan, and we think the shareholder's letter  
18       adds to that weight. However, again, we've been  
19       clear, we don't think the 2007 Energy Plan is legally  
20       binding, and I don't think the shareholder's letter of  
21       intent changes that analysis.

22               So those are my only two submissions on  
23       item 5.

24   THE CHAIRPERSON:   Thank you.     Are you ready to go on  
25       item 6.

26   MR. GODSOE:        I'm ready to go on item 6.

1 **ARGUMENT BY MR. GODSOE ON ITEM #6:**

2 MR. GODSOE: Parsing item 6 as follows: B.C. Hydro has  
3 testified, number one, SD10 does not require any  
4 change in the economic basis on which B.C. Hydro  
5 dispatches its generating assets; and number two,  
6 given the strongly seasonal nature of B.C. Hydro's  
7 customer demand; and number three, B.C. Hydro ability  
8 to forecast and manage its hydro-electric generating  
9 assets on a multi-seasonal basis, should the  
10 Commission view the planning reliance value for  
11 Burrard as a rate of output?

12 With respect to this panel, this question  
13 was clearly asked and answered in respect of the  
14 Energy Planning Alliance. Mr. O'Riley gave a firm  
15 no. And I would refer the Commission panel to  
16 transcript Volume 8, page 1400, line 12. As Mr.  
17 O'Riley went on to explain, in response to a question  
18 from Commission Milbourne, the output of Burrard will  
19 vary depending on system conditions, hydrology  
20 condition and in particular multi-year hydrology  
21 conditions and market prices.

22 And system conditions and hydrology  
23 conditions go to reliability. The evidence is clear.  
24 Burrard will not simply run at 600 gigawatt hours year  
25 after year after year, and I have to go no further  
26 than refer you to figure 3.1 of appendix J-3 to make

1 my point.

2 Particularly with respect to number 3, B.C.  
3 Hydro's energy reliability criterion is based on a  
4 multi-year consecutive sequence of low inflow  
5 conditions that take B.C. Hydro's ability to utilize  
6 its storage flexibility right to its limit. And I  
7 would refer the Commission panel to Exhibit B-52 for  
8 the proposition.

9 At this limit, all of its resources are  
10 required, including the operation of the full planning  
11 capability of Burrard to meet its load, and  
12 evidentiary references for that are found at  
13 transcript Volume 7, pages 1125/1126, 1184, 1214, and  
14 1239-1240. The seasonality of the load, which was  
15 number two out of item six, impacts the use of Burrard  
16 for capacity liability. However, as Mr. O'Riley  
17 testified, that's relatively unrelated to the annual  
18 energy reliance, and again the transcript reference  
19 for that is Volume 7, pages 1057 to 1058 and in  
20 particular I'd urge the Commission to revisit  
21 transcript Volume 8, pages 1398 to 1399.

22 "Special Direction 10 does not change the  
23 fact there will be differing operating  
24 conditions in multi-year low flow periods as  
25 compared to high flow periods."

26 Now, following on from the above the

1 Commission panels asks:

2 "If so, should the Commission consider the  
3 likelihood that for other than the 600  
4 gigawatt hour per year level, the actual  
5 annual utilization of Burrard will be tiered  
6 less than whatever rate is established for  
7 it for planning purposes for Special  
8 Direction 10 compliance."

9 We've already said that we disagree that there should  
10 be any kind of rate established and so my response to  
11 this question is no as well.

12 **Proceeding Time 1:30 p.m. T46**

13 Irrespective of that, as you've heard in  
14 respect of item 4, B.C. Hydro's argument is that  
15 Burrard must be kept capable from a technical and  
16 social licencing perspective. And I'll say no further  
17 on that, because I'll be into re-arguing my case. And  
18 those conclude my submissions on item 6.

19 THE CHAIRPERSON: Those who support. Mr. Wallace.

20 **ARGUMENT BY MR. WALLACE ON ITEM #6:**

21 MR. WALLACE: Mr. Chairman. In our submission, the only  
22 -- and I hope I understand the question properly. The  
23 only relevance to the actual production of Burrard is  
24 to the social contract for running it. Clearly  
25 Burrard is capable under Special Direction -- meeting  
26 the requirements under Special Direction 10 of

1 generation of three or four thousand gigawatt hours of  
2 electricity per year.

3 Odds are that it will not have to do so,  
4 because it will be cheaper to use surplus hydro power  
5 available due to the difference between critical water  
6 use for planning and actual generation, 4,000 gigawatt  
7 hours on average, or contracted non-firm power  
8 purchases or market purchases, all of which make good  
9 sense.

10 That being said, there still has to be room  
11 for it to be able to run and maintain its social  
12 contract and JIESC accepts the submission of Hydro  
13 that 3,000 is an appropriate number, although it  
14 thinks 4,000 is also feasible and acceptable. It's a  
15 very vague line there.

16 Self-sufficiency is a security of supply  
17 issue in our submission. Burrard provides that  
18 security and, along with the other resources just  
19 mentioned, does it at a reasonable cost. Thank you.

