

**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.**  
**February 19, 2009**

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**PROCEEDINGS AT HEARING**

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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 3**

## APPEARANCES

|                            |   |
|----------------------------|---|
| G.A. FULTON                | Commission Counsel  |
| C. GODSOE<br>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<br>K. SEYMOUR   | Joint Industry Electricity Steering Committee   |
| C. WEAVER                  | Commercial Energy Consumers of British Columbia   |
| J. QUAIL<br>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<br>L. WINSTANLEY | COPE 378  |
| P. COCHRANE                | City of New Westkminster  |

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**CAARS**

VANCOUVER, B.C.

February 19, 2009

**(PROCEEDINGS RESUMED AT 9:01 A.M.)**

THE CHAIRPERSON: Please be seated.

Good morning, everyone. Welcome to the oral public hearing of B.C. Hydro's 2008 long-term acquisition plan, LTAP, application. My name is Pullman and I am the Commission member designated to chair this panel. With me on my right is Commissioner Milbourne, and on my left is Commissioner Harle. The other people you should be aware of are the Commission's counsel, Mr. Gordon Fulton, the lead staff person for the Commission, Ms. Eileen Cheng, and the Hearing Officer, Mr. Hal Bemister.

Just a few words of background. B.C. Hydro filed its 2008 LTAP application on June the 12<sup>th</sup>, 2008, and on the June the 17<sup>th</sup>, 2008, the Commission issued Order G-96-08, which is Exhibit A-1 in these proceedings, establishing a regulatory timetable and setting up a procedural conference for September the 8<sup>th</sup>, 2008. Following which, on September the 11<sup>th</sup>, 2008, the Commission issued Order G-126-08, which is Exhibit A-4, which set January the 8<sup>th</sup>, 2009 as the oral hearing date, as well as determining that an issues list would not be required for these

1 proceedings and setting a closing date of October 15<sup>th</sup>,  
2 2008 for the evidentiary phase for the Mica units 5  
3 and 6 definition phase expenditures.

4 Second procedural conference was held on  
5 November 26<sup>th</sup>, 2008 following which the Commission  
6 issued Order G-178-08, which is Exhibit A-12, which  
7 established a revised regulatory timetable requiring  
8 B.C. Hydro to file its evidentiary update on December  
9 22<sup>nd</sup>, 2008, establishing a third round of Information  
10 Requests to be issued on January the 12<sup>th</sup>, 2009, and to  
11 be responded to by February the 10<sup>th</sup>, 2009, and  
12 revising the oral hearing date to February the 19<sup>th</sup>,  
13 2009 which, of course, is today.

14 Moving forward, I propose that we sit each  
15 morning from 8:30 in the morning, 9:00 on Mondays, I  
16 hope you can all accommodate 8:30, to around 4:00 in  
17 the afternoon, with 15-minute breaks in the morning  
18 and afternoon sessions, and 90 minutes for lunch.

19 **Proceeding Time 9:04 a.m. T2**

20 As I said earlier, there is no issues list  
21 for this hearing, but I would be grateful if those  
22 counsel who wish to make opening statements could  
23 identify those issues they propose to pursue in this  
24 hearing. I would also be interested in hearing from  
25 Mr. Godsoe on how B.C. Hydro's experiment with tagging  
26 topics worked out. The Panel would certainly be

1 interested in receiving a concordance of the IRs by  
2 topic number if one exists, but --

3 So now we'll proceed with the roll. Please  
4 identify yourselves and the organization or  
5 organizations you represent when Mr. Fulton summons  
6 you. Also please indicate whether you have any  
7 matters you wish to bring before the Panel at this  
8 time, and then we'll have the opening statements.

9 Mr. Fulton.

10 MR. FULTON: Thank you, Mr. Chair. Good morning, Chair,  
11 good morning, Panel. In terms of appearances I'll  
12 call first upon British Columbia Hydro & Power  
13 Authority.

14 MR. GODSOE: Good morning, Mr. Chair, Commissioners.  
15 Craig Godsoe, G-O-D-S-O-E, for British Columbia Hydro  
16 & Power Authority. To my far right is Mr. Kevin  
17 Thrasher, T-H-R-A-S-H-E-R, of Lawson Lundell, who'll  
18 be assisting me throughout the proceedings. And we  
19 have nothing to add to the agenda as set out in  
20 Exhibit A-17.

21 THE CHAIRPERSON: Thank you, Mr. Godsoe.

22 MR. FULTON: British Columbia Transmission Corporation.

23 MR. CURTIS: David Curtis on behalf of BCTC. No items to  
24 add to the agenda this morning.

25 THE CHAIRPERSON: Thank you, Mr. Curtis.

26 MR. FULTON: Terasen Gas Inc., Terasen Gas (Vancouver

1 Island) Inc., and Terasen Gas (Whistler) Inc.

2 MR. GHIKAS: Mr. Chairman, Commissioners, Matt Ghikas, G-  
3 H-I-K-A-S, on behalf of the Terasen Utilities, and I  
4 have no issues to add to the list.

5 THE CHAIRPERSON: Thank you, Mr. Ghikas.

6 MR. FULTON: Columbia Power Corporation.

7 MR. MacINTYRE: Good morning. Glenn MacIntyre, G-L-E-N-  
8 N, M-A-C capital I-N-T-Y-R-E, appearing on behalf of  
9 Columbia Power Corporation, which I'll refer to by the  
10 acronym CPC. CPC is represented by counsel, Fred  
11 Weisberg. Mr. Weisberg is unable to attend today and  
12 tomorrow but will be attending beginning on Monday.

13 CPC filed an intervention, Exhibit C11-1,  
14 but has not filed evidence in this proceeding. CPC  
15 does not have an opening statement. CPC wishes to be  
16 called upon for cross-examination of each panel,  
17 although we currently anticipate that any cross-  
18 examination will not be extensive. CPC reserves the  
19 right to make final argument.

20 THE CHAIRPERSON: Thank you, Mr. MacIntyre.

21 MR. FULTON: Pristine Power Inc.

22 MR. WALKER: Good morning, Mr. Chair, Panel. Eli Walker  
23 appearing as counsel for Pristine Power. First name  
24 E-L-I, last name W-A-L-K-E-R. Nothing to add this  
25 morning and no opening statement.

26

**Proceeding Time 9:07 a.m. T03**

1 THE CHAIRPERSON: Thank you, Mr. Walker.

2 MR. FULTON: NaiKun Wind Energy Group, Inc.

3 MR. BOIS: Good morning, Mr. Chair, panel. My name is  
4 Charles Bois, B-O-I-S, and I appear for NaiKun Wind  
5 Energy. We don't have an opening statement. We will  
6 have some limited cross-examinations of a couple of  
7 members of the two panels and of Panel 1, and we will  
8 reserve the right to submit a final argument, but we  
9 don't have an opening statement. Thank you.

10 THE CHAIRPERSON: Thank you.

11 MR. FULTON: Independent Power Producers' Association of  
12 British Columbia.

13 MR. AUSTIN: Good morning. David Austin, A-U-S-T-I-N,  
14 appearing on behalf of the Independent Power Producers  
15 of B.C. There is one matter that I would like to  
16 bring to the Commission's attention in that there is  
17 -- the Throne Speech was brought down earlier this  
18 week, and the IPPBC would like to introduce that into  
19 evidence. I was proposing to -- after consultation  
20 with Mr. Fulton, to file it as part of my opening  
21 statement, but not necessarily have it adopted for  
22 acceptance until I did my first cross-examination.  
23 The reason for doing that is in case another party  
24 wishes to use it in their cross-examination because  
25 the IPPBC is about number four on the list.

26 So, it's something I'd like you to consider

1           and if there are any problems with that, I'd like to  
2           know about it.

3   THE CHAIRPERSON:    Thank you, Mr. Austin.

4   MR. FULTON:        Joint Industry Electricity Steering  
5           Committee.

6   MR. WALLACE:        R. B. Wallace, appearing on behalf of the  
7           Joint Industry Electricity Steering Committee.  
8           Appearing with me from time to time will be Ms. K.  
9           Seymour, S-E-Y-M-O-U-R. We have no preliminary  
10          matters and will have an opening statement.

11   THE CHAIRPERSON:    Thank you, Mr. Wallace.

12   MR. FULTON:        Commercial Energy Consumers of British  
13          Columbia.

14   MR. WEAFER:        Good morning, Mr. Chairman, members of the  
15          panel. My name is Chris Weafer, W-E-A-F-E-R,  
16          appearing on behalf of the Commercial Energy  
17          Consumers. We have no other preliminary matters but  
18          we will make an opening statement at the appropriate  
19          time. Thank you.

20   THE CHAIRPERSON:    Thank you, Mr. Weafer.

21   MR. FULTON:        B.C. Old Age Pensioners' Organization *et al.*

22   MR. QUAIL:         Good morning, Mr. Chairman and panel members,  
23          Jim Quail appearing for BCOAPO *et al*, and with me here  
24          today is my co-counsel, Leigha Worth, and our  
25          consultant, Colin Fussell. We also are relying on the  
26          expertise of Mr. Bill Harper, who is participating

1           virtually, let's say, from Toronto via the Internet.  
2           We have nothing to add to the agenda.  
3 THE CHAIRPERSON:    Thank you, Mr. Quail.  
4 MR. FULTON:        B.C. Sustainable Energy Association, Sierra  
5           Club of Canada, B.C. Chapter.  
6 MR. ANDREWS:       Good morning, members of the panel.  
7           William Andrews, representing B.C. Sustainable Energy  
8           Association and the Sierra Club of British Columbia.  
9           I have nothing to add to the agenda, and I do have an  
10          opening statement.  
11 THE CHAIRPERSON:    Thank you, Mr. Andrews.  
12 MR. FULTON:        Peace Valley Environmental Association.  
13 MR. GATHERCOLE:    Good morning, panel. Richard Gathercole  
14          appearing on behalf of Peace Valley Environmental  
15          Association. I have nothing to add to the agenda, but  
16          I will be making an opening statement.  
17 THE CHAIRPERSON:    Thank you, Mr. Gathercole.  
18 MR. FULTON:        Horizon Technologies Inc./Energy Solutions  
19          for Vancouver Island Society, Okanagan Environmental  
20          Industry Alliance, Island Transformation.Org, Rental  
21          Owners and Managers Society of British Columbia.  
22 MR. BERTSCH:        My name is Ludo Bertsch, spelled B-E-R-T-S-  
23          C-H, and I'm representing the Energy Solutions for  
24          Vancouver Island Society, the Okanagan Environmental  
25          Industry Alliance, Island Transformations.Org, and the  
26          Rental Owners and Managers Society of B.C. And we

1 will have an opening statement to make. Thank you.

2 THE CHAIRPERSON: Thank you, Mr. Bertsch.

3 MR. FULTON: COPE 378.

4 MR. OULTON: Good morning, Chair, Commissioners. My name  
5 is Mark Oulton, O-U-L-T-O-N, appearing on behalf of  
6 COPE 378. Appearing with me from time to time will be  
7 Lori Winstanley, W-I-N-S-T-A-N-L-E-Y, from COPE. We  
8 intend to make an opening statement and do not have  
9 anything to add to the agenda.

10 THE CHAIRPERSON: Mr. Oulton, thank you.

11 **Proceeding Time 9:12 a.m. T4**

12 MR. FULTON: Mr. Chairman, the Texada Action Now  
13 Community Association is represented by Mr. Richard  
14 Fletcher. Mr. Fletcher is in Britain at the moment.  
15 He advised me by e-mail yesterday that he would be  
16 back for the proceedings on Monday. But he has  
17 provided a written opening statement which, when it  
18 comes time, I will ask that that opening statement be  
19 marked an exhibit.

20 THE CHAIRPERSON: Thank you, Mr. Fulton.

21 MR. FULTON: In terms of other appearances then, is there  
22 any -- City of New Westminster.

23 MS. COCHRANE: Good morning, Chair and Panel. My name is  
24 Penny Cochrane. I'm here on behalf of the City of New  
25 Westminster and also appearing throughout the  
26 proceedings will be Rod Carle, manager of the

1           electrical utility of the City of New Westminster. We  
2           have no opening statement and no changes to the  
3           agenda. Thank you.

4 THE CHAIRPERSON: Thank you.

5 MR. FULTON: Now, to complete that hanging sentence, Mr.  
6 Chairman, is there anyone else here who has appeared  
7 in the proceedings that wishes to be recognized for  
8 the purposes of the appearances today?

9                       No responses, Mr. Chairman. That concludes  
10           the order of appearances.

11 THE CHAIRPERSON: Thank you, Mr. Fulton.

12 MR. FULTON: That takes us then to the opening statements  
13 phase of these proceedings, Mr. Chairman, and by way  
14 of introduction of who will be making opening  
15 statements and the order that they will be making  
16 those statements, they are as follows: B.C. Hydro,  
17 Terasen Utilities, JIESC, BCOAPO, IPPBC, CEC, BCSEA,  
18 ESVI *et al.*, PVEA, COPE 378. And Mr. Tennant, who has  
19 not appeared yet this morning, did indicate to me by  
20 e-mail that he and -- or it may have been by a  
21 telephone conversation, that he wanted to make an  
22 opening statement. So there may be an opening  
23 statement from Vanport Sterilizers Inc., and I did  
24 indicate to you that I will file the Texada Action Now  
25 Community Association opening statement when the  
26 others conclude.

1                   So with that list then, Mr. Chairman, I  
2                   will ask B.C. Hydro to begin with its openings  
3                   statement.

4 THE CHAIRPERSON:   Thank you. Mr. Godsoe.

5 MR. GODSOE:       Thank you, Mr. Fulton.

6 **OPENING STATEMENT BY MR. GODSOE:**

7 MR. GODSOE:       Mr. Chairman and Commissioners, in the  
8                   interest of efficiency and I think to be helpful to  
9                   the Panel and to my friends, I'm going to combine two  
10                  elements that are laid out in Exhibit A-17 in my  
11                  opening statement. First is what is traditionally  
12                  known as an opening statement, but also a drilling  
13                  down in the identification of B.C. Hydro's four  
14                  witness panels I think would be helpful for me to do  
15                  now. So you can tell I'm making a plea to go, run  
16                  past the 20-minute limit you set out in Exhibit A-17.

17                  More particularly the structure of my  
18                  opening statement is as follows. First I'm going to  
19                  give a brief overview of the application in front of  
20                  you and summarize what B.C. Hydro is seeking in this  
21                  proceeding. Second I'm going to describe the  
22                  legislative and provincial government policy context  
23                  governing the 2008 LTAP. And third I'm going to  
24                  summarize the composition and focus of each of B.C.  
25                  Hydro's four witness panels.

26                  And just to respond to your remark in your

1 opening statements, Mr. Chair, the tagging of topics  
2 for information requests was extremely helpful to B.C.  
3 Hydro, and we will be able to produce that table of  
4 concordance. I'll get back to you at the break about  
5 when we can produce that, but I know it does exist.

6 THE CHAIRPERSON: Thank you.

7 MR. GODSOE: I'll begin then with an overview of the  
8 application. Pursuant to Section 44.1 of the  
9 *Utilities Commission Act*, B.C. Hydro is required to  
10 file long-term resource plans "in the form and at the  
11 times the Commission requires". The 2008 LTAP, of  
12 course, is B.C. Hydro's long-term resource plan. And  
13 the 2008 LTAP provides a framework of future actions  
14 to ensure B.C. Hydro continues to provide reliable,  
15 cost-effective service while limiting risk to its  
16 customers.

17 **Proceeding Time 9:16 a.m. T05**

18 B.C. Hydro filed the 2008 LTAP on 12 June  
19 of 2008, pursuant to Sections 44.1 and 44.2 of the  
20 *Utilities Commission Act*. And, Mr. Chair, you may  
21 recall as part of the 2006 IEP/LTAP proceeding, the  
22 Commission agreed that LTAPs should be filed every two  
23 years.

24 B.C. Hydro is proposing to file the next  
25 LTAP in 2011, which would be two years after the  
26 Commission's decision on the current 2008 LTAP. And

1 the reason for this is as follows. That would permit  
2 us sufficient time to analyze a Commission decision,  
3 and also sufficient time to make any adjustments that  
4 may be necessary, including to ensure B.C. Hydro  
5 reaches self-sufficiency in 2016.

6 Now, I referenced service just moments ago.  
7 B.C. Hydro has an obligation to supply service to its  
8 customers, and this principle is reflected in the  
9 following: Section 28 of the *Utilities Commission*  
10 *Act*, Heritage Special Direction Number HC-2 to the  
11 Commission, which provides among other things that  
12 Hydro's rates are established on a cost-of-service  
13 basis, and finally B.C. Hydro's electric tariff,  
14 including tariff supplement 6. This over-arching  
15 service principle establishes the basis for the 2008  
16 LTAP and the plans it contains, as you will hear from  
17 the policy panel and the other three B.C. Hydro  
18 panels.

19 The relief sought by B.C. Hydro is set out  
20 in Exhibit B-1-11, which is the revised Order sought.  
21 And the primary relief I'll categorize into three  
22 distinct parts. First, a Commission Order determining  
23 that the 2008 LTAP is in the public interest. Second,  
24 a Commission Order determining that the following  
25 seven expenditures are in the public interest, and  
26 they are the implementation of the DSM plan,

1 definition phase work for capacity-related DSM,  
2 sustaining capital for Burrard Thermal generating  
3 station, definition phase work for Mica Units 5 and 6,  
4 Site C Stage 2 work, definition phase work for the  
5 clean power Call and, finally, implementation of the  
6 Fort Nelson generating station upgrade project case  
7 three, which I'll refer to as FNU-3.

8 The third category is approval of the two  
9 contingency resource plans set out in Chapter 6 of the  
10 2008 LTAP, for inclusion of B.C. Hydro's network  
11 integrated transmission service update to British  
12 Columbia Transmission Corporation.

13 B.C. Hydro has also requested that the  
14 Commission endorse the following: a proposed clean  
15 power Call pre-attrition firm energy target of 3,000  
16 gigawatt hours per year. The clean power Call, clean  
17 or renewable eligibility requirement. B.C. Hydro's  
18 plan to rely on Burrard for 900 megawatts of  
19 dependable capacity and 3,000 gigawatt hours per year  
20 of firm energy. That the DSM amortization period  
21 remain at 10 years. That the filing of DSM  
22 performance reports occur on an annual, as opposed to  
23 a semi-annual, basis. The elimination of the fiscal  
24 '05/fiscal '06 revenue requirement application  
25 decision directive 62 and 64, which pertain to load  
26 displacement projects, in light of the new definition

1 of demand-side measures found in Section 1 of the  
2 *Utilities Commission Act*. And finally, B.C. Hydro's  
3 proposed capital plan review process.

4 I now want to turn to the legislative and  
5 policy framework governing the 2008 LTAP. Now, while  
6 the 2008 LTAP flows out of the 2006 IEP/LTAP, it is  
7 B.C. Hydro's first long-term resource plan reflecting  
8 the following: the May, 2008 amendments to the  
9 *Utilities Commission Act*; the June, 2007 issuance of  
10 Special Direction number 10 to this Commission; and  
11 the February 2007 release of the 2007 Energy Plan.  
12 And I'd like to address each of these developments in  
13 turn.

14 **Proceeding Time 9:21 a.m. T6**

15 In May 2008, amongst other things, the B.C.  
16 Government amended the long-term planning resource  
17 sections of the *Utilities Commission Act*, and those  
18 are now found in Section 44.1. For the first time,  
19 the B.C. Government legislated the DSM is the  
20 preferred resource, legislated it. And I point to the  
21 following sections to back up my remarks.

22 Pursuant to subsection 44.1(2)(b), B.C.  
23 Hydro must pursue all cost-effective DSM prior to  
24 pursuing any supply-side resource. And pursuant to  
25 subsection 44.1(2)(f), B.C. Hydro must prove why it  
26 cannot fill its entire load resource gap with DSM.

1           And as you'll hear from the policy panel, Panel 4,  
2           B.C. Hydro is of the view that it has met both of  
3           these provisions with its LTAP.

4                       Subsection 44.1(6) of the *Utilities*  
5           *Commission Act* gives the Commission the discretion to  
6           accept the LTAP if the Commission considers the LTAP  
7           "would be in the public interest". The term "public  
8           interest" is not defined in the *Act*. However, in  
9           Section 44.1(a) the Commission must consider the  
10          following when reviewing the LTAP. The government's  
11          energy objectives. The interests in persons in B.C.  
12          Hydro who receive or who may receive service from B.C.  
13          Hydro. And finally, whether the plan shows that B.C.  
14          Hydro intends to pursue adequate cost-effective  
15          demand-side measures.

16                      And on this last point, as you are aware,  
17          the B.C. Minister of Energy, Mines and Petroleum  
18          Resources recently enacted the demand-side measures  
19          regulation, a copy of which can be found in Exhibit A-  
20          10. That regulation sets out legally binding adequacy  
21          and cost-effectiveness parameters for B.C. Hydro's DSM  
22          filings.

23                      There are six government energy objectives  
24          defined in Section 1 of the *Act*. However, we are of  
25          the view that only four are relevant to this  
26          proceeding, and they are as follows:

1 Encourage B.C. Hydro to reduce greenhouse  
2 gas emissions. Encourage B.C. Hydro to take DSM  
3 measures. Encourage B.C. Hydro to produce, generate  
4 and acquire electricity from clean or renewable  
5 resources. And finally, encourage B.C. Hydro to use  
6 innovative energy technologies.

7 I now want to turn to Special Direction 10  
8 which I'll call SD 10 for short, and it may help, in  
9 fact, if you have a copy of Special Direction 10 in  
10 front of you. It's found at Appendix B-2, Exhibit B-  
11 1-1 as I move through my opening statement.