20 THE CHAIRPERSON: Thank you, Mr. Wallace. Any questions  
21 of Mr. Wallace? No questions.

22 ARGUMENT BY MR. WEAFFER ON ITEM #6:

23 MR. WEAFFER: Mr. Chairman, the CEC is generally in  
24 agreement with B.C. Hydro, and with the -- also in  
25 agreement with the comments of Mr. Wallace on behalf  
26 of JIESC with the one exception, which I spoke to when

1 I stood earlier, which we believe that there is no  
2 risk to the social licence setting the plant  
3 capability at 4,000 gigawatt hours. The plant -- that  
4 would be planned conditional capability at 4,000  
5 gigawatt hours. Thank you.

6 THE CHAIRPERSON: Thank you.

7 **ARGUMENT BY MS. WORTH ON ITEM #6:**

8 MS. WORTH: BCOAPO would like to adopt the comments of  
9 Mr. Wallace, with the same proviso as Mr. Weafer. As  
10 you know from our final argument, it is our position  
11 that it is possible for B.C. Hydro to run Burrard at  
12 4,000 rather than the proposed 3,000 level. Thank  
13 you.

14 THE CHAIRPERSON: Thank you.

15 **ARGUMENT BY MR. TENNANT ON ITEM #6:**

16 MR. TENNANT: I just want to go out on a bit of a limb  
17 here, Mr. Chairman. I want to say that if the  
18 emissions from Burrard could be captured in a  
19 municipal waste water or ocean water flow and then  
20 piped into a proposed greenhouse gas control operation  
21 at Britannia Mines, then the annual utilization of  
22 Burrard could be materially more than whatever rate is  
23 established for SD10 compliance. And I would also go  
24 so far as to say that it's almost a scandal that a  
25 compressed air energy storage plant at Britannia Mines  
26 hasn't been factored into this LTAP. Thank you.

1 THE CHAIRPERSON: Thank you, Mr. Tennant.

2 **ARGUMENT BY MR. ANDREWS ON ITEM #6:**

3 MR. ANDREWS: BCSEA and SCCBC support the submissions of  
4 counsel for B.C. Hydro regarding question 6. Just for  
5 identification in their final argument, BCSEA SCCBC  
6 supported the notion that Burrard be nominated for  
7 3,000 gigawatt hours per year for planning purposes,  
8 and no higher.

9 THE CHAIRPERSON: Thank you. Mr. Andrews, sorry.

10 COMMISSIONER MILBOURNE: I don't want to use you as a  
11 case in point, but I'm going to. As I understand it,  
12 that's not the question that's being asked here.

13 **Proceeding Time 1:20 p.m. T47**

14 The question wasn't whether you agree or  
15 disagree. The question was, as I believe it's stated,  
16 what is the likelihood that regardless of what level  
17 you strike this plant at for planning purposes, that  
18 it will be operated at that level. That's the  
19 question, not whether or not you agree or disagree  
20 with 3,000.

21 So do you have any comments on the  
22 question?

23 MR. ANDREWS: I didn't understand the question in my  
24 preparation. I specifically endorsed Mr. Godsoe's  
25 comments because I think he did understand it.

26 My response to your question at this point

1 is that my understanding of the evidence is that it's  
2 unlikely that if Burrard is nominated for 3,000  
3 gigawatt hours per year for planning purposes that it  
4 would actually be run at that level because of the  
5 economic comparison between using Burrard and cost of  
6 imports. Whether that comes to pass depends on the  
7 price of the imports and the price of gas, of course.  
8 And that the evidence also suggests that it can't be  
9 assumed that if Burrard is nominated for 3,000  
10 gigawatt hours per year for planning purposes that it  
11 would necessarily only be used at 600 gigawatt hours  
12 per year because of factors to do with the various  
13 scheduling issues.

14 So to the extent that all of these  
15 questions relate to compliance with SD10, the BCSEA's  
16 position is that the material criteria is the number  
17 for planning purposes and that that number can't, that  
18 the Commission ought not to go behind that number to  
19 identify some number that corresponds to some expected  
20 actual level, because that is not the realm within  
21 which SD10 operates. It operates on the planning  
22 level.

23 COMMISSIONER MILBOURNE: Thank you.

24 THE CHAIRPERSON: Mr. Bertsch, do you wish to --

25 **ARGUMENT BY MR. BERTSCH ON ITEM #6:**

26 MR. BERTSCH: If you remember, before I was talking about



1 number you put on it?

2 MR. BERTSCH: There could be some influence as in how  
3 that directs the planning and setup of Burrard in a  
4 secondary sense. In other words, if you had planned  
5 for a lot larger for SD10, that may then translate to  
6 what you would actually run it with.

7 COMMISSIONER MILBOURNE: Thank you.

8 THE CHAIRPERSON: Mr. Oulton, you're obviously determined  
9 not to be last.

10 **Proceeding Time 1:40 p.m. T48**

11 **ARGUMENT BY MR. OULTON ON ITEM #6:**

12 MR. OULTON: It's a question I posed to my friend. I'm  
13 not sure if he supporting or opposing B.C. Hydro's  
14 position. I think it comes as no surprise to the  
15 Commission that COPE has a certain position on 6,000  
16 versus 3,000 versus 600, but I think I understood the  
17 question in issue 6 and it's simply, whatever  
18 reliability planning level is adopted, is it expected  
19 that Burrard will operate at that level? In a  
20 nutshell. And it's referred to as a rate of output.

21 And COPE's position, I believe, on that  
22 point is entirely in line with B.C. Hydro's. In other  
23 words, we say it would be wholly inappropriate to  
24 define the capability of Burrard in terms of a rate of  
25 output. And the reasons for that are, simply, Burrard  
26 is in most respects a dispatchable resource. There is

1 a minimum level of operation that the resource -- that  
2 Burrard is seen to operate at, and that's its peaking  
3 facility at or around 600 megawatt -- or gigawatt  
4 hours per year. And my recollection of the evidence  
5 was that the intention is to continue to operate it on  
6 that, and as circumstances warrant, the economic  
7 dispatch considerations that were referred to -- its  
8 operation may increase.

9 But as -- in COPE's submission, Burrard's  
10 capability is defined by what level of output it could  
11 in fact be achieved. If it was dispatched, or run, in  
12 all of available hours, in other words, and that's  
13 whether it's -- what it's capable of producing.

14 But the evidence was clear that B.C. Hydro  
15 doesn't intend to operate Burrard in that matter. It  
16 intends to continue to operate Burrard in a similar  
17 manner that it has, at least in the recent period of  
18 time, ten years or so, I think was -- probably going  
19 to get the name of the witness wrong. I think that  
20 was Mr. O'Riley who was saying that.

21 But the notion is, other than periods of  
22 time where economic dispatch required it to go above  
23 that, for reasons such as the -- it's not economic to  
24 displace it with other resources, or there weren't  
25 other resources available by virtue of low water or  
26 the lake, Burrard would be operated at much lower than

1           3,000 even, or 6,000, and that's the point that COPE  
2           makes on the -- its substantive position on those  
3           issues.

4                         But in COPE's submission, the general  
5           expectation -- and the evidentiary references for  
6           this, at least in part, are set out at paragraphs 83  
7           and 84 of COPE's written submissions. There's some  
8           footnotes there. The transcript references in which  
9           B.C. Hydro indicated that its expectation is that it's  
10          not going to operate Burrard in most years at anything  
11          other than a peaking facility, because of economic  
12          dispatch. And it's for that reason that it would be  
13          wholly inappropriate, in COPE's submission, to define  
14          whatever its planning reliance value is as a rate of  
15          output.

16                         Hopefully I've captured the question  
17          properly.

18   THE CHAIRPERSON:    Any questions? Thank you, Mr. Oulton.

19   MR. OULTON:          Thank you.

20   **ARGUMENT BY MR. AUSTIN ON ITEM #6:**

21   MR. AUSTIN:         On behalf of the IPPBC I'm going to approach  
22          this question in a slightly different manner. And it  
23          goes back to the concept of critical water. And, Mr.  
24          Chairman, you asked B.C. Hydro to prepare a response,  
25          and this was really on the basis of a statistical  
26          analysis of the probability of observing critical

1 water flow conditions. And this was -- this is  
2 Exhibit B-52. B.C. Hydro undertaking number 13. And  
3 if you're thinking in terms of the probability of  
4 Burrard running or not running, you have to go back to  
5 the basics of critical water.

6 In addition to that, there's a very  
7 important point that constantly gets overlooked in  
8 terms of the operation of B.C. Hydro's system. I  
9 alluded to that earlier this morning. And if you look  
10 in Exhibit C-17-18, which is an extract from the  
11 revenue requirements hearing that the IPPBC filed,  
12 you'll see on page 2194 of that, my cross-examination  
13 in part of Ms. Kirschner on behalf of B.C. Hydro. And  
14 I was asking about the optimization of the system, and  
15 Ms. Kirschner's response on page 2194 is:

16 "Okay. So describe how we optimize the  
17 system, and then talk a little bit about  
18 what critical water is all about."

19 And when you go over to page 2196, this is very  
20 important in terms of B.C. Hydro's system.

21 "The objective function, as I have mentioned  
22 before, is to maximize the net revenue.

23 So, let's translate this into something  
24 that's a lot more practical. B.C. Hydro doesn't  
25 annually go back to a particular reservoir level.

26 **Proceeding Time 1:45 p.m. T49**

1                   If there is a commercial opportunity to  
2                   sell electricity it can take it if it's to maximize  
3                   net revenue. And that can have an impact on your  
4                   reservoir levels.

5                   Similarly a key thing as set out in Exhibit  
6                   B-52 about a critical water period is, B.C. Hydro must  
7                   always be prepared for a critical flow period. It  
8                   cannot determine whether a given year is part of a  
9                   critical period until the critical period is over. So  
10                  you don't know you've got a critical water period  
11                  until it's over.

12                  So what you can do at the beginning of a  
13                  critical water period you don't even know you're in,  
14                  you can go out and sell a whole lot of electricity,  
15                  pull down your reservoir level, and then you may be in  
16                  the start of a dry period that you don't even know  
17                  that you're in until it's over.

18                  So this all goes into the concept of how  
19                  much Burrard is or isn't going to be operated. So by  
20                  selling you can actually bring forward a critical  
21                  water period, mimic a critical water period or  
22                  something similar. It's just not a set piece in terms  
23                  of critical water.

24                  The other thing about critical water is,  
25                  and there are many references in the transcript to  
26                  this and I'd just like to bring one forward is, this

1 is on transcript page 1240, and that's Volume 7, Mr.  
2 O'Riley is saying,

3 "...and it's not just the critical water  
4 years. There's a whole continuum of water  
5 conditions. So the critical water years  
6 happen, the near-critical water years, a  
7 certain percentage of the time. The near-  
8 critical water years happen. We had a  
9 critical water, a low-water period in  
10 seventies, late seventies. We had a very  
11 low water period in the early to mid-  
12 nineties. We have had relatively adverse  
13 water conditions in the early part of this  
14 decade."