12 As acknowledged by COPE in Exhibit C16-9,  
13 COPE responds to BCUC IR 2.1.1, SD 10 is a legal  
14 constraint. It is legally binding on this Commission.  
15 And I'm going to turn now to Section 3 of SD 10. That  
16 states that in regulating B.C. Hydro, the Commission  
17 must, the Commission must, use the criterion that B.C.  
18 Hydro is to achieve self-sufficiency by becoming  
19 capable of meeting by 2016 and "each year thereafter",  
20 its electricity supply obligations "solely, solely,  
21 from electricity generating facilities within the  
22 province".

23 SD 10 precludes the Commission from  
24 accepting B.C. Hydro's continued reliance on 2500  
25 gigawatt hours per year of non-firm/market reliance  
26 after 2015 for planning purposes. Accordingly, that

1 resource has been removed from B.C. Hydro's supply  
2 stack after 2015.

3 **Proceeding Time 9:26 a.m. T07**

4 And the reasons for that are laid out  
5 exhaustively in Exhibit B-3, response to COPE IR  
6 1.2.7. SD 10 also precludes the Commission from  
7 accepting B.C. Hydro's continued reliance on 400  
8 megawatts of market reliance after 2015 for planning  
9 purposes. Again, that resource has been removed from  
10 B.C. Hydro's stack after 2015. And the reasons for  
11 that are found in Exhibit B-3, response to BCUC IR  
12 1.33.3.

13 As you will hear from Panel 2, SD 10 also  
14 has implications for Burrard. Now, because SD 10 is  
15 legally binding on the Commission, B.C. Hydro  
16 maintains that the personal views of Dr. Jaccard  
17 concerning the benefits of self-sufficiency, and the  
18 personal views of Dr. Schaffer concerning the costs of  
19 self-sufficiency, are not relevant at all to this  
20 proceeding. And accordingly, B.C. Hydro has no plans  
21 to cross-examine either witness on their personal  
22 views of SD 10. What we will be doing is cross-  
23 examining both witnesses on other aspects of their  
24 submissions.

25 I now want to turn to the government policy  
26 context and explore two documents. First, the 2007

1 Energy Plan and second, the B.C. Climate Action Plan.  
2 As you will hear from the policy panel, the  
3 2008 LTAP has been developed in the context of, and is  
4 guided by, provincial government policy, including the  
5 2007 Energy Plan. And the list of relevant 2007  
6 Energy Plan policy action items is set out in Table 1-  
7 2 of Exhibit B-1. I'm going to highlight a few for  
8 you now. First, the DSM-related policy actions, and  
9 those are largely found in number 1 and number 3.  
10 Number 1 sets out a target for B.C. Hydro to acquire  
11 50 percent of its incremental resource needs through  
12 conservation by 2020. Number 3 encourages public  
13 utilities like B.C. Hydro to pursue all cost-effective  
14 DSM. And as I've just stated moments earlier, that  
15 latter requirement has now been legislated in Section  
16 44.1(2). And we go further. There is nothing in the  
17 *Utilities Commission Act* that sets a cap of 50 percent  
18 on how much DSM B.C. Hydro should acquire. The only  
19 place 50 percent is mentioned in the *Act* is in Section  
20 44.1(4), and we maintain that is purely a reporting  
21 obligation. It does not establish an implementation  
22 target.

23 Second category is ensuring self-  
24 sufficiency and, as I have outlined earlier, pursuant  
25 to SD 10, this is now a legislative requirement for  
26 the Commission. The thermal offset requirements are

1 found in policy actions number 18 and 19. Number 18  
2 states that "new thermal generation must completely  
3 offset GHG emissions by its in-service date".  
4 Existing thermal generation is spoken to through  
5 policy action number 19, and those facilities must  
6 completely offset their GHG emissions no later than  
7 2016. These two policy actions have also been  
8 legislated pursuant to the *Greenhouse Gas Reduction*  
9 *(Emission Standards) Statutes Amendment Act* of 2008,  
10 which is described in Chapter 4 of the 2008 LTAP.

11 Policy action number 21 is also relevant to  
12 the LTAP, and that states:

13 "Ensure clean or renewable electricity  
14 generation continues to account for at least  
15 90 percent of total generation."

16 And finally, policy action number 22 speaks to Burrard.

17 We say there are several reasons why the  
18 Commission should ascribe significant weight to the  
19 2007 Energy Plan. And one of the reasons is, frankly,  
20 LTAPs, to be effective, must take into account B.C.  
21 government policy direction. The reason is obvious.  
22 B.C. government policy developments are material and  
23 affect the electricity industry in B.C. in a  
24 fundamental way. And as you will hear from B.C.  
25 Hydro's policy panel, it would be imprudent for B.C.  
26 Hydro to ignore government policy.

1 **Proceeding Time 9:30 a.m. T8**

2 The second major B.C. Government policy  
3 initiative that I say is relevant to the LTAP is the  
4 B.C. Climate Action Plan. That plan contains measures  
5 to take B.C. approximately 73 percent of the way to  
6 the *Greenhouse Gas Reduction Targets Act*, legislated  
7 target of a 33 percent reduction in GHG emissions by  
8 2020 using 2007 as a baseline. The Climate Action  
9 Team struck by the Premier has proposed measures to  
10 close this gap, some of which include electrification,  
11 and those initiatives can be explored with Panel 2.

12 In addition, as set out in Exhibit B-12,  
13 B.C. Hydro's response to BCUC Panel IR 1.21.1, through  
14 a ministerial order the province has now legislated  
15 additional GHG targets, number one, for 2012 to be 6  
16 percent below 2007 levels. Number two, for 2016 to be  
17 18 percent below 2007 levels. Fundamental point, the  
18 province has legislated targets for the province.  
19 You'll hear a lot about regional targets. Those are  
20 not legislated. The provincial target trumps.

21 I think that lays out the primary legal and  
22 policy landscape that I believe will be important for  
23 the Commission's review of this application, and I  
24 think that leaves me only needing to describe B.C.  
25 Hydro's four witness panels.

26 By way of background before I dive into

1 each of the four panels, Exhibit B-13 contains a  
2 lineup of Hydro's witness panels, and the direct  
3 testimony of each witness. Exhibit B13-1 contains an  
4 allocation of LTAP chapters and responses to  
5 information requests among the four panels. Each of  
6 the four panels will have a chair whose role will be  
7 to field questions that haven't been put to a  
8 particular witness, or suggest a person who's a more  
9 appropriate witness for the question posed. In other  
10 words, the chair of each panel will be a sort of  
11 traffic director within the panel in a way that is  
12 intended to be helpful. I'll identify the chair of  
13 each panel as I move through them in a moment.

14 I will be at counsel table for B.C. Hydro  
15 during the testimony of Panels 1, 2 and 4. Mr. Kevin  
16 Thrasher will be at counsel table for B.C. Hydro  
17 during the testimony of Panel 3.

18 The senior management of B.C. Hydro, with  
19 the bulk of the policy-making authority with respect  
20 to the LTAP are divided between Panels 1 and Panels 2.  
21 Panel 1 is comprised of Mr. Bob Elton, President and  
22 CEO of B.C. Hydro, who will also be the chair of Panel  
23 1, and Ms. Van Ruyven, Executive Vice-President of  
24 Customer Care and Conservation. Panel 2 includes Mr.  
25 Chris O'Riley, Senior Vice-President of Engineering,  
26 Aboriginal Relations and Generation, and I'll urge you

1 to use the acronym EARG for short because that's quite  
2 a mouthful.

3 Mr. Elton has, through an opening -- is  
4 going to be making an opening statement shortly, and  
5 the materials were circulated as Exhibit B-14.  
6 Broadly speaking, the Policy Panel will be addressing  
7 Chapter 1 of the LTAP. The Policy Panel will also be  
8 addressing the long-term rate increase forecast found  
9 at Exhibit B-3, response to Commission IR 1.7.1.

10 Panel 2, broadly speaking, addresses  
11 Chapter 2 of the LTAP, which establishes B.C. Hydro's  
12 load resource gap prior to the implementation of any  
13 LTAP action items. There are two exceptions to this.  
14 The first is Burrard and the second is Fort Nelson  
15 related issues and I'll come to each of those in a  
16 minute. The chair of Panel 2 is Mr. Cam Matheson,  
17 B.C. Hydro's Director of Energy Planning. This panel  
18 will address both the 2007 load forecast and the 2008  
19 load forecast update.

20 Mr. Chair, you might recall that B.C.  
21 Hydro's load forecasting methodology was the subject  
22 of extensive review in the 2006 IEP/LTAP proceeding,  
23 and that that methodology generally speaking was  
24 accepted by the Commission in its 2006 IEP/LTAP  
25 decision.

26 There have been a couple of changes to the

1 methodology. One I'll point out is both forecasts now  
2 include a forecast of future rate increases.

3 **Proceeding Time 9:35 a.m. T09**

4 With respect to the 2008 load forecast  
5 update, that has resulted in a reduction of 1300  
6 gigawatt hours per year by fiscal 2017. And the  
7 reference for that is Exhibit B-10, page 7.

8 Panel 2 will also be addressing existing  
9 committed resources, including the impact of SD 10,  
10 with one important exception, which is attrition, and  
11 I'll come to that in a moment. Based on the 2008 load  
12 forecast update, and prior to the implementation of  
13 the LTAP, approximately 10,600 gigawatt hours and  
14 1,190 megawatts are required to fill the gap between  
15 load and existing resources in fiscal 2017. And  
16 you'll note I've referenced fiscal 2017 twice now.  
17 The reason for that is, that is the first full fiscal  
18 year for the self-sufficiency requirement. It's an  
19 important year.

20 As I said earlier, Panel 2 is going to  
21 address two LTAP Chapter 6 issues. First, Burrard,  
22 and second all Fort Nelson-related issues, including  
23 FNU-3, and the Fort Nelson resource plan. So, Panel 2  
24 will address virtually all Burrard-related issues,  
25 including the two B.C. Hydro asks of sustaining  
26 capital and its plans to rely on Burrard for planning

1 purposes. The only exception to Burrard-related  
2 issues being put to Panel 2 is Panel 3, which can  
3 address how Burrard was modeled in the portfolio  
4 analysis. But to be clear, Panel 4 will not be  
5 addressing Burrard at all.

6 As set out in Exhibit B-4, response to BCUC  
7 IR 2.215.2, and that's a very important IR, B.C. Hydro  
8 concludes that it is operationally feasible to rely on  
9 Burrard for 900 megawatts of dependable capacity and  
10 up to 3,000 gigawatt hours per year of firm energy.

11 THE CHAIRPERSON: Sorry, what was that reference again  
12 you said?

13 MR. GODSOE: It is Exhibit B-4, response to BCUC IR  
14 2.215.2.

15 THE CHAIRPERSON: Thank you.

16 MR. GODSOE: I really can't emphasize that IR enough.

17 The plan to rely on 900 megawatts of  
18 dependable capacity has not attracted a single IR.  
19 With respect to firm energy, it's important to realize  
20 the range that B.C. Hydro examined was 600 gigawatt  
21 hours per year up to 6,100 gigawatt hours a year. It  
22 wasn't just between 3,000 and 6,000, it was 600 to  
23 6,000.

24 Finally, in fairness to Panel 2, because  
25 I'm landing them with two Chapter 6 issues, I'm taking  
26 one issue away from them, and that is attrition. So,

1 all attrition-related questions, be they with respect  
2 to existing IPP EPAs, or be they with respect to  
3 future Calls, should be put to Panel 4.

4 Panel 3 addresses chapters 3, 4 and 5 of  
5 the LTAP. The chair of the panel is Mr. Randy  
6 Reimann, and he is the manager of resource planning.  
7 That panel will address, among other things, resource  
8 options, portfolio analysis and four forecasts;  
9 natural gas price forecast, GHG price forecast,  
10 electricity price forecast and the renewable energy  
11 credit forecast.

12 B.C. Hydro has improved the methodologies  
13 it applies to its analysis of relevant markets and, in  
14 particular, I wanted to draw your attention to both  
15 the natural gas price forecast and the GHG price  
16 forecast. There, B.C. Hydro elicited the services of  
17 third-party experts and asked those experts to assign  
18 probabilities to those forecasts. So that's quite a  
19 departure from what happened in the 2006 IEP/LTAP.

20 Finally, we come to Panel 4. And that  
21 addresses the specific implementation actions set out  
22 in Chapter 6 of the LTAP, with the following  
23 exceptions. Fort Nelson and Burrard, which I've just  
24 said would be going to Panel 2, and also to follow up  
25 on your opening remarks, Mr. Chair, that the  
26 definition phase expenditures for Mica Units 5 and 6

1 is now closed pursuant to BCUC Order G-126-08. One  
2 small exception to Mica Units 5 and 6 that can be put  
3 to Panel 4 is how those two units inter-react with  
4 B.C. Hydro's two contingency resource plans, which  
5 I'll come to in a moment.

6 The chair of Panel 4 is Mr. Cam Matheson.  
7 Key elements of the LTAP action item shouldn't be a  
8 surprise at this point, but let me go through them.  
9 First, DSM. That continues to be an important and  
10 cost-effective resource for B.C. Hydro. It mitigates  
11 exposure to cost risk associated with natural gas and  
12 electricity prices, and also GHG offset scenarios.

13 **Proceeding Time 9:40 a.m. T10**

14 DSM also avoids transmission costs and  
15 siting risk. By fiscal 2020, 9,600 gigawatt hours per  
16 year or approximately 72 percent of new resources will  
17 come from DSM, and that reference is found in Table  
18 2.9 of Exhibit B-10.

19 Consistent with Policy Action Number 13 of  
20 the 2002 Energy Plan, B.C. Hydro will contract with  
21 IPPs to provide most of the incremental energy supply  
22 after DSM is taken into account. In addition to the  
23 standing offer program that this Commission blessed in  
24 March of 2008, the LTAP identifies three competitive  
25 procurement processes. First, the Bio-Energy Call  
26 Phase 1, which is the result of the award of EPAs of

1           579 gigawatt hours per year of firm energy, and 60  
2           megawatts of capacity. Bio-energy Call Phase 2, which  
3           targets approximately 1,000 gigawatt hours of pre-  
4           attrition firm energy. And third, the clean power  
5           call targeting 3,000 gigawatt hours per year of pre-  
6           attrition firm energy.

7                        The LTAP also looks at resource smart  
8           capacity projects. These are to augment DSM and IPP  
9           supply contributions and maintain operational  
10          flexibility and meet reliability requirements. In  
11          particular, B.C. Hydro plans to carry out work in Mica  
12          Units 5 and 6. Those units are expected to yield  
13          approximately 465 and 460 megawatts respectively of  
14          very long-term dependable capacity, increase system  
15          efficiency and energy gains, and have very low  
16          environmental impacts.

17                       Finally, underlying the LTAP are two  
18          contingency resource plans. These include advanced  
19          in-service dates for Mica Units 5 and 6, and  
20          definition phase work for Site C.

21                       And that concludes my opening statement.

22 THE CHAIRPERSON:    Thank you, Mr. Godsoe.

23                       Sorry, Mr. Fulton, I was just wondering  
24          when we would be breaking for coffee and it's not yet.

25 MR. FULTON:        Yes, usually it's approximately between  
26          10:15 and 10:30, Mr. Chair.

1 THE CHAIRPERSON: Thank you.

2 MR. FULTON: Terasen Utilities.

3 THE CHAIRPERSON: Mr. Ghikas, I see you've been reunited  
4 with your razor?

5 MR. GHIKAS: Yes, I have, thank you, Mr. Chairman. And  
6 my wife thanks me for it.

7 THE CHAIRPERSON: Please continue.

8 **OPENING STATEMENT BY MR. GHIKAS:**

9 MR. GHIKAS: Mr. Chairman, the Terasen Utilities are  
10 Terasen Gas Inc., Terasen Gas (Vancouver Island) Inc.  
11 and Terasen Gas (Whistler) Inc. TGI and TGVI provide  
12 natural gas service to over 95 percent of the natural  
13 gas consumers in the province. Terasen Gas (Whistler)  
14 is scheduled to convert from propane to gas later this  
15 year.

16 Both electricity and natural gas figure  
17 prominently in B.C.'s energy strategy. With respect  
18 to natural gas, the Energy Plan states that the  
19 intention to take B.C.'s oil and gas sector to the  
20 next level, to enhance a sustainable, thriving and  
21 vibrant oil and gas sector. The province has acted on  
22 this policy action by means of other things, selling  
23 land at record rates, and land sale bonuses in the  
24 last two years. More than 90 percent of the natural  
25 gas consumed by customers of the Terasen Utilities is  
26 produced in British Columbia.



1           percent of -- use electricity for hot water. And the  
2           numbers are growing.

3                         But there are, in those cases, practical  
4           alternatives, for example, to heating a building with  
5           -- heating a building or heating water with  
6           electricity, such as natural gas or other energy forms  
7           including renewables. And when fuel alternatives  
8           exist, it is imperative that the appropriate rate and  
9           incentive mechanisms, as well as consistent messaging,  
10          are in place to encourage efficient use of energy.  
11          And this is what underlies the province's policy of  
12          the right fuel for the right activity at the right  
13          time. The Terasen Utilities believe that the  
14          Commission has a fundamental role to play in giving  
15          effect to this policy. The issue of efficient fuel  
16          choice has come to a head in this proceeding, in my  
17          submission. And the Commission's decision in this  
18          LTAP proceeding can and should provide guidance on  
19          that issue.

20                        It's useful at the outset to illustrate  
21          how, on a day-to-day basis, the issue of fuel choice  
22          can arise and also to highlight the importance of  
23          sending appropriate price signals and messaging up  
24          front. In one case, owners and frequently developers  
25          of new homes and commercial buildings are faced with  
26          the initial decision of installing gas or electric

1 appliances, or appliances that use some other energy  
2 form. Once the choice and investment is made, it's  
3 obviously an obstacle to later change. In another  
4 case, an owner with an older, low-efficiency  
5 appliance, or an appliance nearing the end of its  
6 life, is faced with the decision of adopting a high-  
7 energy -- high-efficiency, pardon me, natural gas  
8 furnace or adopting another type of technology versus  
9 installing what appears to the consumer to be a much  
10 cheaper option of plenum or baseboard heaters.

11 Again, it's important to send the  
12 appropriate price signals and messaging at the time  
13 the choice is made, because it's much harder to  
14 encourage change after the investment is made. But if  
15 the appropriate price structure is in place, and the  
16 messaging is consistent, it leaves the door open over  
17 time to promote efficient fuel choice on the part of  
18 homes and businesses that have already invested in  
19 what is the inefficient choice. The Terasen Utilities  
20 are actively participating in this proceeding, Mr.  
21 Chairman, with the conviction that electricity is not  
22 the right fuel for, most notably, space and water  
23 heating applications. The Terasen Utilities believe  
24 that it is appropriate and consistent with government  
25 policy for B.C. Hydro to take cost-effective measures  
26 to encourage potential and existing space and water

1 heating customers to adopt another, more efficient,  
2 fuel for space and water heating. Natural gas is a  
3 more efficient fuel for these end uses, and there are  
4 other existing emerging options as well.

5 B.C. Hydro faces a difficult task in  
6 meeting its forecasted load, and the load forecasts  
7 may prove to be conservative, given the potential for  
8 developments such as plug-in vehicles. So there are  
9 two basic reasons why encouraging fuel choices other  
10 than electricity for these end uses makes sense.  
11 First of all, the avoidable space and water heating  
12 load must be served by high-cost incremental  
13 electricity purchases and related grid expansions,  
14 resulting in an upward pressure on electricity rates  
15 overall, in a time when B.C. Hydro ratepayers are  
16 already experiencing the largest rate increases ever.  
17 And second, although at first glance it may appear  
18 counterintuitive, the avoidable electric space and  
19 water heating load results in higher overall energy  
20 consumption and greenhouse gases than the direct use  
21 of natural gas in B.C. furnaces and hot water tanks.

22 **Proceeding Time 9:50 a.m. T12**

23 So I'm going to start by elaborating on why  
24 serving avoidable electricity, electric space and  
25 water heating load and other potential direct use  
26 applications such as cooking and clothes drying, will

1 result in an upward pressure on B.C. Hydro rates, and  
2 conversely explain the benefit to B.C. Hydro  
3 ratepayers as a whole that can be achieved by making  
4 available the necessary cost-effective incentives to  
5 avoid or reduce that load.

6 There's only a finite amount of low-cost  
7 Heritage electricity to be shared among consumers in  
8 British Columbia, as the load-resource balance in B.C.  
9 Hydro's evidentiary update makes clear. And therefore  
10 it's a resource, a Heritage resource that British  
11 Columbians cannot afford to squander. The new or  
12 marginal electric generation sources have a much  
13 higher cost per kilowatt hour or per megawatt hour  
14 than do the Heritage resources. As demand for  
15 electricity in this province increases, there will be  
16 proportionately less and less of the low-cost Heritage  
17 resources available for individual consumers. More of  
18 that existing demand, including demand for space and  
19 water heating, will have to be supplied from new high-  
20 cost generation. B.C. Hydro has provided avoided  
21 supply cost for DSM assessment of \$128 per megawatt  
22 hour in F2006 dollars.

23 Space heating load in particular has a  
24 significant seasonal aspect. It occurs in the winter  
25 months when electricity is the most expensive. And  
26 supplying the electricity to serve existing electric

1 space and water heating customers, as well as those  
2 new space and heating water customers that are being  
3 captured by B.C. Hydro at an increasing rate, will  
4 most certainly result in all B.C. Hydro ratepayers  
5 paying more for electricity in the long run as B.C.  
6 Hydro must acquire new, more costly resources to meet  
7 this demand.

8 Not only is electric space and water  
9 heating load increasing energy demand, but it also  
10 contributes to a capacity shortfall. The Commission  
11 will recall the graph from the 2007 B.C. Hydro rate  
12 design proceeding that has come to be known as the  
13 Terasen graph, showing that residential and space  
14 heating loads drive the winter peak in B.C. There is  
15 no question that space heating load is a particularly  
16 expensive load to serve and that it will become more  
17 expensive every year, if increasing numbers of new and  
18 existing customers choose electric space heating, and  
19 the system experiences a progressively more pronounced  
20 system peak.