15 So if you're trying to assess how much  
16 Burrard will or won't run, you have to look at B.C.  
17 Hydro's practices in relation to export sales and you  
18 also have to look at the concept of critical water and  
19 near-critical water periods. So it's just not a  
20 simple question of, is it going to be run less now  
21 than it has in the past or will it be run more in the  
22 future. Because in that same response, in Volume 7 on  
23 page 1240, and Mr. Godsoe referred to it, Mr. O'Riley  
24 says,

25 "So we can expect to get some significant  
26 quantities of energy generated from Burrard

1           when those periods coincide with adverse  
2           market prices."

3                     Remember, there's another feature that's in  
4           place. It's just not all about statistics. If the  
5           world was all about statistics the architects of the  
6           sub-prime mortgage pools wouldn't have precipitated  
7           the crisis that they did. It's a number of different  
8           events coming together that you haven't really thought  
9           about and when they come together there can be a  
10          fairly significant outcome.

11                    Then Mr. O'Riley goes on to say,  
12                    "And that's actually -- those things are  
13                    correlated. So, I think the assumption, a  
14                    go-forward assumption that Burrard won't run  
15                    or will run like it's run the last few years  
16                    is not a reasonable assumption to make."

17          And the IPPBC isn't contradicting itself in relation  
18          to the level of imports that will probably occur if  
19          Burrard is in there for 3,000 gigawatt hours for  
20          planning purposes. It's just pointing out that  
21          Burrard may end up going to whatever limit is set, to  
22          the full limit for an extended period of time, which  
23          would have an impact on B.C. Hydro's social licence.

24                    So it's just not a simple question of  
25                    reliability or, more to the point, probability with  
26                    respect to how much Burrard is going to run. There's

1 all sorts of different circumstances that may occur  
2 that may result in imports coming into British  
3 Columbia which really is not consistent with SD10, and  
4 there may be instances where Burrard is running flat  
5 out because of commercial decisions made, critical  
6 water occurring, or near-critical water occurring.

7 So you have to keep that in mind when  
8 you're sorting through all this. So the answer to the  
9 question in terms of the likelihood, the answer is, it  
10 depends. It depends on a whole lot of factors.

11 And whether it's materially less or up to  
12 the limit, again, it all depends on a whole lot of  
13 factors.

14 And subject to any questions, those are my  
15 submissions.

16 **Proceeding Time 1:51 p.m. T50**

17 COMMISSIONER MILBOURNE: I think I'm understanding that  
18 you are painting a picture here that quite frankly I  
19 hadn't heard before, the possibility or the  
20 probability that B.C. Hydro could export itself into a  
21 critical water condition. I'm having a little trouble  
22 squaring that with, I believe, some references I've  
23 seen in B.C. Hydro's final arguments, and its reply to  
24 the effect that quote -- Mr. Godsoe, I'm sure, will  
25 correct me if the quote is wrong. That quote: "B.C.  
26 Hydro has no mandate for exports."

1                   So I am having a little trouble with your  
2                   scenario given that position on the part of B.C.  
3                   Hydro.

4 MR. AUSTIN:       It has no mandate for long-term firm  
5                   exports, but there is nothing to prevent it from  
6                   maximizing revenue by selling electricity on a short-  
7                   term basis into the export market. And again I'd be  
8                   giving evidence, but if you go back to the 2004-2005  
9                   Revenue Requirements application, you go back to the  
10                  year 2001 where there were export opportunities in  
11                  California, B.C. Hydro certainly was maximizing  
12                  exports. And then as luck would have it, or luck  
13                  wouldn't have it, as alluded to by Mr. O'Riley, there  
14                  was a period in the early part of this decade where we  
15                  did get into a dry period. It didn't last very long.  
16                  But I didn't say that you were going to export  
17                  yourself in a critical water period. You could have  
18                  done a heavy amount of exports and then the critical  
19                  period starts. You didn't know it, but you are  
20                  certainly in a sense advancing the critical sequence.

21                   Because there you are. You've exported,  
22                   your inventory and your water is down, and you are  
23                   starting into low water inflows. So operation  
24                   decisions do have an impact of where you end up in  
25                   terms of the reservoir levels. You don't know.  
26                   That's the whole thing. It says -- as set out in

1 Exhibit B-52, it says you cannot determine whether a  
2 given year is part of a critical period until the  
3 critical period is over.

4 COMMISSIONER MILBOURNE: Thank you. I'll leave it for  
5 Mr. Godsoe to decide if he wants to elaborate on the  
6 likelihood of this scenario that you are painting.

7 My second question was you made reference  
8 to a quote that -- I forget the quote. Imports into  
9 B.C. would not be consistent with SD10, and I'm trying  
10 to square that with what we've been told in this  
11 proceeding, that SD10 changes nothing in terms of the  
12 way B.C. Hydro would economically manage its system,  
13 which clearly permits imports, exports, or whatever.  
14 This is strictly a planning capability issue. So I am  
15 having a little trouble with what you are telling me  
16 about there being something wrong with imports  
17 quote/unquote, into B.C. and SD10.

18 MR. AUSTIN: Well, for the purposes of SD10 it's self-  
19 sufficiency. So if you are continually importing that  
20 which would be supplied by generation in this  
21 province, as I said earlier, would make a mockery of  
22 SD10. And that's what the evidence was, and it's in  
23 our argument of the formal vice-president of  
24 operations, Dawn Farrell. That's the evidence on the  
25 record.

26 COMMISSIONER MILBOURNE: Thank you.

1 THE CHAIRPERSON: Thank you, Mr. Austin. Anyone else  
2 wish to speak on item 6.

3 Hearing no one, Mr. Godsoe, I think you  
4 have reply.

5 MR. GODSOE: I don't actually have any reply on item 6.

6 THE CHAIRPERSON: I've got the right number, have I?

7 MR. GODSOE: We just finished item 6. Commissioner  
8 Milbourne invited me, if I wanted to, to reply and I'm  
9 -- I don't feel that I need to reply.

10 THE CHAIRPERSON: Okay, well, then are you ready to move  
11 on.

12 **ARGUMENT BY MR. GODSOE ON ITEM #7:**

13 MR. GODSOE: I think we are onto item 7.

14 B.C. Hydro accepts the Commission may set  
15 conditions on its acceptance of the 140.1 million  
16 expenditure schedule for the definition and  
17 implementation of FNU3 under Subsection 44.2(3)(a) of  
18 the *Utilities Commission Act*. In particular, B.C.  
19 Hydro notes that the Commission has the power to  
20 impose reporting requirements pursuant to other  
21 sections of the *Utilities Commission Act* such as  
22 Section 43, which is the duty to provide information.

23 With respect to reporting, B.C. Hydro is of  
24 the view that conditions four and five of the recently  
25 granted CPCN for BCTC Central Vancouver Island  
26 Transmission Project are appropriate. And I've chosen

1 that one because it's the most recent and because two  
2 Commissioners on this Panel were on that Panel.

3 Just so that everybody knows what I'm  
4 talking about, condition 4 related to the filing of  
5 quarterly progress reports that would showed planned  
6 versus actual schedule, planned versus actual cost,  
7 and any variance or difficulties the project may be  
8 encountering.

9 **Proceeding Time 1:56 p.m. T51**

10 Condition 5 related to the filing of a  
11 final report within six months of the end or the  
12 substantial completion of the project, and that will  
13 provide a "complete breakdown" of the final costs of  
14 the project, compare those costs to the updated cost  
15 estimate, and provide a detailed explanation and  
16 justification of all material cost variances. So we  
17 accept there should be a reporting obligation, but  
18 that's the only condition we're submitting is  
19 appropriate for that project.

20 And subject to any questions, those are my  
21 submissions on item 7.

22 THE CHAIRPERSON: So, if I'm correct -- understand you  
23 right, you have no problems with the two reporting  
24 requirements that you --

25 MR. GODSOE: We do not.

26 THE CHAIRPERSON: And obviously you, like two members of

1           this panel, are not espoused to the concept of earned  
2           value, I think is the expression.

3 MR. GODSOE:    Well --

4 THE CHAIRPERSON:   Don't go there, Mr. Godsoe.

5 MR. GODSOE:    You'll note that I did not reference the  
6           Revelstoke Unit 5 CPCN. I think earned value is very  
7           much in dispute still and I didn't see anything in the  
8           CPCN for the Central Vancouver Island Transmission  
9           Project that referenced earned value. So, our strong  
10          preference that it not be in the condition.

11 THE CHAIRPERSON:   I hear what you're saying, thank you.

12                    Conditions. If I were to give you some  
13           for-instances -- for instance, a condition that -- and  
14           I'm theorizing here. You may remember that I had some  
15           discussion with Mr. O'Riley and I think that with your  
16           chairman -- not your chairman, your president, about  
17           the board -- whether the board of directors would have  
18           approved it or not. And I imagine that May has come  
19           and gone, and I'm hoping that the B.C. Hydro board of  
20           directors --

21 MR. GODSOE:    May has come and gone but I would be giving  
22           evidence if I told you the outcome. It was approved.

23 THE CHAIRPERSON:   Thank you. That's fine, thank you.

24                    Is there anyone wish to make any comment on  
25           item 7? I think --

26 **ARGUMENT BY MR. AUSTIN ON ITEM #7:**

1 MR. AUSTIN: I'll be very brief on this point, but in  
2 relation to conditions, the IPPBC has consistently  
3 asked for conditions that put some personal  
4 responsibility on some of the people advancing the  
5 projects. In other words, their performance bonuses  
6 be tied to the performance cost estimates for the  
7 projects.

8 Quarterly reporting doesn't seem to do that  
9 much, except that it explains that projects have  
10 normally gone over budget, but then precious little  
11 happens after that. So in previous proceedings, the  
12 IPPBC has asked that some of the conditions include  
13 performance of individuals responsible for the  
14 projects be tied to their bonuses and compensation.

15 Subject to any questions, those are the  
16 IPPBC's submissions.

17 THE CHAIRPERSON: Thank you, Mr. Austin. Any other  
18 comments on item 7? Mr. Tennant? Mr. Weafer.

19 **ARGUMENT BY MR. WEAFER ON ITEM #7:**

20 MR. WEAFER: Thank you, Mr. Chairman. We are comfortable  
21 with the proposal put forward by B.C. Hydro in terms  
22 of the reporting on this project, and support their  
23 position.