21 In this context the question for the  
22 Commission becomes, is it cost-effective to  
23 discourage, for instance, electric space and water  
24 heating load in favour of other fuel choices such as  
25 natural gas or other energy systems? And during the  
26 course of this proceeding and in argument, the Terasen

1 Utilities will take the Commission to the evidence  
2 that answers this question in the affirmative.

3 One significant piece of evidence is the  
4 2007 Conservation Potential Review conducted by B.C.  
5 Hydro, which focuses on natural gas as an alternative  
6 fuel choice. The CPR identifies a signification  
7 economic potential for fuel switching DSM related to  
8 natural gas, an economic potential as defined in the  
9 CPR as referring to measures that have a positive  
10 total resource cost, or TRC, and a benefit/cost ratio  
11 of more than one. And one of the key inputs in those  
12 tests is B.C. Hydro's avoided cost of supply. In the  
13 words of the CPR, the results of the tested measures  
14 aimed at fuel choice "suggest that from a provincial  
15 economic perspective, there are opportunities where  
16 switching from electricity to natural gas may be  
17 beneficial".

18 The economic potential from fuel switching  
19 in the B.C. Hydro CPR, in other words the amount of  
20 load that can be avoided, was found -- can potentially  
21 be avoided, was found to be a 24 petajoule equivalent,  
22 or 6,674 gigawatt hours per year by 2026 in the  
23 current gas cost supply scenario, and 3,293 gigawatt  
24 hours per year by 2026 in the high gas supply cost  
25 scenario. In either scenario, that economic potential  
26 represents a sizable portion of the load resource gap

1 forecasted by B.C. Hydro.

2 **Proceeding Time 9:55 a.m. T13**

3 Fuel switching opportunities identified by  
4 B.C. Hydro's CPR having an economic potential that do  
5 not get pursued further represent a lost opportunity  
6 to manage energy costs for the benefit of all B.C.  
7 Hydro customers, not just the customer targeted by the  
8 DSM measure. B.C. Hydro rates will experience greater  
9 upward pressure than would be if the targeted load is  
10 reduced or avoided by the efficient use of other  
11 fuels, including natural gas and alternative energy  
12 systems. Capitalizing on the economic potential also  
13 mitigates the risk to all B.C. Hydro customers of not  
14 closing that resource gap, and the consequences  
15 associated with that failure are significant.

16 Despite the fact that the -- that B.C.  
17 Hydro's CPR identifies significant economic potential  
18 for fuel switching programs, B.C. Hydro doesn't appear  
19 to have given any further study to those measures.  
20 Certainly little if any of the \$418 million DSM budget  
21 for the next three years is directly targeted to  
22 encouraging efficient fuel choices.

23 B.C. Hydro took this approach because,  
24 regardless of the marginal costs of energy, customers  
25 paying those rates that reflect the embedded cost of  
26 electricity don't see the payback necessary from these

1           measures to spur them to adopt another fuel source.  
2           So, in the language of the CPR, they have a zero  
3           achievable potential. But contrast this approach to  
4           the residential inclining block rate structure which  
5           B.C. Hydro recently obtained Commission approval for.  
6           The whole premise of the RIB rate is that the embedded  
7           costs of energy send inefficient price signals, and  
8           it's only by adopting rates that reflect B.C. Hydro's  
9           marginal costs that we'll send the right signals to  
10          energy consumers to make appropriate choices.

11                        So the Terasen Utilities will be arguing,  
12          at the conclusion of this hearing, that from an  
13          overall B.C. Hydro ratepayer standpoint, it defies  
14          logic for B.C. Hydro to invest heavily in programs  
15          designed to encourage, for instance, the ever-  
16          increasing number of space and heating customers to  
17          reduce their resulting electricity consumption, while  
18          at the same time not investing in cost-effective load  
19          avoidance and fuel switching measures to reduce the  
20          load.

21                        By virtue of government's energy objectives  
22          in Bill 15, the Commission is charged with encouraging  
23          public utilities to take cost-effective DSM and it  
24          will be the Terasen Utilities' position in this  
25          proceeding that pursuing fuel switching and load  
26          avoidance further is consistent with that government

1 objective.

2 Now, dealing briefly with the greenhouse  
3 gas issue, we can expect that the IPP supply in  
4 British Columbia not required to meet the avoided  
5 space heating load, will still have a very significant  
6 market south of us and in Alberta. And that market is  
7 currently heavily dependent on electricity generated  
8 from natural gas and coal. Minister Neufeld recently  
9 said in a CBC interview, that we have huge  
10 opportunities in this province to build generation for  
11 export and also between jurisdictions south of us that  
12 generate with coal.

13 Which brings us to the second basis for  
14 Terasen Utilities' position that electricity is not  
15 the right fuel for space and water heating  
16 applications, most notably. The export of clean power  
17 that's been freed up in British Columbia, even if B.C.  
18 Hydro's former space and heating water customers in  
19 British Columbia were now served by -- entirely by  
20 natural gas, will result in a net reduction in the  
21 amount of GHGs pumped into our atmosphere. The logic  
22 of this is straightforward, and the primary evidence  
23 supporting of this logic that the Terasen Utilities  
24 will be relying on is already on record and is not in  
25 dispute.

26 First, the electricity generated throughout

1 the western interconnection moves freely across  
2 borders, as do GHG emissions. Second, the vast  
3 majority of the time, the marginal source of  
4 electricity supply in western North America is  
5 generated from low-efficiency natural gas or coal-  
6 fired generation facilities. Third, a modern combined  
7 cycle gas-fired generator operates at about 50 percent  
8 efficiency and the efficiency of a coal-fired unit is  
9 even lower. Modern direct gas-fired furnaces and hot  
10 water heaters in the home and businesses operate at a  
11 much higher efficiency, between 85 to 95 percent  
12 efficiency.

13 **Proceeding Time 10:00 a.m. T14**

14 Therefore, elsewhere in the western  
15 interconnection it takes more natural gas to generate  
16 the electricity used in space and water heating than  
17 it does to meet the same demand with gas furnace or  
18 domestic hot water heater.

19 Fourth, in the vast majority of the cases,  
20 the injection of renewable power anywhere on the  
21 western interconnection will displace existing or new  
22 gas and coal fire generation, meaning that emissions  
23 are reduced.

24 At the conclusion of this hearing, Terasen  
25 Utilities will be asking the Commission to accept the  
26 logical implication of this evidence, and that is that

1       for so long as coal and gas-fired generation continues  
2       to be the marginal source of electrical generation in  
3       western North America, the use of natural gas for  
4       specific end uses such as space and water heating in  
5       British Columbia will make additional B.C. clean  
6       energy available for export to displace coal and gas-  
7       fired energy on the margin. The Commission has twice  
8       previously arrived at this very conclusion, first of  
9       all in the October 26, 2007 decision on B.C. Hydro's  
10      rate design application, and secondly it repeated that  
11      finding in the December 2007 decision stating that it  
12      continues to agree with Terasen that the use of  
13      natural gas as opposed to electricity for space and  
14      water heating in B.C. will make additional energy  
15      available to displace coal.

16               I'm now going to briefly frame the issue  
17      for the Commission on fuel choice as the Terasen  
18      Utilities see it. The message from B.C. Hydro on fuel  
19      choice is the same today as it was two years ago when  
20      the Commission first addressed this issue in the 2007  
21      rate design application. A government is fuel  
22      neutral. So in spite of the identified economic  
23      potential for programs aimed at fuel choice, it will  
24      not pursue those programs because B.C. Hydro is  
25      waiting for some further pronouncement from government  
26      on a preferred fuel for space and water heating

1 applications. The Terasen Utilities believe that the  
2 Commission's neutral stance on energy source for  
3 particular end uses is not a surprise, rather it  
4 amounts to the true application of the policy from the  
5 Energy Plan, right fuel for the right activity at the  
6 right time. This is further reinforced by the  
7 unqualified support of the Ministry of Energy to  
8 Terasen's recent energy efficiency and conservation  
9 application, which contained fuel switching measures.

10 The Terasen Utilities are of the view that  
11 government's principled or non-dogmatic approach to  
12 fuel switching means that the Commission retains the  
13 responsibility to consider the merits of using  
14 specific fuels in particular applications.

15 The Commission will also hear from B.C.  
16 Hydro in defence of the do-nothing approach on fuel  
17 switching and fuel choice, the mantra that fuel  
18 switching will increase provincial GHGs. GHGs don't  
19 abide by provincial boundaries. We are as affected in  
20 B.C. Hydro by GHGs emitted in Alberta or Washington  
21 State as we are if they're emitted in B.C. Make no  
22 mistake about what B.C. Hydro is saying when they  
23 qualify the phrase "increase GHG" with the word  
24 "provincial". They're saying that the Commission  
25 should not adopt cost-effective fuel switching or fuel  
26 choice measures that would reduce future rate

1 increases for B.C. Hydro customers, because burning  
2 natural gas in furnaces and water heaters in B.C.  
3 might currently count against the province's 33  
4 percent GHG reduction target established under the  
5 *Greenhouse Gas Reductions Target Act*. And B.C. Hydro  
6 is unsure whether the GHGs might be accounted for  
7 under the Western Climate Initiative.

8 If the ultimate goal is to mitigate against  
9 climate change, which it should be, influencing the  
10 right behaviour is what ought to be paramount. If  
11 there is a flaw in how performance is measured, it  
12 would illogical to take the position that higher net  
13 emissions, increased total energy consumption, and  
14 risking meeting the policy goal of self-sufficiency  
15 should somehow become secondary. Government's energy  
16 objective which government has legislatively mandated  
17 that the Commission consider in reviewing the LTAP, is  
18 "to encourage public utilities to reduce greenhouse  
19 gas emissions". That legislative objective is not  
20 qualified by reference to provincial GHGs or the  
21 province's GHG scorecard, although government could  
22 have done that.

23 **Proceeding Time 10:05 a.m. T15**

24 The reduction of GHGs in the region, which  
25 Terasen Utilities believe results from targeted fuel-  
26 switching and load-avoidance, is consistent with this

1 legislative expression of policy directed at the  
2 Commission.

3 So in conclusion, the Terasen Utilities  
4 advocate a Commission direction that B.C. Hydro must,  
5 within a fixed period of time, pursue rate mechanisms  
6 and programs designed to efficiently capture the  
7 economic potential for fuel-switching and load  
8 avoidance activity that was identified in B.C. Hydro's  
9 most recent CPR. This is in the interests of B.C.  
10 Hydro ratepayers in terms of lower rates than it would  
11 otherwise be the case. It's in the interest of  
12 British Columbians generally, in terms of reduced GHG  
13 emissions, and finally it's consistent with the clear  
14 expression of government policy as set out in the new  
15 amendments to the Act, the DSM regulation, and the  
16 policy of the right fuel for the right activity at the  
17 right time.

18 And that concludes my opening. If there is  
19 any questions --

20 THE CHAIRPERSON: No, thank you, Mr. Ghikas.

21 MR. GHIKAS: Thank you, Mr. Chairman.

22 THE CHAIRPERSON: Mr. Wallace. Can you --

23 MR. WALLACE: I plan to be less than 20 minutes.

24 THE CHAIRPERSON: I'm just wondering if -- would you like  
25 to break now and --

26 MR. WALLACE: It doesn't matter to me.

1 THE CHAIRPERSON: Okay, why don't you proceed? Thank  
2 you.

3 MR. WALLACE: Proceed? Thank you.

4 **OPENING STATEMENT BY MR. WALLACE:**

5 MR. WALLACE: Mr. Chairman, Commissioners, I think as  
6 you're aware I represent the Joint Industry  
7 Electricity Steering Committee. We're referred to as  
8 JIESC. JIESC represents the largest users in B.C.  
9 Hydro's transmission service rate class, rate schedule  
10 18-23. The large industrial customers consume  
11 approximately 40 percent of British Columbia Hydro's  
12 domestic load and of this 40 percent, approximately 60  
13 percent, or roughly 25 percent of B.C. Hydro's  
14 domestic load, comes from the forest industry. The  
15 JIESC members are vitally concerned about the long-  
16 term security of supply, minute-to-minute reliability,  
17 and last but definitely not least cost.

18           Reliable, reasonably-priced electricity is  
19 one of the few competitive advantages that industry in  
20 British Columbia has. It is an advantage that must  
21 not be eroded. The need for this advantage and any  
22 other advantage the B.C. industrials can find is set  
23 out in very graphic and compelling detail in Exhibit  
24 B-12, response to BCUC IR 3.238.2, public attachments  
25 4 through 9 found at PDF pages 218 to 507. Parts of  
26 those are redacted, and I suspect that the details

1           that you will find in the redacted version that you  
2           see are even more chilling.

3                       These documents set out the plight of the  
4           industry in British Columbia, in many cases, on a  
5           company-by-company or even a plant-by-plant basis, in  
6           gruesome detail. And I'd like to just cite or repeat  
7           a few of the comments that are found in there. They  
8           were made in October, and they set a very strong basis  
9           for what is even a more difficult situation today.

10                      At page 8, looking at the October 1<sup>st</sup>  
11           Temanex report, and again it's response 3.238.2, page  
12           8 of 11 -- or, of 111, in that presentation, under the  
13           title "Special added note for this presentation", made  
14           October 1<sup>st</sup>, "two to three months from July's forecast  
15           to today's presentation can make a big difference in  
16           economic outlook. Market volatility escalating to  
17           shocking and disturbing levels. Economic growth  
18           outlook for North America, Europe, Japan and even  
19           emerging Asia has deteriorated significantly. U.S.  
20           liquidity crisis fiasco, a major short- to medium-term  
21           threat. Short-term economic growth outlook even worse  
22           than the July forecast summarized. Does not bode well  
23           for an already-battered forest industry."

24                      Page 53 of the same document. "Special  
25           comments on ongoing structural shifts in forecast  
26           outlook. Most B.C. forest products companies have

1 taken a beating during the last few years.  
2 Precipitous decline in market demand for major  
3 projects -- products. Newsprint since 1999 to 2000.  
4 Lumber since 2005. Huge escalation in Canadian versus  
5 U.S. dollar strength. Some companies have not had a  
6 profitable year since 2001. Increased supplier  
7 concentration, a shutdown of marginal competitiveness  
8 capacity ongoing."

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

10 Page 55, summary:

11 "The B.C. forest industry will continue to  
12 face obstacles to its hoped-for return to  
13 profitability. These obstacles, notably  
14 ongoing demand decline, strong Canadian  
15 dollar, fibre constraints, low-cost overseas  
16 competitors and so on, are expected to  
17 accelerate capacity shutdowns."

18 And obviously those shutdowns have continued and the  
19 situation has got worse.

20 Other reports in that same response look at  
21 other sectors, and they too are serious. Bad is it  
22 is, this material was prepared prior to B.C. Hydro's  
23 December 22<sup>nd</sup> update, in early October. I think we  
24 were in the RRA hearing around that time and  
25 witnessing some of that happening day to day. And  
26 accordingly, the material is somewhat understated

1           today, unfortunately.

2                           As we all know, circumstances have  
3           deteriorated further since that time. We point out  
4           the rapid rate of change not to criticize B.C. Hydro  
5           for the quality of its forecasts. Clearly B.C. Hydro  
6           has been trying to get a grasp on the state of the  
7           industry and the province, but to emphasize the  
8           seriousness and the volatility of the economic  
9           situation in British Columbia. The JIESC submits that  
10          the evidence will show that this is not a time to lock  
11          in on large, long-term resource acquisition decisions  
12          in an attempt to resolve possible gaps or to provide  
13          insurance 20 years out into the future. It is a time  
14          of great uncertainty with respect to future demand and  
15          a time of high customer vulnerability. B.C. Hydro  
16          should only be acquiring resources that are needed to  
17          be acquired now to meet foreseeable, probable  
18          requirements, while maintaining a maximum degree of  
19          flexibility in order to match load and resources over  
20          the next 20 years. The time to lock into long-term  
21          contracts and solutions may come up when we better  
22          understand future loads, the evolving role of DSM, and  
23          supply-side options to serve them.

24                           In the submission of the JIESC, the only  
25          resources B.C. Hydro should be acquiring at this time  
26          are those that are both clearly necessary to serve

1 customers and are cost-effective. To the JIESC, cost-  
2 effective means the lowest long-term cost consistent  
3 with government policy as set out in the Energy Plan,  
4 the *Utilities Commission Act*, and the Regulations  
5 thereunder. In our submission, where there is  
6 ambiguity with respect to government policy, you may  
7 also look to other government policy pronouncements.  
8 However, those pronouncements should not be given the  
9 weight that must be given to the Energy Plan, the  
10 formal legislation, and the regulatory enactments.  
11 Most particularly, other pronouncements should not be  
12 considered binding.

13 I have said that acquisitions must be  
14 necessary and cost-effective. I'd like to address  
15 each a little further. With respect to necessity and  
16 uncertainty, the current economic downturn led to the  
17 reduced load forecast filed in conjunction with  
18 Exhibit B-10, the December 22<sup>nd</sup> update. We expect that  
19 the evidence in this proceeding will show that loads  
20 have continued to fall, and even as you hear the  
21 evidence in this matter and deliberate on it, loads  
22 will fall further. It is not clear how far loads will  
23 fall or how long they will remain down. Some of the  
24 changes we are seeing may not be structural. However,  
25 some of the changes clearly are structural and will be  
26 permanent, particularly in the forest industry where

1 we are seeing permanent plant closures due to economic  
2 circumstances.

3 The mid- to long-term impact of the current  
4 economic dislocation will not be known for some time,  
5 quite likely years. It will only be then that it will  
6 be clear what incremental long-term commitments are  
7 necessary. B.C. Hydro also indicates that there's  
8 some uncertainty about how effective its DSM programs  
9 will be. Based on the B.C. Hydro evidence in this  
10 case, it appears that DSM is clearly the most cost-  
11 effective, in our submission likely the only new  
12 resource B.C. Hydro requires at this time. B.C. Hydro  
13 is hesitant to rely solely on DSM for future resources  
14 and proposes to proceed with a call for tenders, the  
15 clean power Call targeting 3000 gigawatt hours, 2100  
16 net, even though anticipated prices for that power  
17 appear to be more than the double the cost of DSM.  
18 JIESC understands B.C. Hydro's concern but is  
19 confident that there are DSM solutions available for  
20 less than the 120 to 125 dollars per megawatt forecast  
21 for the clean power Call.

22 **Proceeding Time 10:15 a.m. T17**

23 B.C. Hydro's current plans are based on an  
24 overall DSM program, expenditures in the range of \$41  
25 to \$42 per megawatt hour. And that comes from Exhibit  
26 B-1, table 3-4. Even if one looks at the program DSM

1 alone, the costs are in the range of \$56 a megawatt  
2 hour, or less than half the projected supply-side  
3 cost. And that comes from Exhibit B-4, JIESC IR  
4 2.25.2.

5 The JIESC does not believe that anyone  
6 knows the amount of effective DSM opportunities there  
7 are at \$120 a megawatt. However, we expect that the  
8 opportunities are very substantial. The JIESC is  
9 concerned also that there appears to be pressure from  
10 some in the IPP industry to have B.C. Hydro acquire  
11 electricity that B.C. Hydro does not require to meet  
12 its customer needs, and expects to see the same  
13 arguments that we've seen in the press surface here.  
14 The JIESC adamantly opposes any effort to have B.C.  
15 Hydro power not needed by its customers. The JIESC is  
16 of the view that, on the evidence in this proceeding,  
17 IPP power is expensive and should only be acquired  
18 where it is demonstrably needed and is cost-  
19 effective. There is clearly a cost premium to be paid  
20 for supply-side resources.

21 The JIESC is concerned that unrequired  
22 excess power purchased from IPPs will need to be sold  
23 in the export market at a substantial loss from the  
24 contracted prices and form a significant long-term  
25 burden on B.C. Hydro's domestic customers, that they  
26 can ill afford. I can say from personal experience

1           that buying high and selling low is simply not a good  
2           long-term philosophy.

3                       The JIESC recognizes that the IPP industry  
4           has potential. However, it also has risks, and the  
5           customers of B.C. Hydro should not be absorbing any of  
6           those risks except to the extent necessary to provide  
7           service to the customers.

8                       Turning to cost-effective, it appears that  
9           there may be consensus here. The need to -- for power  
10          for acquisitions to be cost-effective is at one level  
11          common sense. At another level, what is cost-  
12          effective can quickly become contentious. The JIESC  
13          believes that cost-effective is the lowest long-term  
14          cost at which necessary resources can be acquired in a  
15          manner consistent with government energy policy and  
16          legislation. The *Utilities Commission Act* requires  
17          that all proposed resources be cost-effective and, in  
18          particular, Section 44.1(2), referred to by Mr.  
19          Godsoe, requires that Hydro give a preference to  
20          demand-side measures. This preference over -- for DSM  
21          over the acquisition of new supply-side resources  
22          also, I suggest, recognizes popular feeling and  
23          sentiment. B.C. Hydro has said in the past, and I  
24          expect would confirm again, that it is important to  
25          getting its acceptance for the construction of new  
26          supply-side reserves -- or getting public acceptance

1 for the construction of new supply-side resources that  
2 B.C. Hydro be able to show that all cost-effective  
3 available conservation measures are being undertaken.  
4 The facts, I would suggest, are fairly simple in this  
5 matter. Mr. Elton's opening statement, which he  
6 hasn't given yet, but which we've read, indicates that  
7 DSM Plan A can meet roughly 72 percent of the load  
8 resource gap going forward. The LTAP application  
9 indicates that this was at a cost of \$41 per megawatt  
10 hour for Plan A, and also indicates that DSM Plan B  
11 can meet the entire gap at approximately \$42 per  
12 megawatt hour. Both Plan A and Plan B are priced  
13 substantially below the estimated cost of \$120 to \$125  
14 for a megawatt hour coming out of the clean power  
15 Call. Unless the contracts that ultimately come out  
16 of the clean power Call come in at much lower costs  
17 than presently expected, or unless there is a good  
18 reason for a supply-side premium, it is hard to see  
19 how the clean power Call can be considered cost-  
20 effective.