24 THE CHAIRPERSON: Thank you.

25 **ARGUMENT BY MR. TENNANT ON ITEM #7:**

26 MR. TENNANT: I believe that the Commission should set

1 conditions on the approval of funding, including that  
2 B.C. Hydro should request more funding to enable them  
3 to give at least a conceptual consideration to the  
4 identified opportunities for developing a series of  
5 carbon-controlled pump storage hydro plants in the  
6 area, either as an alternative or else an ancillary to  
7 the FNU3 project.

8 Now, aside from the argument I've already  
9 made, to employ the pump storage plants for a  
10 renewable source of electricity in order to make it  
11 dispatchable and to obviate the inefficient, including  
12 use of the FNU3 for peaking supply, I would suggest it  
13 also be considered these studies to consider employing  
14 the plants to complement or back up Site C, or to  
15 minimize the risks associated with proceeding with any  
16 repairs to the Bennett Dam, its generator for the  
17 reservoir. That's my submission.

18 THE CHAIRPERSON: Thank you, Mr. Tennant. Any other  
19 question -- any other submissions?

20 Now, Mr. Godsoe, you wish to --

21 **REPLY BY MR. GODSOE ON ITEM #7:**

22 MR. GODSOE: I do. It is news to me that IPPBC has tied  
23 previous requests to performance bonuses on an  
24 individual level. I have not seen that personally and  
25 I did not see that in their argument.

26 **Proceeding Time 2:01 p.m. T52**

1 I must say, if we're getting into  
2 risk/reward systems or cost collars, I would have  
3 lengthy submissions on the jurisdiction of the  
4 Commission or lack thereof, I might underline, to do  
5 so. So, I think I need some clarification from Mr.  
6 Austin on that issue, because if we're into cost  
7 collars we're going to be here for a while.

8 With respect to Vanport, I think our full  
9 answer is in Section 5.1 of the reply argument. We  
10 say it's inappropriate for the Commission to direct us  
11 further to look at any further speculative pump  
12 storage projects that might be coming forward from  
13 Vanport.

14 THE CHAIRPERSON: I don't think Mr. Austin was going to  
15 corporate cap and collars. I think he was going to  
16 personal cap and collars. But certainly it's not in  
17 evidence in front of us and I see no intervenor  
18 seeking that relief, including Mr. Austin. So I think  
19 we can say that item 7 is behind us.

20 **ARGUMENT BY MR. GODSOE ON ITEM #8:**

21 MR. GODSOE: Moving then to the last item, item 8, B.C.  
22 Hydro's position continues to be as set out at page 18  
23 of its reply argument, that neither COPE 378 nor any  
24 other intervenor has sought any relief, any relief  
25 from the Commission on the topic of relieving B.C.  
26 Hydro from its obligation to serve new customers under

1 its tariff and accordingly, to quote the reply  
2 argument, the Commission need not and indeed should  
3 not rule on this issue.

4 Exhibit B-56 is specifically referenced in  
5 item 8. I wanted to draw the Commission's attention  
6 to a couple of very important caveats with respect to  
7 that exhibit. As it says in that exhibit, it is a  
8 simplified analysis. It is a rate impact analysis  
9 based on a fixed amount of generation, and that's  
10 load, because, number one, it only looks at  
11 incremental generation created by the plant without  
12 looking at imports or import costs; and number two,  
13 without looking at what the alternative power source  
14 would be absent the upgrade.

15 It is a calculation that was done based on  
16 a pre-defined assumption that the only load the  
17 incremental supply would serve is industrial classes  
18 1211 or 1823. As clearly set out in B.C. Hydro's  
19 argument at pages 183 and 184, FNU3 is not reliant on  
20 the development of the Horn River basin, or indeed any  
21 single industrial customer that would trigger the 150  
22 mVa threshold set out in tariff supplement 6. So I  
23 think we need to cut the tying the FNU3 to this  
24 relief, and I think I've done that in the argument  
25 based on the evidence.

26 Going more broadly, there are several

1 problems with the Commission ruling. First, B.C.  
2 Hydro's marginal cost of supply is higher than its  
3 embedded costs of supply. That's obvious, and that's  
4 set out in Exhibit B-12, response to Commission IR  
5 3.244.1. To quote from that IR, quote:

6 "B.C. Hydro's marginal cost of energy is  
7 higher than the embedded cost of energy and  
8 consequently any incremental load over the  
9 forecast load will increase B.C. Hydro's  
10 average cost of energy supply."

11 A Commission ruling in what I'll call a  
12 vacuum raises several procedural concerns for B.C.  
13 Hydro. First, COPE 378 raised Section 28.3 of the  
14 *Utilities Commission Act* and the possibility of relief  
15 on 18 December 2009 with the filing of Exhibit C-16-9,  
16 which is COPE 378 response to BCUC 1.12.1. No  
17 intervenor other than COPE 378 has raised this issue  
18 in argument. If the Commission were to rule on the  
19 relief, what of the ratepayers impacted? Where do  
20 they get to make submissions?

21 If the Commission has the power to relieve  
22 B.C. Hydro from serving large new industrial customers  
23 because of the marginal cost is above embedded cost,  
24 if it exercises that power could it not do so for  
25 other customer classes? If it doesn't, would that not  
26 be discriminatory? I'm just raising the tip of the

1           iceberg here. Clearly there's a legal debate between  
2           ourselves and COPE 378 on the extent of 28(3).  
3           However, there is nothing in this LTAP that triggers a  
4           request for relief and accordingly, with respect, I  
5           urge the Commission to decline to make any such  
6           ruling.