21 **Proceeding Time 10:19 a.m. T18**

22 Turning then, just to the high cost of  
23 purchasing more power from IPPs than is necessary, as  
24 I've indicated, JIESC is concerned that there is  
25 considerable pressure to purchase additional energy  
26 beyond that which is necessary to meet the resource

1 gap. This pressure appears to come from IPPs and the  
2 press. B.C. Hydro's plan, in our submission, is  
3 generous to IPPs when supply-side and DSM alternatives  
4 are considered and prepared.

5 I'd like to roughly point out the costs and  
6 potential burdens of these proposals to you in order  
7 to set them in context for the purpose of this  
8 proceeding. There are three main areas of concern.  
9 There's a request for an increase in the clean Call  
10 from 3,000 to 5,000 gigawatt hours, replacement of up  
11 to 3,000 gigawatt hours of generation for Burrard, and  
12 arguments for premature, in our submission, compliance  
13 with the 2026 insurance requirement of 3,000 gigawatt  
14 hours.

15 The calculations I'm going to use in  
16 illustrating the magnitude of the potential burden of  
17 these proposals on customers are based on new IPP  
18 power at \$110, a conservative number, I think, in  
19 light of the projections of the clean power Call, DSM  
20 at \$50, more than B.C. Hydro is proposing under Plan A  
21 and Plan B, and a market price of \$60, price  
22 consistent with Figure 4-6 in Exhibit B-1 on prices of  
23 electricity, mid-C. These are rough numbers but  
24 consistent with the evidence and sufficient to  
25 illustrate our concern.

26 First the increase in the clean power Call.

1        If one accepts that B.C. Hydro is right and 3,000  
2        gigawatt hours from IPPs is all that is necessary for  
3        domestic requirements, increasing the clean power Call  
4        by 2,000 gigawatt hours will lead to net annual  
5        purchases after attrition of 1400 gigawatt hours in  
6        excess of need. The cost of this power would be 1400  
7        times \$110, \$154 million per year. Acquiring the  
8        power through DSM in contrast would cost roughly \$60  
9        million a year. And the reference there is Exhibit B-  
10       12, JIESC 3.29.1.

11                Assuming the excess power could be sold at  
12        a forecast market price of \$60 or a total of \$84  
13        million in total, if the power is acquired from IPPs  
14        there'll be a loss of \$70 million a year. If it's  
15        acquired by way of DSM there'd be a profit of \$24  
16        million a year. Huge difference.

17                Second issue, premature obtaining of  
18        insurance supply. If B.C. Hydro were to purchase  
19        3,000 gigawatt hours per year of insurance energy now  
20        instead of out in 2026, the project annual costs would  
21        be \$110 times 3,000, or \$330 million per year. By  
22        definition as insurance, it's energy that the B.C.  
23        Hydro customers will probably not require. If it's  
24        sold in the market at currently projected prices of  
25        \$60, the annual net loss will be in the range of \$150  
26        million a year and it's going to be the customers that

1 are going to bear that cost, not the IPPs, not the  
2 government.

3 Third, replacement of Burrard energy. If  
4 the Commission orders B.C. Hydro to replace Burrard  
5 energy with energy purchased pursuant to the clean  
6 power Call, the costs will also be extremely high.  
7 For the purposes of this calculation, JIESC assumed  
8 600 gigawatt hours will be required from Burrard to  
9 meet minimum operating requirements. The net 2400  
10 gigawatt hours, again if purchased at \$110 it costs  
11 \$264 million, well in excess of the costs of  
12 generating at Burrard at current natural gas prices,  
13 exceeds the cost of DSM or purchasing these volumes  
14 from the market by roughly 50 to 60 dollars a megawatt  
15 hour, or 120 to 144 million dollars.

16 These three, in our submission, unnecessary  
17 purchases, were they pursued, could easily add net  
18 costs to B.C. Hydro customers of \$350 million a year,  
19 equivalent to about 10 to 13 percent permanent rate  
20 increase, without providing any measurable benefit.

21 I point out also that these impacts are on  
22 top of the impact of self-sufficiency, which we are  
23 not challenging, it's legislated, based on critical  
24 water which will have B.C. Hydro requiring 4400  
25 gigawatt hours of resource above the average  
26 requirements of its customers.

1 **Proceeding Time 10:24 a.m. T19**

2 This power will, on average, over time,  
3 have to be sold, again likely at losses in the  
4 hundreds of millions of dollars per year. It's simply  
5 unreasonable and unfair to ask customers under any  
6 circumstances to bear these sorts of burdens in order  
7 to assist IPPs, and it's certainly even less  
8 appropriate in today's circumstances.

9 If IPPs have a good product at a good  
10 price, they should find a willing buyer who needs the  
11 product and leave B.C. Hydro's customers out of the  
12 transaction.

13 There are also some other issues, and  
14 they're minor and I'll touch -- minor in comparison.  
15 They pale, given the numbers I've just given you, but  
16 I do want to put them on record. They include the  
17 following. First, the lack of a functional industrial  
18 DSM program. Since stepped rates were implemented,  
19 B.C. Hydro has been considering what it should do in  
20 the way of an industrial DSM program. Industrial DSM  
21 is a major source of DSM savings to be acquired under  
22 the LTAP, and while there have been some attempts at  
23 getting a functional industrial DSM program in place,  
24 we do not have such a program yet. It must be made a  
25 matter of priority.

26 Smart meters, JIESC is concerned by major

1 capital expenditure proposed for Smart meters. It has  
2 been justified in the press recently, on the basis of  
3 energy savings. However, we do not see such savings  
4 in the plan and we'll be following up on that.

5 Fort Nelson. The situation in Fort Nelson  
6 is clearly in a state of flux. We're concerned by  
7 apparent disconnects between B.C. Hydro, who will be  
8 serving the customer, which appears to be considering  
9 a number of options, and BCTC, which appears in its  
10 Capital Plan to be moving in the direction of a  
11 transmission line to the northeast.

12 DSM efficiency. JIESC is of the view that  
13 DSM programs can be done more efficiently and we'll be  
14 exploring that.

15 Increased electricity from Alcan. Alcan  
16 has recently announced that it is slowing down the  
17 implementation of its modernization program. This  
18 should make more firm electricity available to B.C.  
19 Hydro, reducing the short- and mid-term need for  
20 purchases under long-term contracts.

21 And finally, Site C. JIESC is generally  
22 supportive of Site C, but concerned by the disconnect  
23 between the apparent attractiveness of this product  
24 and -- or, project, and the amount of money being  
25 spent on it, and the fact that the project does not  
26 have a recognized position in the basic resource plan

1 or the contingency resource plan.

2 That concludes my comments. Thank you.

3 THE CHAIRPERSON: Thank you, Mr. Wallace. You were  
4 indeed true to your word.

5 We will break for 15 minutes. Thank you.

6 **(PROCEEDINGS ADJOURNED AT 10:27 A.M.)**

7 **(PROCEEDINGS RESUMED AT 10:44 A.M.)** **T20/21**

8 THE CHAIRPERSON: Please be seated.

9 Mr. Fulton reminded me that some people in  
10 attendance this morning wish to attend an industry  
11 lunch, so I will try and get everyone out and break  
12 these proceedings by about 5 to 12 if that's okay.

13 MR. QUAIL: Mr. Chairman, I propose that be on the  
14 condition that all the rest of us be invited to their  
15 lunch as well.

16 THE CHAIRPERSON: If you pay \$35, Mr. Quail, I'm sure  
17 they'll let you in.

18 **OPENING STATEMENT BY MR. QUAIL:**

19 MR. QUAIL: One sort of piece of business, Mr. Austin  
20 raised the issue of the Throne Speech, and we may be  
21 making passing reference to that document and to save  
22 having to file two copies or two bits of it, it  
23 probably logistically would make sense for that to be  
24 filed before we get into cross-examining Panel 1.  
25 It's not the kind of document that requires proof of  
26 authenticity or anything of that nature anyway, so it

1 shouldn't be an issue.

2 This whole area of practice is one, as I've  
3 commented before, where who is your friend depends  
4 entirely on what the issue is. And I can say that I  
5 expect that the Commission Panel will be hearing a lot  
6 of commonality from all of the intervenors  
7 representing ratepayer groups. In my submission, the  
8 most important aspect of this hearing that's really  
9 overtaken almost everything else is its economic  
10 context. We have plunged over the brink of a serious  
11 global economic crisis since the time the application  
12 was filed, and this is widely expected to be the worse  
13 since the Great Depression of the 1930s. So earlier  
14 this week, for example, it was announced that the  
15 world's second largest economy, which is Japan, is  
16 shrinking at an annual rate in excess of 8 percent,  
17 which is on track to full-scale depression. And the  
18 president of the United States has talked about the  
19 potential for catastrophe in the American economy  
20 within just the last few days.

21 Economic forecasts are deteriorating weekly  
22 or even daily, and few expect that recovery will be  
23 either soon or robust. Today's vantage point, in my  
24 submission, is a terrible basis to make predictions in  
25 which anyone can invest must confidence. This is the  
26 worst of times to consider making decisions to lock

1 B.C. Hydro into long-term electricity supply.

2 Next month the Commission will initiate its  
3 inquiry into the new Section 5.4 of the *Utilities*  
4 *Commission Act*, and the terms of reference for that  
5 inquiry which have been issued by government require  
6 the Commission to look at proactive strategic  
7 approaches that integrate the development of  
8 generation and transmission resources. The idea, in  
9 my submission, is to ensure that our transmission  
10 system evolves in the form of a superhighway instead  
11 of a spider's web. In my submission, this is yet  
12 another reason why now is not the time for B.C. Hydro  
13 to risk overcommitting ratepayers to high-priced,  
14 scattered generation resources.

15 The fact that the IPPBC is engaged in  
16 effective political lobbying, as my friend Mr. Wallace  
17 has referred to, and recruited some media to their  
18 side, does not detract from the job of this  
19 Commission. You are an independent expert tribunal.  
20 If there was an upside to the economic crisis in the  
21 context of this proceeding, it is that the sudden loss  
22 of industrial load and decline in economic activity in  
23 the province is giving B.C. Hydro and the Commission  
24 some breathing space to take time to conduct the  
25 inquiry, develop a careful analysis of how best to  
26 grow the system, and be ready to proceed with

1 implementation when the world is thrown off what  
2 promises to be a deep and long recession.

3 **Proceeding Time 10:48 a.m. T22**

4 So our primary message in this hearing is  
5 that B.C. Hydro and the Commission need to catch their  
6 breath, take careful stock of the changed situation,  
7 and find solutions that have the flexibility to  
8 respond to such an uncertain future as it unfolds. I  
9 believe Marshall McLuhan once commented that people  
10 tend to look into the future through a rear-view  
11 mirror. In my submission, there's a real danger of  
12 relying on what we see in the immediate past in order  
13 to project the future. That, in my submission, is not  
14 the times we're in.

15 Yesterday the Court of Appeal issued a  
16 landmark decision about the role of this Commission in  
17 relation to electricity purchase agreements entered  
18 into by B.C. Hydro. It said that the Commission must  
19 assume the role, in effect, of protector of the right  
20 of aboriginal peoples to be consulted and  
21 accommodated. While it will take a little while to  
22 digest the impact of the court's *Alcan EPA* decision,  
23 it is clear that if anyone had dreams of a sausage-  
24 mill approach to EPAs, those dreams are now dashed.  
25 That's because there's now a sign hanging over the  
26 door of the Commission that says "Accommodation

1 police".

2 So, for example, I would suggest the  
3 legality of B.C. Hydro's standing offer program  
4 permitting the utility to enter into EPAs with no  
5 contract-by-contract scrutiny must be in grave doubt.  
6 So is the image that some might have been projecting  
7 of a host of IPP-built generation projects blooming  
8 like dandelions on a summer lawn. There are huge  
9 constitutional and societal issues bound up in these  
10 transactions. The process must take the time to get  
11 the answers right. And I think it's clear enough, the  
12 Court of Appeal, in the judgment of Mr. Justice  
13 Donald, acknowledged that those issues are not the  
14 staple fare, as I believe he put it --

15 THE CHAIRPERSON: "Staple diet", Mr. Quail.

16 MR. QUAIL: Sorry?

17 THE CHAIRPERSON: "Staple diet". Yes.

18 MR. QUAIL: Staple diet. Thank you. Yes. Because I'm  
19 sure you're well familiar with what's been said.

20 And obviously some resource and  
21 institutional adjustments will be required in order to  
22 deal with these issues that are now on the  
23 Commission's plate. And these are all in the context  
24 on the *Alcan* case. I mean, the *Alcan* case is about  
25 contracts entered into by B.C. Hydro.

26 These and other considerations, in my

1 submission, call for the Commission to nudge on the  
2 brakes, now that there is an opportunity to do that.  
3 All the load forecasts have subsided. We're behind  
4 the curve, compared to where it looked a year or two  
5 ago. Some of that pressure is off. I mean, that's --  
6 as I say, that's really trying to put a silver lining  
7 on a grim situation, but it is a reality. And ensure  
8 that B.C. Hydro's resource acquisitions are in the  
9 interests of the entire public, in particular  
10 ratepayers and now particularly including First  
11 Nations.

12 And meanwhile, and here I would echo my  
13 friend Mr. Godsoe's comments, the Commission must  
14 prefer DSM over any other resource as a strategy for  
15 meeting B.C. Hydro's service obligations. Where cost-  
16 effective DSM can be used to avoid new energy  
17 acquisitions, the Commission must choose DSM over  
18 those acquisitions.

19 I just want to make a little -- a brief  
20 comment on the issue of government policy, and policy  
21 pronouncements in relation to the jurisdiction of the  
22 Commission. And here, I suppose, we agree about 90  
23 percent with what Mr. Wallace said. That is, where  
24 government policy has been incorporated into a  
25 statutory framework, whether the *Utilities Commission*  
26 *Act* or a Special Direction, it's effectively hard-

1       wired into the mandate of the Commission. But  
2       otherwise, and this includes aspects of the Energy  
3       Plan which are not hard-wired in that way, the  
4       Commission has to recognize that, while it needs to be  
5       cognizant of government's policy of that nature, let's  
6       say soft policy pronouncements, they form one element  
7       of the context of your decisions. And you must  
8       exercise your independent judgment, and not feel in  
9       any way bound by government policy, which does not  
10      carry a statutory imprimatur.

11                Again with reference to my friend Mr.  
12      Wallace's opening comments this morning, we would just  
13      make the general observation that it appears to us  
14      that his calculations of the financial benefit of  
15      cost-effective available DSM with incremental IPP  
16      resources understates, if anything, what the  
17      difference is. And that's because, of course, the  
18      cost of available DSM programs is substantially less  
19      than the incremental cost of acquisitions even in the  
20      current resource stack. So in fact money spent -- a  
21      dollar spent on DSM represents a net saving even in  
22      relation to the *status quo*. So the spread is even  
23      greater than that.

24                               **Proceeding Time 10:53 a.m. T23**

25                One final issue that I want to touch on is  
26      with reference to my friend Mr. Ghikas's submissions

1 about fuel switching from electricity to natural gas.  
2 Our clients oppose measures to impel ratepayers to  
3 adopt natural gas rather than electricity for  
4 household energy. Terasen's solutions, at least  
5 judging by positions they've taken in all of the  
6 proceedings I can think of involving electricity rates  
7 in the recent past, has been to push household  
8 electricity costs so high that households have very  
9 little choice but to migrate to natural gas.

10 Mr. Ghikas suggested that fuel switching to  
11 natural gas is consistent with government policy,  
12 again with the proviso that we're not talking about  
13 policy that is hardwired to the statute, but still an  
14 interesting concept and we are going to be probing  
15 into that issue further, whether in fact it's  
16 reconcilable with the government's concerns about  
17 climate change.

18 And subject to any questions, those are my  
19 opening comments.

20 THE CHAIRPERSON: Thank you, Mr. Quail.

21 **OPENING STATEMENT BY MR. AUSTIN:**

22 MR. AUSTIN: Good morning, members of the Commission  
23 Panel. My opening statement on behalf of the IPPBC is  
24 essentially an outline of the issues that I will be  
25 pursuing during the course of the oral portion of B.C.  
26 Hydro's long-term acquisition plan. It's not an

1 infomercial, it's generally not evidence, and it's  
2 certainly not our final argument.

3 I should note that the IPPBC will be  
4 calling three witnesses to provide evidence on its  
5 behalf: Dr. Mark Jaccard with respect to GHG  
6 pricing, Stefan Landry of Brookfield Power with  
7 respect to natural gas pricing, and Chris Ball of Port  
8 Finance with respect to the impact of certain IPP  
9 contract terms on the unit energy prices contained in  
10 B.C. Hydro's application. I want to make it very  
11 clear that Mr. Ball's evidence is not being tendered  
12 with respect to any aspect of B.C. Hydro's 2008 clean  
13 power call. The bidders in this call have already  
14 prepared their bids and submitted them on the basis of  
15 the existing evaluation criteria and sample form of  
16 electricity purchase agreement. The money has been  
17 spent, the bids are in, and the acquisition process  
18 must be completed on this basis.

19 I would also like to note that although  
20 there is economic uncertainty in the world, it doesn't  
21 appear that the economic world as we know it is going  
22 to come to an end any time soon. This is the same  
23 observation that the IPPBC made during the course of  
24 BCUC's review of B.C. Hydro's most recently revenue  
25 requirements proceeding. The supply and demand for  
26 electricity is a long-term endeavour and not one where

1 supply and demand are switched on and off. There was  
2 a lot of economic uncertainty in the early 1980s when  
3 B.C. Hydro's Revelstoke Project came into service, as  
4 did the Cheekeye/Dunsmuir Transmission Project. The  
5 Revelstoke Project is now cited as one of those  
6 Heritage assets that produced low-cost electricity.  
7 That's the nature of the business. It's long-term,  
8 and supplies from IPPs under contract with B.C. Hydro  
9 are long-term deals, they are not short-term deals.

10 The issues that the IPPBC intends to pursue  
11 are the size of the 2008 clean power Call, and in  
12 particular Exhibit B-11; the role of Burrard as set  
13 out in the long-term acquisition plan; the recent  
14 Energy Plan; and the requirement in Special Direction  
15 No. 10, SD 10, to achieve energy self-sufficiency by  
16 2016 and each year thereafter.

17 The next issue is the requirement in  
18 Special Direction No. 10 of becoming capable of  
19 exceeding as soon as practicable no later than 2026  
20 the electricity supply obligations by at least 3,000  
21 gigawatt hours per year, and by the capacity required  
22 to integrate that energy in the most cost-effective  
23 manner.

24 **Proceeding Time 10:57 a.m. T24**

25 The next issue will be fuel switching, such  
26 as that associated with plug-in hybrids, residential

1 hot water and heating requirements, and in the oil and  
2 gas industry for production. And earlier I alluded to  
3 the filing of the Throne Speech, because what the  
4 Throne Speech says in part, and it's Throne Speech of  
5 February 16<sup>th</sup>, it says:

6 "Electric plug-in vehicles and other  
7 technologies aimed at reducing fossil fuel  
8 dependency will place new demands on our  
9 electricity system. We can meet those  
10 demands and create jobs and opportunities  
11 for our citizens. Our government will build  
12 on its clean energy plan with new directions  
13 to B.C. Hydro and the British Columbia  
14 Utilities Commission."

15 And I would just like to diverge somewhat  
16 from my opening remarks to comment on some of the  
17 issues that Terasen raised. Certainly a regulatory  
18 hearing of this type is essentially supposed to  
19 emulate the free market, and we are getting all sorts  
20 of comments about different types of fuels, different  
21 types of customers, and that's good, and that's  
22 healthy. However, to somehow suggest that this  
23 Utilities Commission is going to play a role in  
24 exports to Alberta and California, when the prime  
25 impediment to exports to those jurisdictions, as long  
26 as I can remember, has been transmission on the other

1 sides of the British Columbia border is somehow going  
2 into an area that the Utilities Commission has no  
3 jurisdiction over.

4 When you talk about exports of electricity  
5 from British Columbia, you can go a long way back.  
6 The most recent government policy on exports of  
7 electricity from British Columbia is -- was set out in  
8 1993. It hasn't been changed. The key issue in 1993  
9 was access to the export markets in the United States.  
10 The key problem was transmission on the U.S. side of  
11 the border. That problem has not changed since 1993.

12 Also in relation to fuel switching, we now  
13 have the new gorilla on the block. It's called  
14 "GHGs", greenhouse gases, and that has been something  
15 that this -- the provincial government in Victoria has  
16 been very interested on. It's taken some leads and,  
17 as Mr. Godsoe has said, there are some specific  
18 targets that have been now been hard-wired into law.  
19 So, those are the types of things that also have to be  
20 included with respect to any discussion of fuel  
21 switching.

22 The next issue is the supply of electricity  
23 to the Fort Nelson area of British Columbia and, in  
24 particular, the portion of the Throne Speech that  
25 says:

26 "The goal of the northeast transmission line



1 of Appeal decision in *Alcan* yesterday. IPPs don't get  
2 financing until they sign accommodation agreements  
3 with First Nations. The *Alcan* decision is highly  
4 unlikely to have any impact on most IPP electricity  
5 purchase agreements with B.C. Hydro for that very  
6 reason.

7 In addition to the issues that I outlined,  
8 obviously there's going to be other issues that may  
9 come up that the IPPBC considers relevant. And  
10 subject to any objections that anybody has, I'd like  
11 to file as an exhibit the February 16<sup>th</sup>, 2009 Throne  
12 Speech.