7                               Subject to any questions, those are my  
8           submissions on item 8.

9   THE CHAIRPERSON:    I think we'll hear from the  
10           intervenors. Anyone wish to support this, B.C.  
11           Hydro's submission?

12   **ARGUMENT BY MR. AUSTIN ON ITEM #8:**

13   MR. AUSTIN:        The IPPBC supports B.C. Hydro's position and  
14           I would like to add that the B.C. Utilities Commission  
15           should not be setting industrial policy in this  
16           province through the rationing of electricity.

17   THE CHAIRPERSON:    Thank you.

18                               **Proceeding Time 2:07 p.m. T53**

19   **ARGUMENT BY MR. WALLACE ON ITEM #8:**

20   MR. WALLACE:        I agree. JIESC agrees with both B.C. Hydro  
21           and IPPBC on this one.

22                               The government has indicated so far that  
23           new loads in the province, whether they be  
24           residential, commercial or industrial, get to share in  
25           the value of the Heritage Assets. In our submission  
26           it appears to be the correct policy. It might turn

1 out down the road that there should be exceptions. If  
2 an aluminum plant came along, we should at least talk  
3 about it, but the JIESC submits that if there are to  
4 be exceptions they should be decided -- not be decided  
5 in a vacuum, they should be decided on a full airing  
6 and hearing of the issues at the time it's going to be  
7 done. And in our submission, 28(3) clearly  
8 contemplates that when it says,

9 "After a hearing and for proper cause the  
10 Commission may relieve a public utility from  
11 the obligation to supply service."

12 We have no submissions with respect to  
13 proper cause, and you should not make that decision at  
14 this time.

15 Thank you.

16 THE CHAIRPERSON: Thank you, Mr. Wallace.

17 **ARGUMENT BY MR. WEAVER ON ITEM #8:**

18 MR. WEAVER: Mr. Chairman, the CEC also supports B.C.  
19 Hydro's position on this matter, and also adopts the  
20 comments by Mr. Wallace. Thank you.

21 THE CHAIRPERSON: Thank you.

22 **ARGUMENT BY MS. WORTH ON ITEM #8:**

23 MS. WORTH: Commission Panel, BCOAPO, like B.C. Hydro,  
24 does not see that the Commission needs to, or should  
25 make any determination at this time in regards to the  
26 implications of Section 28(3) of the Act. In the

1 absence of an application for relief in this regard,  
2 such a determination would be premature, in our  
3 submission, and made in the absence of a full  
4 examination of the issue on record.

5 BCOAPO believes that this Commission Panel  
6 could safely leave this issue to be determined in the  
7 future, at such time as an application is made for  
8 relief.

9 Thank you.

10 **ARGUMENT BY MR. ANDREWS ON ITEM #8:**

11 MR. ANDREWS: BCSEA/SCBC, supports the position expressed  
12 by counsel for B.C. Hydro and also endorses the  
13 comments made by Mr. Austin and Mr. Wallace, which  
14 actually track quite closely the views that BCSEA had  
15 prepared to present. Subject to any questions, those  
16 are my submissions.

17 THE CHAIRPERSON: Thank you.

18 MR. OULTON: Bat clean up once again. Mr. Chair --

19 THE CHAIRPERSON: It's fitting, I think. This is your  
20 issue, Mr. Oulton.

21 **ARGUMENT BY MR. OULTON ON ITEM #8:**

22 MR. OULTON: Well, obviously the Commission's question  
23 gave COPE pause to consider this issue, and I don't  
24 think COPE's position, other than obviously there is  
25 an issue as between COPE and B.C. Hydro on the proper  
26 interpretation of Section 28(3). That section was

1 raised in response to a specific information request  
2 put to Dr. Schaffer and it's in that context that this  
3 issue arose. My friend from B.C. Hydro is quite  
4 right. COPE doesn't seek any relief in that regard in  
5 this application, it was simply -- the reason it is  
6 addressed in argument is B.C. Hydro took issue with  
7 Dr. Schaffer's reference to that question. There  
8 appears to be clearly differing legal opinions on  
9 where that takes us, but I think COPE agrees with B.C.  
10 Hydro that there's no need to make an express ruling  
11 on that issue in the context of this hearing.

12 It was responded to in argument to the  
13 extent that my friend for B.C. Hydro takes issue with  
14 parts or all of Dr. Schaffer's evidence. We would be  
15 remiss if we didn't seek to address the points that he  
16 makes, including the points he makes vis-à-vis Section  
17 28(3).

18 The issue that Dr. Schaffer raises in his  
19 evidence is one that COPE says is alive in this LTAP  
20 and will continue to be a live one and in that regard,  
21 if there is any relief to be sought on this point,  
22 it's not vis-à-vis an interpretation binding on  
23 Section 28(3) because that is properly a matter that  
24 would be the subject of, if as my friend Mr. Wallace  
25 points out, a new aluminum smelter comes on board or  
26 comes to the province and wants to do it, that is a

1 significant industrial load of the type that Dr.  
2 Schaffer was referring to, and that may well provide  
3 -- that type of event may well provide the context for  
4 determination of Section 28(3).