13 THE CHAIRPERSON: Mr. Godsoe?

14 MR. GODSOE: I have no objection to that.

15 THE CHAIRPERSON: Hearing nothing, I invite you to file  
16 it.

17 MR. FULTON: C17-8, Mr. Chairman.

18 THE CHAIRPERSON: Thank you.

19 (COPY OF SPEECH FROM THE THRONE DATED FEBRUARY 16,  
20 2009, MARKED EXHIBIT C17-8)

21 MR. AUSTIN: And, subject to any questions, that  
22 concludes the IPPBC's opening statement.

23 THE CHAIRPERSON: Any questions there?

24 COMMISSIONER MILBOURNE: No.

25 THE CHAIRPERSON: Thank you, Mr. Austin -- hang on, Mr.  
26 Austin.

1 COMMISSIONER HARLE: Just one quick question. I'd like  
2 to get you to elaborate a little bit as to why you  
3 think the recent decision on *Alcan* doesn't affect the  
4 IPP contracts?

5 MR. AUSTIN: Well, because IPPs do what amounts to a  
6 private accommodation with First Nations. They sign  
7 what are called "benefits agreements" with First  
8 Nations, and without that benefit agreement, the  
9 prospect of getting long-term project financing is  
10 potentially nil, because the financial institutions  
11 have recognized that, without a signed accommodation  
12 agreement with First Nations, their money may be at  
13 risk, and they're just not prepared to do it. And  
14 that has been the standard practice for at least five  
15 or six years.

16 COMMISSIONER HARLE: Thank you.

17 THE CHAIRPERSON: Okay, Mr. Austin. Mr. Weafer?

18 **OPENING STATEMENT BY MR. WEAFER:**

19 MR. WEAFER: Good morning, Mr. Chairman and members of  
20 the Panel.

21 I'm representing the Commercial Energy  
22 Consumers in this proceeding, and the CEC represents  
23 commercial class customers of B.C. Hydro. It consults  
24 with customers in the commercial class to ensure that  
25 they have representation before the BCUC on matters  
26 that affect their interests. The commercial class as

1 a whole represents approximately 30 percent of B.C.  
2 Hydro's load.

3 The CEC representing customers represents  
4 what we say is the key public interest. That is,  
5 ratepayers that ultimately pay for investments  
6 identified in the LTAP. While other stakeholders may  
7 have an economic or policy issues which are relevant  
8 to the Commission, ultimately the public interest as  
9 we advocate it represents those who pay the bills, and  
10 there are significant bills that fall out of the LTAP  
11 initiatives.

12 In this hearing, and in our rounds of  
13 Information Requests, we focused on nine issues, which  
14 I'll just highlight in my opening comments. Firstly,  
15 and this has been covered by other customer groups,  
16 the economic conditions and the impact on the LTAP  
17 which was filed in June of 2008. In the recent  
18 revenue requirement proceeding, the Chief Financial  
19 Officer of B.C. Hydro referred to the economic  
20 conditions we faced as of October, 2008 and carried on  
21 today as "the perfect storm," a series of events that  
22 are structurally impacting British Columbia, North  
23 America and global economies. And in light of that,  
24 notwithstanding the evidentiary update of B.C. Hydro  
25 filed in January -- sorry, in December, we say, and  
26 will pursue in this proceeding, that there is flaws in

1 the LTAP as put forward by B.C. Hydro and we will be  
2 looking to initiatives which create more flexibility  
3 in terms of B.C. Hydro's plan on a go-forward basis,  
4 and we'll be encouraging that the Commission in its  
5 decision look to create more flexibility to deal with  
6 circumstances that none of us have faced in our --  
7 certainly in our business careers if not our lives.  
8 And to that end, we don't fault B.C. Hydro for what  
9 they have filed, nor do we challenge them in terms of  
10 what they filed as an update. But clearly we have a  
11 problem that we mutually need to resolve in terms of  
12 avoiding unnecessary investment in these challenging  
13 economic times.

14 **Proceeding Time 11:07 a.m. T26**

15 Secondly, the B.C. Hydro system itself, the  
16 CEC will pursue issues in relation to the existing  
17 B.C. Hydro system where we believe there are  
18 potentially different options for extracting power  
19 from the existing system, and here the focus will be  
20 on the utilization of Burrard as proposed in the LTAP,  
21 specifically whether B.C. Hydro could more effectively  
22 use Burrard Thermal to avoid the costs of new supply,  
23 and particularly to provide flexibility in the short  
24 term while these economic uncertainties are hopefully  
25 resolved. Fundamentally the issue here is can Burrard  
26 be better utilized for the benefit of ratepayers and

1 the public interest broadly, in the short term in  
2 relation to the LTAP longer-term plan?

3 Thirdly, the key issue, DSM. The CEC has  
4 long been an advocate of demand-side management, and  
5 we will examine in this proceeding whether the LTAP  
6 effectively pursues as set out in the Energy Plan all  
7 cost-effective DSM. We note that there is -- the  
8 evidence indicates there has been little to no failure  
9 to meet DSM targets in the past, and that B.C. Hydro's  
10 experience with DSM has demonstrated that the cost-  
11 effectiveness is very positive. So notwithstanding  
12 it's clear from the legislation, government policy and  
13 B.C. Hydro's old position that DSM is the first choice  
14 and is what should be pursued. We question whether in  
15 the plan they have effectively pursued all options.

16 Turning to IPPs, clearly there's a policy  
17 directive from the government that would love to see  
18 the IPP sector develop, and we acknowledge that.  
19 Unfortunately it has been challenged by the perfect  
20 storm, and the reality is it is an industry which in  
21 our view has challenges that the ratepayers should not  
22 have to solve. That said, we will pursue, as we have  
23 in other proceedings, though we think even more  
24 pertinent today, whether B.C. Hydro and the IPP sector  
25 has effectively pursued alternative relationships to  
26 create the probability of the IPPs being in business

1 in this province through the use of more innovative  
2 contracting relationships, including contracting to  
3 the point of covering the risk of the investor up to  
4 the point of the project not being built, but  
5 nonetheless incenting investors in the industry to  
6 look for projects and look for opportunities. We  
7 don't think the evidence in this proceeding shows that  
8 the need is there to build the IPP sector to the  
9 amount identified in the LTAP. We will pursue that  
10 through cross-examination of the B.C. Hydro Panel.

11 With respect to future resources, the CEC  
12 will pursue examination of B.C. Hydro's criteria for  
13 development of Site C, IPP DSM numbers, or smart  
14 options as to whether the criteria utilized by B.C.  
15 Hydro is in the ratepayer interest. And here, as  
16 others have said before me, we remain particularly  
17 concerned with the amount being spent on Site C  
18 without a clear understanding of what criteria is  
19 being applied for that assessment.

20 Turning to our issue 6, capacity issues.  
21 As the Commission is aware, the CEC in the past has  
22 raised concerns with respect to the relationship  
23 between Powerex and B.C. Hydro under the Transfer  
24 Pricing Agreement, and the allocation of capacity  
25 benefits to Powerex for the purpose of generating  
26 trade income. Looking at the LTAP and the investments

1 in capacity, the CEC will pursue why the ratepayers  
2 are being asked to fund capacity which will have  
3 limited benefit to customers but will significantly  
4 increase the opportunity for trade income well above  
5 and beyond the \$200 million cap. The CEC does not  
6 believe that it is in the public interest for  
7 ratepayers to fail to receive compensation for  
8 capacity investments in the system, which may  
9 ultimately benefit the shareholder as opposed to  
10 ratepayers. This particularly relates to the Mica 5  
11 and 6 projects and to transmission investments  
12 proposed.

13 The fundamental issue for B.C. Hydro to  
14 consider is whether ratepayers are better off with a  
15 B.C. Hydro Powerex relationship which optimizes the  
16 benefit in the public interest, as opposed to  
17 increasingly in the exclusive interest of the  
18 shareholder.

19 **Proceeding Time 11:12 a.m. T27**

20 Seventh dealing with risks, Mr. Wallace  
21 highlighted the cost issues associated with risks and  
22 the CEC is interested in pursuing with B.C. Hydro the  
23 various risks that are being managed in the LTAP. The  
24 risks of over-supply and surplus export, and the risk  
25 of under-supply and contingency supply are important  
26 components of this risk profile, and we'll be pursuing

1           this with the various panels.

2                       Issue 8, Fort Nelson, we have concerns with  
3           the manner in which the Fort Nelson project is being  
4           pursued. We are empathetic with B.C. Hydro's position  
5           on the potential need in Fort Nelson, but to date,  
6           with the evidence on the record, it's not satisfying  
7           us as ratepayers that the most prudent course is being  
8           pursued, and we will certainly be making submissions  
9           on that in final argument as the evidence is concluded  
10          in these proceedings.

11                      Lastly, and not to spend time on it here,  
12          the fuel-switching proposals put forward by Terasen we  
13          think have some significant merit with respect to  
14          ratepayer interests, and we will be pursuing that  
15          through cross-examination. And those are our nine  
16          primary issues, Mr. Chairman, members of the Panel.  
17          We will file a comprehensive final argument on all  
18          issues of interest, but those are the key topics that  
19          we will be pursuing and, subject to any questions,  
20          those are my opening comments. I appreciate the  
21          opportunity to make an opening submission.

22   THE CHAIRPERSON:    Thank you, Mr. Weafer.

23   MR. WEAFER:        Thank you.

24   THE CHAIRPERSON:    Mr. Andrews.

25   **OPENING STATEMENT BY MR. ANDREWS:**

26   MR. ANDREWS:        Members of the Panel, the BCSEA is a non-

1 profit association of citizens, professionals and  
2 practitioners committed to promoting the  
3 understanding, development and adoption of sustainable  
4 energy, energy efficiency and energy conservation in  
5 British Columbia. BCSEA has eight chapters across  
6 B.C. and approximately 650 individual and corporate  
7 members. Many of BCSEA's members are ratepayers of  
8 B.C. Hydro.

9 The Sierra Club of B.C. is a non-profit  
10 organization of British Columbians from all walks of  
11 life who care about a broad range of environmental  
12 issues, including climate change and clean energy.  
13 SCBC has over 5,000 members and supporters across the  
14 province, many of whom are ratepayers of B.C. Hydro.

15 The BCSEA and SCBC represent B.C. Hydro  
16 ratepayers who want the electricity they purchase to  
17 come from a sustainable electricity system. And I'll  
18 get to some more detail about what they mean by that  
19 in a moment.

20 Previous interventions by BCSEA and/or SCBC  
21 in the precursors of this current proceeding go back  
22 to SCGC participating in the 2004 B.C. Hydro revenue  
23 requirement application that included the 2004  
24 integrated electricity plan, and the 2004 resource  
25 expenditure and acquisition plan. BCSEA and SCBC  
26 participated in the 2005 B.C. Hydro resource options

1 report, and REAP proceedings. BCSEA/SCBC and the  
2 Peace Valley Environmental Association participated in  
3 the 2006 IEP and LTAP proceedings. BCSEA and SCBC  
4 have also intervened in other BCUC proceedings that  
5 involve rates and policy issues and relevant to the --  
6 particularly to the LTAP today, they're participating  
7 in proceedings that are either still underway or have  
8 been completed but without a decision yet from the  
9 Commission, being the F09/F10 B.C. Hydro revenue  
10 requirement application. They've participated on a  
11 limited basis on that, limited because DSM issues that  
12 would otherwise have arisen in the RRA proceeding were  
13 moved to this LTAP proceeding by Order G-122-08  
14 confirming the scope of the hearing set out in Order  
15 G-78-08. The Terasen Gas energy efficiency and  
16 conservation proceeding, and the B.C. Hydro  
17 application for amendment of the power purchase  
18 agreement between Hydro and FortisBC.

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

20 BCSEA and SCBC have representations on  
21 consultation committees organized by B.C. Hydro, such  
22 as the external review committee regarding the  
23 conservation potential review update, which I'll refer  
24 to as the CPR, and the rates working group of the  
25 external review committee.

26 BCSEA and SCBC identify four elements of

1        what they consider to be a sustainable electricity  
2        system as touchstones for their approach to the issues  
3        in the LTAP proceeding. I'll list them and then  
4        describe how each affects the issues that they  
5        anticipate arising.

6                First is energy conservation and  
7        efficiency. The second is sustainable renewable  
8        electricity generation, when and where new generation  
9        is necessary. The third is the imperative to reduce  
10       greenhouse gas emissions. And the fourth are other  
11       factors as applicable to the situation, such as  
12       pollution prevention, amelioration of poverty, respect  
13       for aboriginal rights and title and so on.

14               Regarding energy conservation and  
15       efficiency, specifically in this proceeding, of  
16       course, the topic relates to electricity, but it also  
17       includes other fuels and forms of energy that are  
18       substitutes for electricity, either in end uses or  
19       that are used in the production of electricity or  
20       electricity substitutes. Energy conservation and  
21       efficiency often translates as demand-side management  
22       programs administered by the public utility in  
23       question, which here of course is B.C. Hydro, and  
24       indeed the DSM expenditures proposed by Hydro in this  
25       proceeding are the major -- one of the major focuses  
26       of BCSEA/SCBC's attention in this proceeding. But

1       it's also important to note that in addition to B.C.  
2       Hydro DSM programs, there are many other ways to  
3       foster energy conservation and efficiency, including,  
4       to name a few, price signals, DSM programs  
5       administrated by other utilities or by government,  
6       regulations and standards directly governing energy  
7       efficiency, and land use planning and transportation  
8       decisions.

9                   The distinction between DSM in its  
10       traditional terminology was the DSM referred to  
11       demand-side management. Today we're using the term  
12       "demand-side measures" as defined in the *Utilities*  
13       *Commission Act*, but they have the same acronym and the  
14       difference, as I understand it, is that in particular,  
15       demand-side measures includes rate structures designed  
16       to promote conservation and efficiency, and it also  
17       may include load displacement projects. But  
18       significantly, DSM measures does not appear to include  
19       the simple impact of higher electricity prices on  
20       demand that is -- due to the price elasticity of  
21       demand.

22                   B.C. Hydro's DSM programs are, of course,  
23       an important element of the 2008 LTAP. As others have  
24       mentioned before me, there is a requirement, there are  
25       requirements, plural, under the *Utilities Commission*  
26       *Act* and so I won't reiterate those. B.C. Hydro has

1 identified two options: DSM Option A and Option B.  
2 Significant that Option B includes everything that is  
3 in Option A, plus additional expenditures and  
4 additional electricity savings. I'll use the term  
5 "delta B expenditures" and "delta B savings" to refer  
6 to the difference between Option B and Option A for  
7 expenditures and savings.

8 DSM Option B would achieve a somewhat  
9 larger amount of electricity savings for a somewhat  
10 larger amount of expenditures. B.C. Hydro proposes  
11 DSM Option A. BCSEA/SCBC have filed expert evidence  
12 produced by John Plunkett of Green Energy Economics  
13 Inc., Exhibit C21-4. They've also filed responses to  
14 IRs on Mr. Plunkett's evidence from the Commission  
15 Staff and B.C. Hydro. Mr. Plunkett reviewed DSM  
16 Option A and Option B and he concludes that Option B  
17 is the recommended choice where the objective is to  
18 achieve all cost-effective DSM electricity savings.

19 **Proceeding Time 11:21 a.m. T29**

20 Hydro will argue that DSM Option B is not  
21 "cost-effective", not because of the financial  
22 analysis of the unit cost of Option B savings, but  
23 because Hydro is uncomfortable with managing the Delta  
24 B spending, and because Hydro is concerned about the  
25 deliverability risk of -- associated with Delta B  
26 savings. BCSEA/SCBC will argue that neither of these

1 concerns about Option B warrant passing up the Delta B  
2 electricity savings.

3 The second of the touchstones of my clients  
4 is sustainable renewable energy generation, when and  
5 where new generation is necessary. Subject to how the  
6 evidence comes out, BCSEA/SCBC expect that even with  
7 the adoption of DSM Option B, the load and supply  
8 forecasts may end up leading to a load supply gap that  
9 will necessitate some amount of new generation in B.C.  
10 at some time, and that by saying that I'm not trying  
11 to imply a stated position that there will necessarily  
12 be such a need, but that that is going to be a live  
13 issue.

14 BCSEA and SCBC are certainly pleased that  
15 the terms of reference for the clean Call for power  
16 designed to limit acquisitions to those types of  
17 technology that meet the criteria for zero carbon  
18 emissions.

19 BCSEA also are aware that just because a  
20 type of technology, such as wind power or run of the  
21 river power, has zero carbon emissions doesn't mean  
22 that every proposed installation of that type of  
23 technology is necessarily acceptable in any and every  
24 location. And the siting of new generation facilities  
25 is generally beyond the scope of this LTAP proceeding.  
26 However, the Panel should be aware that there is

1           presently in B.C. a substantial amount of controversy  
2           concerning the siting of particular electricity  
3           generation projects.

4                         In language that is within the scope of the  
5           LTAP proceeding, this controversy translates as  
6           increased deliverability risk associated with new  
7           generation in B.C. In that context, the forthcoming  
8           Section 5 Commission enquiry into transmission  
9           planning comes not a moment too soon. BCSEA and SCBC,  
10          as well as many others, are looking to the Section 5  
11          enquiry as a forum for, among other things, making  
12          progress towards resolving some of the land use issues  
13          associated with the siting of new electricity  
14          generation facilities, and new and expanded  
15          transmission lines too, for that matter.

16                        In short, the Commission now has two long-  
17          term planning proceedings now going forward  
18          simultaneously, albeit it not at the same stages,  
19          involving inter-connected topics. And it's -- I raise  
20          that as something to keep in mind as these issues  
21          arise in the LTAP proceeding.

22                        The third main touchstone of BCSEA and SCBC  
23          is the imperative to reduce greenhouse gas emissions.  
24          Under this heading, I'm going to outline BCSEA/SCBC's  
25          approach to fuel switching as the topic arises in the  
26          LTAP proceeding. In particular I'm going to be

1 talking about electricity to natural gas fuel  
2 switching programs that would be administered by B.C.  
3 Hydro.

4 First, two points for context. Electricity  
5 to gas fuel switching programs are not included in  
6 either DSM Option A or DSM Option B. Second, the  
7 Commission has under reserve Terasen's EEC application  
8 that includes some fuel switching to natural gas from  
9 miscellaneous fuels, oil, propane and wood as well as  
10 electricity. If and when that decision on the Terasen  
11 application is rendered, that may or may not have  
12 implications for the issue in the LTAP proceeding.

13 **Proceeding Time 11:26 a.m. T30**

14 As you know, B.C. Hydro does not propose  
15 any expenditures on electricity to gas fuel switching  
16 programs in the 2008 LTAP. And Terasen, as we've  
17 heard already, is likely to propose that the  
18 Commission should require to pursue such programs.  
19 BCSEA and SCBC do not support expenditures on  
20 electricity to gas fuel switching programs by B.C.  
21 Hydro at this time. However, BCSEA and SCBC arrive at  
22 this position for different reasons than does B.C.  
23 Hydro, and the reasons are important. There are four  
24 levels of analysis, and I'm going to sketch out how I  
25 see the debate unfolding.

26 The first level is economic effectiveness.

1 Tests like total resource cost apply here. The CPR  
2 update identified certain electricity gas fuel  
3 switching options that met the economic potential  
4 threshold, but none that it concluded were within  
5 achievable potential. And that was apparently the  
6 basis for Hydro's original proposal not to include any  
7 of these fuel switching programs in the LTAP.

8 Mr. Plunkett, on the other hand, says that  
9 there are economically achievable electricity to gas  
10 fuel switching opportunities. If there are indeed no  
11 -- if the conclusion is that there are no economically  
12 cost-effective electricity gas fuel switching  
13 programs, then that would be the end of the analysis.  
14 No one's proposing the implementation of electricity  
15 gas fuel switching programs that are not determined to  
16 be economically cost-effective. But if economically  
17 cost-effective electricity to gas fuel switching  
18 programs do exist, then we'd get to the second level  
19 of analysis, which is whether these programs should  
20 not be pursued because they would cause a net increase  
21 in carbon emissions, based on an analysis that is  
22 unconstrained at this stage by reference to the B.C.  
23 greenhouse gas legislation or the western climate  
24 initiative.

25 So the issues at this level involve things  
26 such as what are the additional carbon emissions due

1 to the induced use of gas? How efficient are the gas  
2 appliances in question? What are the reductions in  
3 emissions, if any, due to the electricity savings?  
4 Should they be measured by the average carbon  
5 intensity of electricity generation in B.C., or by the  
6 marginal carbon intensity of electricity generation in  
7 B.C.? Four, what about the marginal carbon intensity  
8 of imports in lieu of Burrard thermal generation?

9 Another key issue that Mr. Ghikas raised is  
10 -- well, I'll refer to it as displacement. This is  
11 the concept that electricity savings in B.C. allow  
12 more electricity exports, or less electricity imports  
13 on a net basis. Hydro argues, for example, that in  
14 the medium to long term, once we're past short-term  
15 lumpiness, electricity savings in B.C. have no effect  
16 on net imports or exports because the supply stack is  
17 adjusted to correspond to the reduced load forecast.  
18 That argument may well be persuasive, but what about  
19 the short term? A key question is whether the net  
20 carbon impact of electricity to gas fuel switching  
21 programs in the short term can be determined on a  
22 rough sort of first principles qualitative basis, or  
23 whether a comprehensive quantitative analysis is  
24 required to determine whether the net consequence is  
25 positive or negative for carbon emissions.

26 Next in the analysis, if there are

1 electricity to gas fuel switching programs that are  
2 economically cost-effective and that would not  
3 increase net carbon emissions on an unconstrained  
4 analysis, the question arises, should the programs be  
5 not proceeded with because of an analysis based on the  
6 impact constrained by the B.C. greenhouse gas  
7 legislative regime and the underdevelopment western  
8 climate initiative, WCI?

9 Now, Hydro makes the argument, to perhaps  
10 oversimplify, that even if there were cost-effective  
11 programs, which they deny, and even if these would  
12 benefit carbon emissions on an unconstrained analysis,  
13 which they also deny, that the additional carbon  
14 emissions due to the program and induced gas use would  
15 count directly against the B.C. reductions targets.  
16 But, the argument goes, the hypothetical carbon  
17 benefits would not count towards the B.C. GHG  
18 reductions targets unless the rules for carbon offsets  
19 are established and they aren't in fact established  
20 yet.

21 **Proceeding Time 11:31 a.m. T31**

22 Now, this is an argument that BCSEA and  
23 SCBC will reject in principle. They would not agree  
24 that the lack of full development of the carbon  
25 reduction legal regime is a valid reason to hold back  
26 on programs that, by hypothesis, and I emphasize that

1           this is in the hypothesis, it's being concluded that  
2           they are beneficial actions on climate change.

3                         Now, this gets us to the fourth level of  
4           analysis, the strategic consequences for action on  
5           climate change of implementing electricity to gas fuel  
6           switching programs. Assuming -- even assuming for the  
7           sake of discussion these programs are cost-effective  
8           economically, beneficial for climate -- on climate  
9           change regionally, and even assuming that they don't  
10          have a problem under the illegal regimes, the concern  
11          here is the mixed message. The main blunt message in  
12          favour of action on climate change is that the burning  
13          of fossil fuels should be reduced because it causes  
14          carbon emissions. Electricity to gas fuel switching  
15          programs may well be applicable only to a very narrow  
16          range of situations. But they carry a blunt message  
17          that it's good to burn gas.

18                        This would totally contradict the equally  
19          blunt message that the burning of fossil fuels should  
20          be reduced. Sending out contradictory messages simply  
21          creates confusion and neither message is actually  
22          conveyed. The strategic question, then, is whether  
23          the amount and the level of certainty or uncertainty  
24          of any net carbon reduction benefits of electricity to  
25          gas fuel switching programs outweighs the damage that  
26          would be done to the effectiveness of the main

1 programs for action on climate change.

2 Now, I don't know what position Hydro takes  
3 on that question, or even if they would agree that  
4 it's a valid question. But BCSEA and SCBC are likely  
5 to conclude that whatever the carbon benefits are that  
6 could be attributed to the electricity to gas fuel  
7 switching programs by B.C. Hydro at the present time,  
8 do not outweigh the potential damage to the main  
9 programs for action on climate change.

10 The fourth category of objectives of BCSEA  
11 and SCBC are the other factors as applicable. And I  
12 won't go through these in detail, but these will  
13 relate to topics that arise in the upcoming hearing,  
14 such as the load and supply forecasts, the future of  
15 Burrard Thermal, Site C, Fort Nelson, and the three-  
16 year LTAP planning cycle.

17 So, subject to any questions, those are my  
18 opening remarks.

19 THE CHAIRPERSON: Thank you, Mr. Andrews. Do you have  
20 any questions? No, that's it, thank you, Mr. Andrews.

21 MR. ANDREWS: Thank you.

22 THE CHAIRPERSON: Mr. Bertsch, are you going to be 20  
23 minutes?

24 MR. BERTSCH: No.

25 THE CHAIRPERSON: Okay. So, I'm just looking at the  
26 time, because I have a commitment to get people out of

1 here by five to twelve.

2 MR. BERTSCH: No problem. No, I won't be 20 minutes.

3 THE CHAIRPERSON: Please proceed.

4 **OPENING STATEMENT BY MR. BERTSCH:**

5 MR. BERTSCH: Good morning, Commission Panel. My name is  
6 Ludo Bertsch, and I represent Energy Solutions for  
7 Vancouver Island Society, the Okanagan Environmental  
8 Industry Alliance, Island Transformations.Org, and the  
9 Rental Owners and Managers Society of B.C., which  
10 collectively will be known as ESVI, OEIA, ITO and ROMS  
11 BC.

12 Generally, and I will be very brief, a lot  
13 of what I was going to say has already been taken care  
14 of by a lot of the other intervenors. Generally we  
15 believe that the demand-side management in improving  
16 energy efficiency will provide the least expensive  
17 energy with low risk at the same time as reducing  
18 environmental issues, reducing the carbon footprint,  
19 and lowering peak demand, making the grid more  
20 reliable and smarter. And if new electrical  
21 generation is needed, priority should be placed not  
22 only on green solutions but also on local generation  
23 and technology.

24 That cannot only help with the transmission  
25 infrastructure, but also builds a sustaining green and  
26 local industry for the province.

1 **Proceeding Time 11:36 a.m. T32**

2 The present challenging economic situation,  
3 we believe, further underscores even more the  
4 necessity to ensure that all cost-effective DSM  
5 measures should be implemented. Rigorous support for  
6 DSM will not only help B.C. Hydro meet its increasing  
7 service requirements at the lowest cost, but will also  
8 help its customers lower their energy costs at the  
9 same time. Certainly a win-win situation for both.

10 Now to delve into a few of the specifics of  
11 the types of cross-examination that we are planning.  
12 While B.C. Hydro did provide an evidentiary update on  
13 December 22<sup>nd</sup>, 2008, it resulted in significant  
14 changes. And we all know the speed in which the  
15 economic situation has continued to change. On  
16 February 16<sup>th</sup>, 2009, the B.C. Government emitted  
17 through its Throne Speech, and now we have a reference  
18 of Exhibit C17-8, page 6 from the Throne Speech, and  
19 it said:

20 "Only a few weeks ago, most experts  
21 predicted net growth for British Columbia in  
22 the year ahead. Today we must brace for a  
23 period of recession."

24 From net growth to recession. That change is  
25 significant and it affects B.C. Hydro in significant  
26 ways. There is a reduced demand for electricity and

1           there are more challenging financial markets to  
2           support big projects.

3                       As we will hear from Mr. Elton in his  
4           reference to some IPPBC discussions, he will say, "We  
5           must keep in mind that one of the most common mistakes  
6           in modelling the future is to be biased by recent  
7           developments." That might be true. However, we must  
8           fully understand and fully document the recent up-to-  
9           date developments, and then it is the translation of  
10          that information into action items where the mistakes  
11          may occur. And that is where we will certainly have  
12          lively debates on how to project that translation into  
13          action in the future. Given that, one of our focuses  
14          for our cross-examinations in the next couple of weeks  
15          will be to help to understand and document those  
16          recent up-to-date developments, and we will leave the  
17          translation into action for final argument.

18                      With this backdrop, we will also explore  
19          the assumptions B.C. Hydro made for its calculations.  
20          Are the load resource balances up to date? Has proper  
21          allocation been given for DSM measures, and are the  
22          measures and expenditures appropriate, including low  
23          income -- in the low income program? Have any  
24          measures been overlooked and are the right choices  
25          being made? Should DSM Option A or B be used? There  
26          are various DSM programs that B.C. Hydro has

1 submitted, has planned to be implemented in the  
2 future. Are the benefits for those accounted for, and  
3 are the plans appropriate? For example, for capacity-  
4 focused DSM programs and SMI. How well does the  
5 conservation potential review address the future  
6 projections for the B.C. market, and is there more  
7 potential available?

8 On another issue, B.C. Hydro noted that the  
9 overall impact of changes of evidentiary update is  
10 most significant in the fiscal 2012 and 2014  
11 timeframe. This impact, as we all know, results in a  
12 small deficit. Are the foundations for this analysis  
13 sound, and is the multi-solution approach B.C. Hydro  
14 is taking the best method?

15 We also plan on looking at the relationship  
16 between the various government programs and stimulus  
17 packages related to B.C. Hydro's programs. Can  
18 customers and partners throughout the region, whether  
19 it be on Vancouver Island or in the Interior,  
20 adequately access PowerSmart expertise? Can all  
21 customers, whether residential or commercial or rented  
22 or owned, properly access those DSM programs?

23 **Proceeding Time 11:40 a.m. T33**

24 One of the other areas we're interested in  
25 is the regulatory process and related framework,  
26 whether that be the 2007 Energy Plan, Bill 15, or M-

1           271. We are interested in how those programs are  
2 developed, and also how stakeholders are involved in  
3 the planning and development of B.C. Hydro programs,  
4 including the DSM programs.

5                       So that, in summary, are some of the areas  
6 that our group of organizations that I represent will  
7 be exploring in the cross-examinations.

8                       In conclusion, and again to quote the  
9 Throne Speech on Exhibit C17-8, page 3:

10                      "We live in a radically changed world. A  
11 world rocked to its core by a global crisis  
12 of confidence."

13 The best solution of all? Cost-effective demand-side  
14 management, known by its various names of energy  
15 efficiency, conservation, peak reduction, PowerSmart,  
16 and as needed, green generation, building the local  
17 economy.

18                      Thank you very much and if you have any  
19 questions --

20 THE CHAIRPERSON: All right. Thank you, Mr. Bertsch.

21 MR. BERTSCH: Thank you.

22 THE CHAIRPERSON: Mr. Gathercole?

23 **OPENING STATEMENT BY MR. GATHERCOLE:**

24 MR. GATHERCOLE: Mr. Chairman, I expect to be no more  
25 than five minutes.

26                      First, to give you a little bit of

1 background on the Peace Valley Environmental  
2 Association. It was formed in 1975 to counter the  
3 proposal being then put forward by B.C. Hydro to build  
4 the Site C dam on the Peace River. The residents of  
5 the northeast wanted to highlight the many values in  
6 the Peace River Valley that would be lost if the  
7 valley were to be flooded, as would be required if  
8 Site C is to be built.

9 Accordingly, the PVA intervened in the 1982  
10 hearing on Site C. It was, in fact, I think it's fair  
11 to say, a major intervenor opposing Site C. And as  
12 you are aware, Site C was not approved at that time.

13 In the intervening 33 years, PVA has worked  
14 to preserve and enhance water, land and air values in  
15 the Peace Valley and, of course, we have now come full  
16 circle because again PVA is focusing on the  
17 possibility of Site C.

18 Our participation in this proceeding is  
19 clearly focused on the role of Site C in the 2000 --  
20 or the proposed role of Site C in the 2008 LTAP, and  
21 the reasonableness of the expenses the Commission is  
22 being asked to approve for Stage 2 of the Site C  
23 process.

24 The issues that PVA will address are  
25 primarily these: first of all, the appropriateness of  
26 including Site C as a back-up reserve to the base plan

1 resources in the 2008 LTAP. The likelihood of its  
2 being required as a resource at all, in the long term.  
3 The projected capital cost of Site C, realizing that,  
4 given the time frame that we're talking about, the  
5 capital costs that are included in the 2000 LTAP are  
6 very preliminary.

7 How Site C fits into provincial government  
8 energy policy specifically is set out in the 2007  
9 Energy Plan and in Special Direction Number 10,  
10 especially with respect to the government's energy  
11 self-sufficiency policy. And finally, the  
12 reasonableness of the expenditures to be incurred in  
13 Stage 2, particularly those related to the public  
14 consultation process.

15 It would appear, Mr. Chairman, that most of  
16 PVA's issues, if not all, will be addressed by Panels  
17 1 and 4. And at this time, I don't anticipate -- or,  
18 I anticipate that I will restrict my cross-examination  
19 to those two panels. I expect that, subject to being  
20 referred to Panels 2 or 3 by Panel 1, I will not be  
21 asking those panels any questions. I believe that any  
22 issues dealt with by these panels that impact on PVA's  
23 concerns will be fully canvassed by other parties.

24 So, subject to any questions, that's my  
25 opening statement.

26 THE CHAIRPERSON: Okay. No questions, thank you, Mr.

1 Gathercole.

2 MR. GATHERCOLE: Thank you.

3 THE CHAIRPERSON: Mr. Oulton. Can you -- I'll give you a  
4 choice. I'm going to break in ten minutes. So, we  
5 can --

6 MR. OULTON: I fear, Mr. Chair, that my opening will be  
7 closer to the 20-minute mark than the ten, and I think  
8 my preference is to simply advance the whole statement  
9 at once, subject to your --

10 THE CHAIRPERSON: That is entirely -- we will now break  
11 until about -- sorry, Mr. Fulton. Do you wish to make  
12 opening remarks, Mr. Fulton?

13 MR. FULTON: No, but I thought that, because we have a  
14 couple of a minutes, and I will take less than that, I  
15 will tender, subject to your agreement, Mr. Chair, the  
16 written opening statement of the Texada Action Now  
17 Community Association at this time.

18 **Proceeding Time 10:46 a.m. T34**

19 THE CHAIRPERSON: That would be fine.

20 MR. FULTON: And if that could be marked Exhibit C33-6.

21 THE HEARING OFFICER: Marked Exhibit C33-6.

22 (OPENING STATEMENT OF TEXADA ACTION NOW COMMUNITY  
23 ASSOCIATION, MARKED EXHIBIT C33-6)

24 MR. FULTON: That concludes the business that I have for  
25 this portion.

26 THE CHAIRPERSON: Okay then, we will stand down then

1 until 1:30 promptly. I hope you all enjoy your lunch.

2 **(PROCEEDINGS ADJOURNED AT 11:47 A.M.)**

3 **(PROCEEDINGS RESUMED AT 1:31 P.M.)** T35/36

4 THE CHAIRPERSON: Please be seated.

5 Any preliminary business from anyone? In  
6 which case, Mr. Oulton, let's hear from you.

7 **OPENING STATEMENT BY MR. OULTON:**

8 MR. OULTON: Good afternoon, Chair, Commissioners. As  
9 you are aware, I'm appearing here as counsel for COPE  
10 378. COPE is, among other things, the principal union  
11 representing B.C. Hydro employees, but more  
12 fundamentally it's comprised of a number of  
13 ratepayers.

14 From COPE's perspective, this is an  
15 extremely significant hearing, and it's significant --  
16 it is its significance which mandates careful scrutiny  
17 of the actions that B.C. Hydro is proposing to take in  
18 the 2008 LTAP.

19 The hearing is significant for a number of  
20 reasons. First, as noted by Mr. Elton in his written  
21 opening statement which, although he has yet to  
22 present it, has been entered as Exhibit B-14, this is  
23 an important proceeding because the planning  
24 strategies put in place at this time will have -- can  
25 and will have effects for years to come. Nowhere is  
26 this more evident than in the significant expenditures

1           and initiatives for which B.C. Hydro is seeking  
2           approval in the draft Order that it's appended to its  
3           application.

4                        As we're all aware, B.C. Hydro's costs have  
5           been escalating at a considerable rate in recent  
6           years, and based on its forecasts as set out in the  
7           LTAP application, these costs will continue to do so.  
8           This ongoing cost escalation has a direct and  
9           corresponding impact on the rates paid by the  
10          ratepayers of this province. What's clear from the  
11          Order sought in this proceeding is that the decisions  
12          made here in this hearing have the potential to  
13          significantly impact B.C. Hydro's costs going forward  
14          and therefore its rates. Moreover, we know from B.C.  
15          Hydro's most recent revenue requirements application,  
16          a decision that's presently pending before this  
17          Commission, the single most significant factor  
18          underlying the recent increases in B.C. Hydro's costs  
19          is the increasing cost of energy.

20                       We also know from the RRA that one of the  
21          largest elements contributing to this increased cost  
22          of energy are B.C. Hydro's recent commitments to  
23          purchase new high-cost sources of supply through  
24          mechanisms such as the F2006 Call.

25                       COPE expects that the evidence in this  
26          proceeding will show that the LTAP is simply a

1 continuation, at least in part, of what COPE will  
2 suggest is a flawed approach employed by B.C. Hydro in  
3 the recent past.

4 **Proceeding Time 1:34 p.m. T37**

5 This approach, if allowed to continue  
6 unfettered, will result in further purchases of high  
7 cost, low value supply to meet its needs, and this  
8 will have the likely consequence of continued, if not  
9 more rapid, escalation of B.C. Hydro's costs and the  
10 associated rates formed by the ratepayers.

11 In COPE's view, one of the central  
12 questions that must be addressed in this hearing is  
13 whether the new supply purchases, for example the  
14 clean Call, B.C. Hydro is proposing to undertake in  
15 order to meet what it says are its forecasted needs,  
16 are (a) demonstrably necessary, and (b) cost-  
17 effective. Put more broadly, are the mechanisms that  
18 B.C. Hydro is proposing to embark on, in the public  
19 interest?

20 A second reason why this hearing is so  
21 significant was noted by B.C. Hydro in its opening  
22 statement and it's also noted by Mr. Elton in his.  
23 This application is the first LTAP filing since the  
24 government introduced the 2007 Energy Plan and  
25 implemented various changes to the *Utilities*  
26 *Commission Act* and associated regulatory instruments,

1 for example Special Direction 10, to implement  
2 elements of that plan. As such, this application is  
3 the first opportunity that this Commission will have  
4 to review and assess the measures B.C. Hydro proposes  
5 to take to respond to these new policy and legislative  
6 developments. This is particularly significant  
7 because looking at the LTAP as a whole, B.C. Hydro  
8 appears to be embarking on many of its current plans,  
9 in large part because it says it is required to do so  
10 by these new statutory and policy developments.

11 As noted by Mr. Godsoe, COPE does recognize  
12 that these changes to the legislative and regulatory  
13 framework are constraints within which B.C. Hydro must  
14 operate, and they must satisfy those requirements, and  
15 that compliance with these new legislated benchmarks  
16 will carry with it certain costs. However, it's  
17 important to ensure that the impacts of these changes  
18 are fully transparent and that B.C. Hydro's efforts to  
19 address these changes are both prudent and cost-  
20 effective.

21 What we intend to demonstrate through  
22 cross-examination of the other evidence that is before  
23 the Commission is that there are more prudent and  
24 cost-effective ways than those B.C. Hydro proposes to  
25 undertake in the LTAP, in order for B.C. Hydro to  
26 satisfy its obligation to provide reliable, cost-

1 effective service to its customers in the face of  
2 these new legislative requirements. Indeed, COPE  
3 expects the evidence will show that the measures B.C.  
4 Hydro proposes in the LTAP will result in the purchase  
5 of more high-cost energy than is required, thereby  
6 increasing rates more than reasonably necessary. And  
7 COPE further expects that prudence will require a  
8 different approach that still satisfies the policy and  
9 legislative constraints B.C. Hydro faces.

10 Specifically, COPE will suggest that there  
11 are several significant deficiencies in the LTAP which  
12 give rise to these concerns. First and perhaps most  
13 significantly, we expect that the evidence, both that  
14 of B.C. Hydro and COPE, will show that the proposed  
15 downgrading of the firm energy capability of the  
16 Burrard Thermal Plant from 6,000 gigawatt hours to  
17 3,000 gigawatt hours for planning purposes is  
18 unnecessary on one hand, but is also not required by  
19 the existing legislative and policy framework, and it  
20 carries with it significant and unwarranted cost.

21 **Proceeding Time 1:38 p.m. T38**

22 The evidence will show that Burrard has,  
23 for many years, been an important complement to B.C.  
24 Hydro's electric system -- hydroelectric system,  
25 providing back-up for the secondary non-firm energy  
26 that B.C. Hydro produces regularly from its Heritage

1 hydroelectric resources in most years. With the  
2 advent of wholesale market trading of electricity,  
3 Burrard has also been an important tool in allowing  
4 B.C. Hydro to take advantage of low seasonal and off-  
5 peak surpluses in other jurisdictions, without being  
6 dependent on those resources.

7 What we expect will become evident over the  
8 course of this proceeding is that B.C. Hydro has not  
9 provided any conclusive evidence that demonstrates  
10 that, by maintaining capital investment, Burrard could  
11 not continue to serve this important back-up function,  
12 just as it has in the past. And it could do so while  
13 still achieving the objectives set out in the recent  
14 legislative and policy changes. Rather, COPE believes  
15 the evidence will show that maintaining Burrard at its  
16 existing level for planning purposes, and it's  
17 important to distinguish between planning and  
18 operational; for planning purposes can be an important  
19 resource in both achieving the self-sufficiency  
20 requirements set out in Special Direction 10 while it  
21 can continue to be opportunistically displaced by  
22 either secondary sources of non-firm energy or, by  
23 B.C. Hydro's own admission in response to BCUC IR  
24 1.96.1, by opportunistic market purchases that would  
25 ultimately minimize system costs.

26 This would not be an expanded or new use of

1 Burrard, but rather would be a continuation of a  
2 process that has served B.C. Hydro and its customers  
3 very well for many years. In addition, COPE believes  
4 that the evidence will show that B.C. Hydro's proposed  
5 downgrading of Burrard for planning purposes creates  
6 an artificial requirement for new supply, regardless  
7 of its cost. Without the proposed downgrading of  
8 Burrard, B.C. Hydro's own forecasts as set out in the  
9 response to COPE IR 3.1.4, Table 2, show that there is  
10 no need for the 3,000 gigawatt clean Call as proposed  
11 in that plan, at least not in the current timeframe  
12 that is being proposed.

13 If Burrard is maintained, COPE will suggest  
14 that there is -- there would be no need to rush into  
15 any purchases that will unnecessarily increase system  
16 costs and that any such purchases such as the clean  
17 Call may be deferred, and that there would be benefit  
18 to doing so.

19 COPE will suggest another major -- or that  
20 another -- or, sorry, that this approach is supported  
21 by another major deficiency in the LTAP.  
22 Specifically, the LTAP fails to address the  
23 fundamental problem my friend Mr. Wallace referred to,  
24 of buying high and selling low, that has arisen as a  
25 function of B.C. Hydro's low industrial rates and its  
26 recent power procurement strategies. In this regard,

1 COPE supports the concerns raised by my friend Mr.  
2 Wallace with respect to the clean Call in his opening  
3 statement.

4 COPE believes that the evidence will show  
5 that B.C. Hydro's current industrial rates attract and  
6 indeed are attracting new loads that pay less than  
7 half the cost of the new supply B.C. Hydro is agreeing  
8 to acquire under long-term contracts, and we'll be  
9 exploring this issue further in cross-examination.