5 **Proceeding Time 2:12 p.m. T54**

6 The issue for COPE that Dr. Schaffer was  
7 discussing in his evidence, I think, that led to the  
8 inquiry from the panel and then the resulting ensuing  
9 debate between my friend and I on the proper  
10 interpretation of Section 28(3) is the market issue  
11 that is facing B.C. Hydro with the reality that, when  
12 it's acquiring new supply from IPPs or otherwise, it's  
13 doing so at a price that far exceeds the price that,  
14 under the tariff, it is obliged to sell to new  
15 industrial customers in particular.

16 And COPE invites this Commission -- and  
17 it's obviously this Commission's decision on whether  
18 or not to accept the invitation; but to provide some  
19 direction to B.C. Hydro whereby it can address --  
20 provide comment in future applications on how it's  
21 going to address that real issue. Because as COPE  
22 sees it, there is an approaching market failure that,  
23 as you continue to increase your supply at incremental  
24 costs that far exceed the costs that you're delivering  
25 the power at, eventually that's not sustainable.

26 THE CHAIRPERSON: Well, thank you. Because I wasn't sure

1           what Dr. Schaffer was referring to. I think he was  
2           looking towards the mines in the northwest, was he  
3           not?

4 MR. OULTON:     That's another example, I believe, that was  
5           live in Dr. Schaffer's mind. That there are a variety  
6           of electricity-intensive industrial loads that may be  
7           coming to B.C. Hydro seeking service, if another  
8           smelter comes to town, given the unique resources that  
9           are available that brought Alcan here, 60-plus years  
10          ago. New mines that come on board, given current  
11          technologies, their operations will be more  
12          electricity-dependent than perhaps past operations  
13          have been, and that results in an increased demand  
14          being placed on the resources that -- I accept my  
15          friend Mr. Wallace's position. There is a direction  
16          out there that there's to be a sharing of value of the  
17          Heritage resources.

18                         But COPE's position is, that sharing makes  
19                         sense to a point, and Section 28(3) gives this  
20                         Commission the jurisdiction, in the appropriate  
21                         context, to ensure that the existing ratepayers and  
22                         new ratepayers get the benefit to the maximum extent  
23                         possible, and not lose the benefit of the Heritage  
24                         resources due to some disproportionate load that comes  
25                         on board.

26 THE CHAIRPERSON:     Well, as Mr. Godsoe said a moment ago,

1 the evidence before this committee -- Commission,  
2 sorry, Panel, is that Horn River is not really part of  
3 the LTAP -- the part of the Fort Nelson FNU-3. But I  
4 mean, if Mr. Schaffer were to turn his view away from  
5 the northwest to the northeast, Dr. Schaffer, he might  
6 well see an instance where this issue is coming.

7 MR. OULTON: No, and I don't think Dr. Schaffer's intent,  
8 and COPE's intent, was not to say that this is an FN3  
9 issue alone. Or even at all. In thinking about this,  
10 I don't think what B.C. Hydro is seeking with respect  
11 to FNU3 would trigger Section 28(3), because it's not  
12 a new user coming on board that has a significant  
13 demand, saying "Please supply us service," which in  
14 turn then would leave it to the appropriate interested  
15 parties to try to seek a hearing under Section 28(3)  
16 and seek the Commission's determination to get B.C.  
17 Hydro relieved of that obligation.

18 FNU3, as I understand it, is an upgrade to  
19 an existing procedure to increase B.C. Hydro's supply  
20 in that area. It's not a new user coming on board and  
21 saying "I want service," which is what's at issue in  
22 Section 28.

23 THE CHAIRPERSON: But there is evidence in front of this  
24 Panel that there is a potential new user out there  
25 with a 326 megawatt load.

26 MR. OULTON: Sorry, in Fort Nelson? Sorry?

1 THE CHAIRPERSON: In Horn River. In Horn River.

2 MR. OULTON: Ah.

3 THE CHAIRPERSON: And you're obviously -- your  
4 submissions were not focused on that at all.

5 MR. OULTON: No.

6 THE CHAIRPERSON: Okay, thank you very much.

7 **REPLY BY MR. GODSOE ON ITEM #8:**

8 MR. GODSOE: I can be brief. With respect, B.C. Hydro  
9 resists the notion that the Commission should even be  
10 invited to issue a direction on this matter. It is  
11 simply premature. What could the Commission be saying  
12 without a project in front of it that would in fact  
13 trigger any notion of Section 28(3)? As you've  
14 pointed out, Horn River is for another time, Mr.  
15 Chairman. It does not trigger FNU3 and so, in our  
16 respectful submission, even the direction in this area  
17 is dangerous.

18 **Proceeding Time 2:17 p.m. T55**

19 THE CHAIRPERSON: The Commission had to resolve in its  
20 own mind that that was the case.

21 Does that conclude your reply?

22 MR. GODSOE: That does conclude my reply on item 8.

23 THE CHAIRPERSON: Thank you very much indeed.

24 Mr. Fulton, does that conclude our agenda?

25 MR. FULTON: Yes, it does, Mr. Chairman. We have  
26 concluded with the eight items that the Commission had

1 set out in Exhibit A-20.

2 THE CHAIRPERSON: We are adjourned. Thank you,  
3 gentlemen.

4 **(PROCEEDINGS ADJOURNED AT 2:18 P.M.)**

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