10 **Proceeding Time 1:41 p.m. T39**

11 COPE will suggest that this amounts to an  
12 effective subsidy of the new industrial load, a  
13 subsidy that has significant implications for existing  
14 customers, particularly domestic customers. COPE  
15 acknowledges that there are constraints, and what B.C.  
16 Hydro can do for its overall system pricing because of  
17 the Heritage Contract and the various directions that  
18 have been issued in respect to that. However, COPE  
19 will suggest that there are still viable alternatives  
20 available for B.C. Hydro, both to consider and pursue,  
21 that would potentially alleviate the adverse impact or  
22 at least -- yes, alleviate the adverse impact on  
23 existing customers. COPE says there is little point  
24 in promoting conservation at great effort and expense  
25 if it's undermined by the uneconomic inducement of new  
26 loads at artificially low rates. In COPE's view, this

1 is a significant issue and we intend to explore this  
2 as well during cross-examination.

3 Another issue that COPE sees in the LTAP  
4 arises out of the direction that we understand has  
5 been given to B.C. Hydro in the 2007 Energy Plan, to  
6 acquire new energy supplies from the private sector,  
7 particularly run of river and wind. While COPE  
8 accepts that such resources may be very attractive and  
9 beneficial in certain areas and circumstances, what we  
10 expect the evidence to show is that the implementation  
11 of these resources within the existing integrated B.C.  
12 Hydro system will impose costs and actually diminish  
13 rather than enhance the very valuable flexibility that  
14 the B.C. Hydro system as a whole currently has.

15 COPE will also suggest that the  
16 proliferation of private purchase contracts, with no  
17 residual rights at the end of the specified terms, is  
18 shortsighted and much less valuable than what B.C.  
19 Hydro can secure from its own potential resource  
20 developments, for example Site C. Its current  
21 strategy as set out in the LTAP is a buy now, buy  
22 again later strategy that COPE believes does not serve  
23 future customers well, and we will be exploring this  
24 through cross-examination.

25 Finally, COPE acknowledges that B.C. Hydro  
26 faces a great deal of uncertainty in the current

1 regulatory economic and policy environment. Mr. Elton  
2 acknowledges as much in his opening statement. This  
3 uncertainty has many facets. Most notably the depth  
4 and duration of the current economic recession and its  
5 impact on the demands made on B.C. Hydro is uncertain  
6 at this time. The development of regional rules and  
7 market mechanisms relating to greenhouse gas emissions  
8 is incomplete and the content of such rules and  
9 mechanisms is presently unknown. The eligibility for  
10 and potential value, if any, of renewable energy  
11 credits for run of river and other potential sources  
12 is also similarly uncertain. The opportunity to  
13 develop, and timing of major projects like Site C, is  
14 also uncertain. And finally, there may be market  
15 opportunities and potential value to B.C. Hydro of  
16 providing energy services to complement the growing  
17 volume of intermittent energy-producing resources in  
18 western North America, an opportunity that B.C. Hydro  
19 is uniquely capable of taking advantage of, but these  
20 opportunities remain uncertain as well.

21 All of these uncertainties, in COPE's  
22 suggestion, speak to the need for prudence on the part  
23 of B.C. Hydro, not haste. In light of this, COPE will  
24 suggest that there is no need to rush forward with  
25 commitments to purchase additional high-cost, low-  
26 value supply that will diminish B.C. Hydro's options

1 and opportunities in the future, and that as such, the  
2 clean Call should be deferred, or alternatively  
3 limited, to purchases that are supported by a sound  
4 business case, such that they are demonstrated to be  
5 cost-effective in relation to other options. These  
6 purchases can be advanced in the future when the need  
7 and value of such purchases is clear.

8 Conversely, the long-term contracts  
9 contemplated in the LTAP cannot be generally undone,  
10 regardless of what unfolds. And this runs contrary to  
11 the comments of Mr. Elton in his opening statement  
12 that long-term resource planning must be dynamic and  
13 adaptive to changing circumstances.

14 In addition, as noted by my friend Mr.  
15 Weafer, this cumulative uncertainty militates in  
16 favour of maintaining Burrard in its existing role to  
17 give B.C. Hydro flexibility in at least the short  
18 term, without locking into the long-term contracts  
19 that are being proposed in the LTAP.

20 Finally I'd be remiss in failing to note  
21 that COPE intends to call the evidence of Dr. Shaffer  
22 that has been filed at Exhibit C16-6, who speaks to  
23 many of the issues I have outlined here, and he will,  
24 of course, be available for cross-examination later in  
25 the proceeding.

26 Subject to any questions, this concludes my

1 opening statement.

2 **Proceeding Time 1:46 p.m. T40**

3 THE CHAIRPERSON: Thank you, Mr. Oulton. No questions,  
4 thank you very much.

5 MR. OULTON: Thank you.

6 THE CHAIRPERSON: Mr. Godsoe? Sorry, Mr. Fulton, I saw  
7 you.

8 MR. FULTON: Yes, I just wanted to make sure that Mr.  
9 Tennant was not here. I don't see him here, but I'll  
10 -- no, he's not.

11 THE CHAIRPERSON: He's not.

12 MR. FULTON: So that then concludes the opening  
13 statements, Mr. Chairman.

14 THE CHAIRPERSON: Thank you. I apologize.  
15 Mr. Godsoe?

16 MR. GODSOE: Well, Mr. Chairman, just before I introduce  
17 my first panel, I do think Exhibit A-17 gives me a  
18 chance to "outline the position of B.C. Hydro on the  
19 matters identified by intervenors", and I'd like to do  
20 that.

21 THE CHAIRPERSON: Please do.

22 **REPLY STATEMENT BY MR. GODSOE:**

23 MR. GODSOE: There's only two issues I want to speak to.  
24 First, I want to be clear that I'm reserving my right  
25 to make submissions with respect to the B.C. Court of  
26 Appeal's decisions in the *Carrier Sekani Tribal*



1 Elton and Ms. Van Ruyven. And, Ms. Van Ruyven, I'll  
2 begin with you my direct examination. Could you  
3 please state for the record your name and position  
4 with B.C. Hydro?

5 MS. VAN RUYVEN: A: Beverly Van Ruyven. I'm the  
6 Executive Vice-President of Customer Care and  
7 Conservation.

8 MR. GODSOE: Q: And your direct testimony can be found  
9 at Exhibit B-13, is that correct?

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

11 MR. GODSOE: Q: And are there any changes you believe  
12 are necessary to that testimony?

13 MS. VAN RUYVEN: A: No.

14 MR. GODSOE: Q: Do you adopt that testimony as your own  
15 in this proceeding?

16 MS. VAN RUYVEN: A: I do.

17 MR. GODSOE: Q: Thank you. And Mr. Elton, could you  
18 please state for the record your name and your  
19 position with B.C. Hydro?

20 MR. ELTON: A: Robert George Elton. I'm the President  
21 and Chief Executive Officer.

22 MR. GODSOE: Q: And your direct testimony can be found  
23 at Exhibit B-13, is that correct?

24 MR. ELTON: A: Yes.

25 MR. GODSOE: Q: Are there any changes you believe are  
26 necessary to that testimony?

1 MR. ELTON: A: No.

2 MR. GODSOE: Q: Do you adopt it as your testimony in  
3 this proceeding?

4 MR. ELTON: A: Yes.

5 MR. GODSOE: Q: And Mr. Elton, I understand you have an  
6 opening statement you are prepared to make, and Mr.  
7 Chairman, on Tuesday, 17 February 2009, Mr. Elton's  
8 opening statement was distributed to both the  
9 Commission and participants, and that can be found at  
10 Exhibit B-14. And with that, I'll ask Mr. Elton if he  
11 could give that opening statement.

12 MR. ELTON: A: Thank you.

13 On June 12, 2008 B.C. Hydro filed its 2008  
14 long-term acquisition plan with the Commission. This  
15 is clearly an important application for B.C. Hydro, as  
16 planning strategies put in place now will have effects  
17 for years to come. The 2008 LTAP is also B.C. Hydro's  
18 first long-term resource plan to be filed with the  
19 Commission since the release of the B.C. Government's  
20 2007 Energy Plan, and the B.C. Climate Action Plan,  
21 the enactment of Special Direction No. 10, and the  
22 passage of the May 2008 amendments to the *Utilities*  
23 *Commission Act*.

24 To provide a backdrop to the Commission's  
25 consideration of the issues raised by the 2008 LTAP,  
26 I'd like to speak to the relationship between the 2008

1 LTAP, B.C. Hydro's service obligation, and provincial  
2 government policy. I would also like to speak to the  
3 substantial risks and uncertainties inherent in the  
4 electrical utility business that we are managing.

5 B.C. Hydro has an obligation to provide  
6 reliable cost-effective electricity supply in an  
7 environmentally responsible manner that is sufficient  
8 to meet customer demand.

9 **Proceeding Time 1:51 p.m. T41**

10 As a result, B.C. Hydro needs to plan for  
11 customer demand now and into the future; be prepared  
12 for emerging issues, unexpected events and  
13 uncertainties that may put those plans at risk; and be  
14 aware of the ever-changing needs and interests of our  
15 current and future customers, of the provincial  
16 government and of regulatory agencies including the  
17 Commission, and of stakeholders.

18 The practice of long-term resource planning  
19 must be dynamic and adaptive to changing  
20 circumstances, if it is to meet its objective of  
21 guiding resource choices to the most cost-effective  
22 and risk-appropriate alternatives. This means, among  
23 other things, that B.C. Hydro must take into account  
24 provincial government policy direction. And in the  
25 2006 Integrated Electricity Plan LTAP hearing, I  
26 testified that it would be imprudent for B.C. Hydro to

1 ignore very strong statements made by the government,  
2 and I have not changed my view.

3 The 2008 LTAP fundamentally advances the  
4 2007 Energy Plan. Consistent with both the May 2008  
5 UCA amendments and the 2007 Energy Plan, B.C. Hydro  
6 pursued cost-effective demand-side management  
7 resources as its first priority in the 2008 LTAP.  
8 While not without delivery risk, the 2008 LTAP  
9 demonstrates that DSM is a cost-effective resource  
10 that mitigates exposure to cost risk associated with  
11 natural gas and electricity prices and greenhouse gas  
12 offsets, and reduces transmission and distribution  
13 costs while avoiding siting risk. DSM is expected to  
14 delivery 7,600 gigawatt hours per year of energy  
15 savings by fiscal 2017, and 9,600 gigawatt hours,  
16 which is 72 percent of the energy load resource gap,  
17 by fiscal 2020.

18 I believe B.C. Hydro is pursuing all cost-  
19 effective DSM. The benefits I just described to our  
20 customers and to society as a whole are worth the risk  
21 and will require diligence implementation.

22 B.C. Hydro is looking to contract with  
23 third party suppliers for new incremental electricity  
24 supply. B.C. Hydro has a standing offer program in  
25 place for the acquisition of supply from projects 10  
26 megawatts or less. We recently awarded four

1 electricity purchase agreements for 579 gigawatt hours  
2 a year of firm energy as part of the bio-energy Call  
3 Phase 1 request for proposals. And we also seek  
4 approximately 4,000 gigawatt hours a year of pre-  
5 attrition firm energy as part of the clean power Call  
6 and bio-energy call Phase II RFP processes. We're  
7 looking to advance the Mica Units 5 and 6 Resource  
8 Smart capacity projects as part of our contingency  
9 resource plans, to ensure that B.C. Hydro can reliably  
10 meet our customers' demand even under adverse  
11 circumstances, and to maintain operational  
12 flexibility. Panel 4 can address this in greater  
13 detail.

14 The 2008 LTAP sets out a long-term plan for  
15 Burrard Thermal Generating Station. As Panel 2 can  
16 testify to, we invested a substantial amount of review  
17 and analysis, and to what we were able to commit to  
18 with respect to Burrard since the 2006 LTAP decision.  
19 Burrard plays a critical role in our system with its  
20 capacity in the Lower Mainland/Vancouver Island  
21 region. The reliance upon Burrard for energy should  
22 not risk its role as a capacity resource, and B.C.  
23 Hydro believes it has achieved an appropriate balance  
24 among the competing pressures. Burrard will continue  
25 its role of providing reliable backup power to the  
26 province at least until 2019.

1                   The result of all this is a long-term  
2                   resource plan that represents the right balance of  
3                   resource additions and meets customer reliability  
4                   needs, while minimizing cost, balancing the diverse  
5                   stakeholder interests, and addressing environmental  
6                   concerns. As Panel 3 can describe, the 2008 LTAP  
7                   builds on B.C. Hydro's prior resource planning efforts  
8                   and reflects advancement in risk analysis, third party  
9                   price forecasting of natural gas and greenhouse gas  
10                  offsets, and portfolio modelling. However,  
11                  quantitative analysis alone is insufficient to fully  
12                  describe the current or future market realities. And  
13                  so the 2008 LTAP incorporates B.C. Hydro's  
14                  professional judgment as well.

15                  There are many significant external  
16                  influences that impact our long-term resource  
17                  planning, and I want to address three in particular:  
18                  the volatility and uncertainty of loads; the  
19                  requirement to meet self-sufficiency; and government  
20                  greenhouse gas policy and regulatory initiatives. We  
21                  prepare a load forecast each year as part of our  
22                  annual financial forecast, and forecasting B.C.  
23                  Hydro's future electricity needs has many challenges.  
24                  There are many variables and uncertainties at play,  
25                  including customer behaviour, economic factors, and  
26                  technological trends.



1       tough times, as we've just been hearing, in an  
2       uncertain and turbulent economy. Many of these  
3       customers in various regulatory proceedings have asked  
4       B.C. Hydro to take into account these tough times in  
5       our long-term planning. In light of forecast economic  
6       conditions, B.C. Hydro amended two of the 2008 LTAP  
7       action items by reducing, firstly, the expected  
8       savings from the DSM plan and secondly, the clean  
9       power Call pre-attrition planning target to 3,000  
10      gigawatt-hours a year. And this is set out in the  
11      evidentiary update, Exhibit B-10.

12                 In arriving at the decision to reduce  
13      expected DSM savings and the clean power Call planning  
14      target, B.C. Hydro recognized the issue raised by the  
15      Independent Power Producers' Association of B.C. in  
16      one of its responses to a BCUC Information Request,  
17      and that is Exhibit C17-6, response to BCUC IR 1.7.2,  
18      namely, that the 2008 LTAP is a 20-year plan, and that  
19      one of the most common mistakes in modeling the future  
20      is to be biased by recent developments. As set out in  
21      the January 12, 2009 letter, Exhibit B-11, B.C. Hydro  
22      is open to acquiring additional supply through the  
23      clean power Call, if the potential electricity  
24      purchase agreements are cost-effective.

25                 B.C. Hydro will provide reasons for any  
26      award above 3,000 gigawatt-hours a year in the Section

1           71 proceeding.

2                       So as a package, B.C. Hydro's 2008 LTAP  
3 sets a path for securing resources to meet B.C.  
4 Hydro's obligation to its customers well in the  
5 future, while keeping costs down and risks manageable.

6                       B.C. Hydro is capable of meeting self-  
7 sufficiency by 2016 through the 2008 LTAP as amended  
8 by the evidentiary update. Long-term resource  
9 planning is a dynamic process, and during the time  
10 between LTAP filings, the public and regulatory  
11 oversight of the activities identified in the LTAP  
12 allow for discussion and adjustment of the LTAP as  
13 warranted. As part of normal business, we analyze and  
14 evaluate our LTAP and make periodic adjustments and  
15 corrections to reflect changes in economic conditions,  
16 anticipated resource developments, and regulatory  
17 requirements. And we would do that with this LTAP.

18                      One aspect of this flexible and staged  
19 approach is manifested through the proposed planning  
20 cycle, which provides regular opportunities to  
21 effectively monitor and adjust the LTAP if necessary  
22 to changing conditions. Under this proposed planning  
23 cycle, B.C. Hydro proposes to file its next LTAP in  
24 2011, far enough advanced of the 2016 date for self-  
25 sufficiency to permit further actions if necessary to  
26 achieve self-sufficiency.

1                   One of the most significant issues emerging  
2                   from government policy and regulatory initiatives is  
3                   making sound business commitments today, given an  
4                   eventual but uncertain greenhouse gas regulatory  
5                   regime. For example, the provincial government has  
6                   legislated targets to reduce greenhouse gas emissions  
7                   by 33 percent below 2007 levels by 2020, and by 80  
8                   percent or more by 2050. The B.C. Climate Action Plan  
9                   states that the plan -- that is to say, the Climate  
10                  Action Plan, contains measures to take B.C.  
11                  approximately 73 percent of the way to the legislated  
12                  target of a 33 percent reduction in GHG emissions by  
13                  2020. The plan goes on to state that the climate  
14                  action team is to make recommendations for how to fill  
15                  the remaining gap, to meet the 33 percent GHG  
16                  reduction target.

17                  Concern about greenhouse gas emissions is  
18                  now a permanent part of the landscape of utility  
19                  planning, which alters the risk profile of certain  
20                  supply editions -- or certain supply options. In the  
21                  2008 LTAP, B.C. Hydro has a GHG risk mitigation  
22                  strategy that includes GHG and electrification  
23                  scenario analysis, and renewable generation DSM  
24                  acquisition plans. The result is an action plan that  
25                  is the least carbon-intense portfolio B.C. Hydro has  
26                  ever identified as being cost-effective.

1 **Proceeding Time 2:01 p.m. T43**

2 In conclusion, since the 2006 IEP/LTAP,  
3 conditions have changed. The 2007 Energy Plan is  
4 being implemented, the global economy has taken a  
5 significant hit, and greenhouse gas regulation is  
6 moving from talk to action. As well, our aspirations  
7 have increased and we now are convinced that  
8 conservation can and must play a larger role in our  
9 lives and in how B.C. Hydro serves its customers.  
10 This is a sound plan which recognizes these changing  
11 conditions and incorporates our aspirations, and it  
12 builds on all the valuable learning from and since the  
13 2006 IEP/LTAP.

14 MR. GODSOE: Thank you, Mr. Elton. B.C. Hydro's Policy  
15 Panel is available for cross-examination, Mr.  
16 Chairman.

17 MR. FULTON: Mr. Chairman, I have provided the Commission  
18 Panel, together with the parties in the room, with an  
19 order of cross-examination for the B.C. Hydro panels.  
20 I would like to add at number 14, NaiKun Wind Energy  
21 Group, although I understand that Mr. Bois that they  
22 will not be cross-examining Panel 1. Their identity  
23 number for the purposes of the proceeding is C36.

24 I also understand that for this panel, that  
25 Columbia Power Corporation will not be cross-  
26 examining, and Mr. Campbell who is at number 11 has

1 not appeared, so I'm not expecting he will be cross-  
2 examining.

3 And finally with respect to Mr. Tennant and  
4 Vanport Sterilizers, he may or may not be here to  
5 cross-examine.

6 So with that introduction then, the first  
7 cross-examining party is Terasen Utilities.

8 MR. GHIKAS: Mr. Chairman, just before I begin here, I've  
9 taken the liberty of preparing a booklet of documents  
10 hopefully covering the lion's share that I will be  
11 referring to in the cross, and I propose that that be  
12 marked as C13-5.

13 THE CHAIRPERSON: Certainly.

14 THE HEARING OFFICER: Marked Exhibit C13-5.

15 (TERASEN UTILITIES' DOCUMENTS FOR CROSS-EXAMINATION OF  
16 B.C. HYDRO POLICY PANEL, MARKED EXHIBIT C13-5)

17 MR. GHIKAS: And Mr. Chairman, there are documents in  
18 there that aren't part of the record, but I've  
19 provided those to my friend, all but one, before lunch  
20 or at lunch, and the remaining one this one. And I'll  
21 be starting off.

22 **CROSS-EXAMINATION BY MR. GHIKAS:**

23 MR. GHIKAS: Q: Good afternoon, Mr. Elton and Ms. Van  
24 Ruyven.

25 MR. ELTON: A: Good afternoon.

26 MR. GHIKAS: Q: I'm Matt Ghikas. I'm counsel for

1 Terasen Gas.

2 I want to start off by referring, if you  
3 can turn in the lower right-hand corner, there's some  
4 handwritten page numbers. If you can turn to page 9,  
5 please, of the booklet. And this is excerpt from the  
6 evidentiary update, page 23 from the evidentiary  
7 update, and just looking at that Table 2-9, I think we  
8 can agree that B.C. Hydro is facing a significant task  
9 in closing the load resource gap identified in that  
10 table.

11 MS. VAN RUYVEN: A: Yes, we could agree that 13,000 --  
12 well, in 2021 the gap is 13,600. That is a  
13 significant gap to close.

14 MR. GHIKAS: Q: Thank you. And even after adjusting  
15 for the DSM measures, the 9900 in 2021, the gap is  
16 still 3700, correct?

17 MS. VAN RUYVEN: A: Yes, that is the gap if you just  
18 star taking off DSM. However, that's not the gap --  
19 that's not what we're presenting in the LTAP  
20 obviously. There's other things that we've added in  
21 the resources.

22 **Proceeding Time 2:06 p.m. T44**

23 MR. GHIKAS: Q: Okay. And if the reduction for the  
24 DSM, the 9900, that of course assumes that the DSM  
25 programs will be entirely successful as anticipated.

26 MS. VAN RUYVEN: A: Yes, this is a bit confusing,

1           because this is year 2021. Our commitment in the  
2           energy policy is 50 percent going forward to 2020.  
3           So, it would have been -- it would be 9600, but yes,  
4           it assumes that our plan that we have put in here is  
5           successful.

6 MR. GHIKAS:   Q:    Okay. And obviously B.C. Hydro faces  
7           considerable uncertainty any time there is a forecast,  
8           with respect to the achievability of both the DSM  
9           savings and also with respect to the load forecast,  
10          correct?

11 MS. VAN RUYVEN:   A:   Yes. There's more certainties than  
12          just that, though. There's uncertainties in all of  
13          our resource choices, starting with the load forecast,  
14          DSM, supply-side additions. They all have risks.

15 MR. GHIKAS:   Q:    Right. Now, if you can turn back to  
16          page 6 of the booklet, this is Mr. Elton's opening  
17          statement. Mr. Elton, you refer just above the  
18          heading in the lower part of that page to three  
19          scenarios, electrification scenarios; electric plug-in  
20          vehicles, residential space heating and water heating,  
21          and oil and gas facilities. And it indicates that  
22          those have been considered for study and potential  
23          inclusion in future load forecasts, when these loads  
24          become more visible and quantifiable. And my question  
25          to you is, what you mean by that, in effect, is that  
26          those scenarios aren't included in the load forecasts

1           that are presented in this application. Is that  
2           correct?

3 MR. ELTON:    A:    I think what it means really is that to  
4           the extent these scenarios might represent major  
5           changes in future load, you know, that are greater  
6           than we can visibly and quantify we talk about today,  
7           they're not included. So to a large extent, not  
8           included, yes.

9 MR. GHIKAS:   Q:    Thank you. And if those issues, those  
10           emerging issues, if they materialize, they will have  
11           the potential to affect B.C. Hydro's load -- or  
12           resource requirements significantly.

13 MR. ELTON:    A:    Yes. I mean, when -- if and when, or as  
14           and when, they become part of -- you know, of a  
15           probable forecast and become part of the mid-load  
16           forecast, that would lead us, then, to make plans to  
17           deal with them.

18 MR. GHIKAS:   Q:    And the reference to space and water  
19           heating in that passage that we are looking at, I take  
20           this to be a risk that the capture rate for space and  
21           water heating will in fact prove to be greater than is  
22           currently anticipated. Is that right?

23 MR. ELTON:    A:    Yes. Yes. You're at -- yes. Yes.

24 MR. GHIKAS:   Q:    And in watching those emerging issues,  
25           with respect to space and water heating, for example,  
26           is it fair to say that B.C. Hydro is paying close

1 attention to the age of suburban houses in Vancouver  
2 and the time at which appliances will be switched out?

3 MR. ELTON: A: Yes, I think, yes.

4 MS. VAN RUYVEN: A: Well, yes we are, and that's why we  
5 do very detailed end use surveys that feed into our  
6 load forecast. And we can only really put in our load  
7 forecast what we are starting to see as trends, and  
8 what is visible. So, certainly, and Mr. Ince on Panel  
9 2 can talk about what we're starting to see on the  
10 residential side for baseboard heating additions,  
11 mostly in new building stock, not on retro-fits. We  
12 have done a little bit of including the oil and gas  
13 sector in our load forecast and he again can provide a  
14 lot of detail as to what we have reflected in the oil  
15 and gas electrification scenarios in the load  
16 forecast. But it's really about what's visible, what  
17 trends do we start to see, what evidence is there to  
18 actually build something into a long-term 20-year load  
19 forecast.

20 MR. GHIKAS: Q: It's a relative unknown to B.C. Hydro  
21 how many appliances are out there, and waiting to be  
22 -- old appliances are out there and needing to be  
23 switched, as they're coming of age.

24 MS. VAN RUYVEN: A: I would say it's relatively  
25 unknown. However, we do very detailed end use surveys  
26 that does -- we do survey customers and what kinds of

1 appliances, what kind of heating, and those sorts of  
2 things. So we will be very much focused on this end  
3 use survey, asking specific questions around potential  
4 fuel-switching, to be better informed for next year's  
5 load forecast.

6 MR. GODSOE: And again, just for the benefit of my  
7 friend, I think detailed questions like that are more  
8 appropriately addressed to Panel 2.

9 MR. GHIKAS: Thank you, Mr. Godsoe.

10 Q: Starting on the first page of your speech, your  
11 opening statement, Mr. Elton, I believe as you  
12 expressed right at the outset, that the importance of  
13 this application in effect for B.C. Hydro lies in the  
14 fact that planning strategies that are put in place  
15 now have effect for years to come. Is that fair?

16 **Proceeding Time 2:11 p.m. T45**

17 MR. ELTON: A: It is fair.

18 MR. GHIKAS: Q: And the requirement to achieve self-  
19 sufficiency obviously plays a role in driving B.C.  
20 Hydro's plan.

21 MR. ELTON: A: Yes.

22 MR. GHIKAS: Q: And can we agree that to the extent  
23 B.C. Hydro makes an error in its planning strategy  
24 now, the harder it will be to respond in time to reach  
25 self-sufficiency by 2016?

26 MR. ELTON: A: Harder than what?

1 MR. GHIKAS: Q: Than if its assumptions have all borne  
2 out, its chosen path bears out.

3 MR. ELTON: A: Clearly if we make an error that means  
4 that we've underestimated something, then yes. If we  
5 make an error the other way, then the opposite will be  
6 true.

7 MR. GHIKAS: Q: Fair enough, I take your point. It's  
8 stating the obvious, I suppose, that DSM figures  
9 prominently in this application, and the magnitude of  
10 the DSM budget is influenced, as I understand it, by  
11 what B.C. Hydro refers to asymmetric flexibility. And  
12 I'm getting that reference from the evidentiary update  
13 here on -- if you go to page 10 of the booklet. And  
14 that's -- and you see that there, the last bullet of  
15 the page there, "Asymmetric Flexibility"?

16 MR. ELTON: A: Yes.

17 MR. GHIKAS: Q: Right. And that's a fancy way of  
18 saying, in effect, that it's easier to ramp up DSM --  
19 or ramp down DSM than up.

20 MR. ELTON: A: It is a fancy way of saying it, but as  
21 you've pointed out, we say it in the plain way as  
22 well.

23 MR. GHIKAS: Q: Yes, thank you. And whatever remaining  
24 load resource gap there is after Hydro pursues all its  
25 DSM, the gap will have to be addressed by the  
26 acquisition of energy by B.C. Hydro.

1 MS. VAN RUYVEN: A: That's correct, along with a small  
2 amount of Resource Smart projects of our own, but yes,  
3 that is predominantly right.

4 MR. GHIKAS: Q: Okay. So I want to ask you a few  
5 questions, staying in a conceptual level for a moment,  
6 about space and water heating. All else equal,  
7 reducing the capture rate for new electric space and  
8 water heating customers from the forecasted capture  
9 rate that's used in the LTAP, would assist in closing  
10 the forecasted load resource gap used in this LTAP.  
11 Right?

12 MS. VAN RUYVEN: A: Well, I think our DSM plan already  
13 has captured reduction of electrons, whether your  
14 electrically heated home or not. So I think it's  
15 partially already in there. If we then were more  
16 aggressive, it would add to closing the gap, yes.

17 MR. GHIKAS: Q: Okay. I'm not sure I entirely  
18 understood what you were saying. So my question is a  
19 really simple one. It's just at a conceptual level,  
20 all else equal, if we reduce the rate that space and  
21 water heating customers are at added, then that's  
22 going to affect the forecasted load resource gap by  
23 closing the gap.

24 MS. VAN RUYVEN: A: Yes, it would.

25 MR. GHIKAS: Q: And can we agree that reducing the  
26 capture rate would also assist B.C. Hydro in achieving

1 self-sufficiency by 2016?

2 MS. VAN RUYVEN: A: Yes, I agree.

3 MR. GHIKAS: Q: And as I understand it, the cost of IPP  
4 supply used in the evidentiary update to assess DSM  
5 cost-effectiveness is \$120 per megawatt hour. Is that  
6 right?

7 MS. VAN RUYVEN: A: No, we use our reference price,  
8 which would have been the average of the 2006 Call for  
9 coming up with the levelized cost of DSM, so \$88 a  
10 megawatt hour.

11 MR. GHIKAS: Q: And I guess what I'm referring to then  
12 is the marginal cost of supply for IPP power. Is that  
13 right? That's \$120.

14 MS. VAN RUYVEN: A: That's right.

15 MR. GHIKAS: Q: Now, can we agree that all else equal,  
16 to the extent that B.C. Hydro can reduce space and  
17 water heating or avoid capturing new load, for a lower  
18 cost to B.C. Hydro than B.C. Hydro's forecast cost of  
19 acquiring the energy to meet that load, B.C. Hydro  
20 ratepayers will on average take at lower rates than  
21 they otherwise would?

22 **Proceeding Time 2:17 p.m. T46**

23 MS. VAN RUYVEN: A: I would agree, with one caveat,  
24 based on the plan that we have before us. The other  
25 part of that question you'd have to ask is, could you  
26 get more? So what kind of risk would you then put

1       your ratepayers at if you couldn't then achieve that  
2       additional savings? But yes, I would agree with your  
3       statement.

4 MR. GHIKAS:   Q:   Okay. Thank you. I guess that brings  
5       me to my next topic, which is -- the starting point  
6       for that is on page 4 of the booklet, which is again,  
7       Mr. Elton, your opening statement. And it's in  
8       particular the statement which we've heard made a few  
9       times already this morning, and that is that B.C.  
10      Hydro is pursuing all cost-effective DSM. And I want  
11      to explore for a minute what B.C. Hydro means and  
12      doesn't mean by "all cost-effective DSM" in the  
13      context of fuel choice.

14                    So let's start by what you don't, Mr.  
15      Elton. B.C. Hydro hasn't pursued all of the DSM that  
16      has a lower per-megawatt cost than the cost B.C. Hydro  
17      will pay to acquire the next megawatt of energy,  
18      right?

19 MR. ELTON:    A:    You'll probably have to be more  
20      specific, I think, when you ask that.

21 MR. GHIKAS:    Q:    Okay, how so?

22 MR. ELTON:    A:    Well, in other words, what -- you're  
23      saying that we haven't pursued all -- I mean, what  
24      we've pursued is everything that we felt was  
25      deliverable within a reasonable period of time in this  
26      plan, and maybe Ms. Van Ruyven could speak to the

1 deliverability risk that we'll obviously be covering  
2 quite a bit during this hearing.

3 MR. GHIKAS: Q: Right. Okay. No, and I will come to  
4 deliverability, but just simply from a cost  
5 perspective, you're not pursuing -- you're not  
6 equating cost-effective to low cost.

7 MS. VAN RUYVEN: A: That's -- we don't think cost-  
8 effective is narrow -- the narrow definition is  
9 "lowest cost". We think it's a much broader  
10 definition than that.

11 MR. GHIKAS: Q: Okay.

12 MS. VAN RUYVEN: A: We think it includes deliverability  
13 risk, we think it also includes diversity of  
14 resources.

15 MR. GHIKAS: Q: Okay. And assuming we were to use the  
16 definition of "low cost" as opposed to the definition  
17 that you're applying of "cost-effective", there would  
18 be DSM measures directed at fuel choice that would  
19 meet that definition, right?

20 MS. VAN RUYVEN: A: Could you repeat that? I'm sorry.

21 MR. GHIKAS: Q: Sure. If we were to apply a low cost  
22 test, there would be measures that could be pursued  
23 relating to the choice of fuel that would meet that  
24 test.

25 MS. VAN RUYVEN: A: If the test was narrowly defined as  
26 simply lowest cost, then yes, I would agree. But we

1 don't believe that it is that narrowly defined, and we  
2 also believe that the Commission has supported that  
3 broader definition in several other hearings that have  
4 been before them.

5 MR. GHIKAS: Q: Okay. If you can go to page 27 of the  
6 booklet, I'm not going to -- this is one of the  
7 documents from the conservation potential review, it's  
8 an attachment to BCSEA IR 2.28.21. I don't intend to  
9 get into the details of, you know, how numbers were  
10 derived with you. Obviously that's directed at  
11 another panel. But I will -- I do want to just deal  
12 with one point on page 27 of the booklet, which is  
13 page 109 of 138 of the attachment.

14 You'll see in the top paragraph there, the  
15 study says that,

16 "In this study, "cost-effective" means that  
17 the fuel-switching measure passes the  
18 Measure Total Resource Cost...test."

19 Okay? And just before I move on, the total resource  
20 cost test, that's a test that is identified in the DSM  
21 regulation, right?

22 **Proceeding Time 2:22 p.m. T47**

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

24 MR. GHIKAS: Q: And so when B.C. Hydro says and when  
25 Mr. Elton says that B.C. Hydro has pursued all cost-  
26 effective DSM, B.C. Hydro didn't pursue all of the

1           measures identified in the CPR work as having a  
2           positive total resource cost, right?

3 MS. VAN RUYVEN:    A:    And again, I'm probably not the  
4           right person to ask on that because I haven't looked  
5           at that conservation potential review for a very long  
6           time, but Mr. Hobson on Panel 3 and 4 would certainly  
7           be able to answer that question.

8 MR. GHIKAS:        Q:       Thank you. So I think -- I recall you  
9           saying and I know I've seen elsewhere in the documents  
10          that B.C. Hydro's definition of cost-effectiveness  
11          includes low cost, as you've said, delivery risk and  
12          diversity. Is that fair?

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

14 MR. GHIKAS:        Q:       And we've already dealt with issues of  
15          low cost, and I want to ask you about diversity. Can  
16          we agree, Ms. Van Ruyven, that the incorporation of  
17          DSM relating to fuel choice would further diversify  
18          the DSM portfolio?

19 MS. VAN RUYVEN:    A:       If you put it in the context if  
20          you're adding another program to get added electricity  
21          savings, I would agree to that. The more programs we  
22          have spread across all of our customer classes that  
23          can be effective would diversify the demand-side  
24          management plan, yes.

25 MR. ELTON:         A:       But the overall diversity of the LTAP  
26          would be reduced, I think is what you're saying,

1           because more of it would be DSM.

2 MR. GHIKAS:   Q:    And diversity within the DSM portfolio  
3           itself, in and of itself reduces deliverability risk  
4           for the portfolio as whole, doesn't it?

5 MS. VAN RUYVEN:   A:   Yes, I think that was my previous  
6           answer.

7 MR. GHIKAS:   Q:    Thank you.

8 MR. ELTON:    A:    Well, again, diversity in and of itself  
9           might. But if what you were talking about -- if the  
10          thing you added had a higher deliverability risk than  
11          the rest of the portfolio did, it wouldn't actually  
12          reduce the deliverability of the portfolio. It would  
13          increase it.

14                    So I think -- I mean, just looking at the  
15          page 34 of the document you've provided us, which  
16          talks about consensus between Hydro and the external  
17          review panel, that none of the fuel switching measures  
18          included -- provided a practical opportunity for B.C.  
19          Hydro to pursue. And again, without getting into the  
20          detail of those, I'm not sure that including those  
21          would necessarily reduce deliverability risk for the  
22          portfolio. I think it's -- though it's a good  
23          question to put to Mr. Hobson.

24 MR. GHIKAS:   Q:    Okay, so, I mean, you seem to be fairly  
25          familiar with the document, Mr. Elton, but you know, I  
26          was going to put -- I have a bunch of questions about

1           that. So am I going to ask you or am I going to ask--  
2 MR. ELTON:    A:   No, I think it would be great if you ask  
3           Mr. Hobson.  
4 MR. GODSOE:   I think you should ask Panel 4. Also, I  
5           just note for my friend's benefit, the definition of  
6           cost-effectiveness used in the LTAP is found at page  
7           1-14 to 1-15 and it includes more than what my friend  
8           is suggesting. It does include environmental impacts.  
9 THE CHAIRPERSON:   It does include --  
10 MR. GODSOE:   Environmental impacts. That's at line 3 of  
11           page 1-50.  
12 THE CHAIRPERSON:   Thank you.  
13 MR. GHIKAS:    And I assure you we'll come to environmental  
14           impacts too.  
15 MR. GHIKAS:    Q:   Mr. Elton, B.C. Hydro is currently a  
16           net importer of electricity, isn't it?  
17 MR. ELTON:    A:   Yes, in most years, yes.  
18 MR. GHIKAS:    Q:   Okay. And it will remain a net  
19           importer until it achieves self-sufficiency,  
20           presumably.  
21 MR. ELTON:    A:   If you mean self-sufficiency as defined  
22           in the Energy Plan and by Special Direction 10, I  
23           mean, that self-sufficiency is defined at critical  
24           water.  
25 MR. GHIKAS:    Q:   Right.  
26 MR. ELTON:    A:   So when you reach that self-sufficiency,



1 exporting B.C. renewables that are surplus to B.C.  
2 domestic needs into the WECC grid will normally result  
3 in renewables displacing coal- or gas-fired generation  
4 at the margin?

5 MR. ELTON: A: Yes.

6 MR. GHIKAS: Q: Okay. And following on that,  
7 electricity that is generated in B.C. that is surplus  
8 to domestic load in B.C. at any one time period will  
9 be exported into the WECC interconnection, right?

10 MR. ELTON: A: Well, of course, I mean, as I think  
11 somebody mentioned earlier, the first thing is, can it  
12 actually be exported? In other words, "Is there  
13 transmission capacity?" is actually an important  
14 question, given the amount you might be talking about.  
15 So, assuming that it can be exported, then yes, it  
16 would typically be exported into the region that  
17 you've just described.

18 MR. GHIKAS: Q: Okay. Natural gas-fired electricity  
19 generation is far less efficient use of natural gas  
20 than direct consumption in domestic end-use appliances  
21 such as space and water heaters, right?

22 MS. VAN RUYVEN: A: Yes, that's right.

23 MR. GHIKAS: Q: And I think if we go to page 45 of the  
24 booklet that I've given you, we see an IR on this,  
25 where B.C. Hydro's confirmed that a new combined cycle  
26 gas turbine is about 50 percent efficient, and a new

1 coal-fired generating facility has an efficiency of  
2 about 40 percent. And that's -- that answer that B.C.  
3 Hydro has provided references a new CCGT facility, and  
4 so my question to you is whether you can confirm that  
5 older ones will be of even lower efficiency.

6 MR. ELTON: A: I mean, generally speaking, yes.

7 MR. GHIKAS: Q: Well, and I know Burrard isn't combined  
8 cycle, but it's 30 percent, roughly.

9 MR. ELTON: A: It's -- yes.

10 MR. GHIKAS: Q: Right. So if we turn briefly to page  
11 74 of the booklet, you see I've copied and included  
12 the LiveSmart B.C. efficiency incentive program, and I  
13 think we can agree LiveSmart is a B.C. program and, as  
14 it says in the left-hand margin, "creates a single  
15 access point for provincial utility and federal  
16 incentives, by highlighting the best opportunities for  
17 energy savings and reducing GHGs."

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

19 MR. GHIKAS: Q: Okay. The part that I'm interested is  
20 actually over the page, and it's in particular with  
21 reference in the middle column to the primary space  
22 heating, for example, and the water heating  
23 efficiencies that they're listing there for the Energy  
24 Star appliances. And I think -- is it fair to say  
25 that, based on those, the efficiency levels that we're  
26 looking at with new direct use space heating is in the

1 high 80s and low 90s? In terms of efficiency.  
2 MR. GODSOE: Mr. Chairman, I would suggest that this line  
3 of cross go to Panel 4. Mr. Hobson's much more versed  
4 on these numbers, and can put them into context. And  
5 what we have is -- the LiveSmart document we only  
6 received an hour ago, with respect to the government's  
7 statistics. But I think Mr. Hobson is better equipped  
8 to address these questions on Panel 4.

9 **Proceeding Time 2:33 p.m. T49**

10 THE CHAIRPERSON: Mr. Ghikas, what's your -- I mean it  
11 seems to me that --

12 MR. GHIKAS: It's pretty obvious, the answer to me, but--

13 THE CHAIRPERSON: You'll get it from Mr. Hobson then, I  
14 suggest.

15 MR. GHIKAS: Fine. That's fine.

16 MR. GHIKAS: Q: If you can turn to page 40 of the  
17 booklet please, C7-5. C13-5, pardon me.

18 THE CHAIRPERSON: Sorry, what did you say?

19 MR. ELTON: A: Page 40.

20 MR. GHIKAS: Q: Page 40, yes.

21 MR. ELTON: A: Of your booklet, yes.

22 MR. GHIKAS: Q: I think it's page 40. Let me just --

23 MR. ELTON: A: Information Request 1.2.3, is that what  
24 it is?

25 MR. GHIKAS: Q: No, actually. It must be -- right.

26 Sorry, it's actually page 46. You'll see this is the

1 response to BCSEA 2.29.2. And this has been alluded  
2 to already, but if you go over to page 48 you'll see  
3 the reference again to -- in the middle of the page  
4 after the fifth bullet,

5 "One of the most significant GHG  
6 implementation uncertainties from a fuel  
7 switching perspective is the extent of B.C.  
8 Government electrification initiatives."

9 And B.C. Hydro goes on to reference two  
10 electrification initiatives.

11 MR. ELTON: A: Yes.

12 MR. GHIKAS: Q: Is B.C. Hydro suggesting that  
13 government is dogmatically pro-electrification in all  
14 circumstances where there's a potential fuel  
15 alternative?

16 MR. ELTON: A: No.

17 MR. GHIKAS: Q: Okay. And you have in the past, Mr.  
18 Elton, characterized the government's position as fuel  
19 neutral.

20 MR. ELTON: A: Yes.

21 MR. GHIKAS: Q: Okay. And you continue to hold that  
22 view.

23 MR. ELTON: A: Yes.

24 MR. GHIKAS: Q: You're not aware of any policy  
25 statement from the government that says that  
26 electricity and not natural gas should be used for

1 space and water heating.

2 MS. VAN RUYVEN: A: No, we're not aware of any policy  
3 statement.

4 MR. GHIKAS: Q: Okay. Now, can you just confirm that  
5 the examples that B.C. Hydro has cited there relate  
6 both to fuel choice and switching from diesel to  
7 electricity?

8 MS. VAN RUYVEN: A: Yes, they both are related to  
9 diesel.

10 MR. GHIKAS: Q: Right. Now, if we go to page 58  
11 please, this is a document that's not in the record  
12 currently. It's a request for expression of interest  
13 in the liquefied natural gas port container truck  
14 demonstration program at Vancouver Ports issued by the  
15 Ministry of Transportation and Infrastructures. B.C.  
16 Hydro -- well, first of all, will you accept subject  
17 to check that these documents are in fact prepared by  
18 Ministry of Transport?

19 MR. ELTON: A: Sure.

20 MR. GHIKAS: Q: Thank you.

21 MR. ELTON: A: I mean yes.

22 MR. GHIKAS: Q: Was B.C. Hydro aware, prior to me  
23 providing this piece of paper today, that government  
24 had issued this expression of interest?

25 MR. ELTON: A: I wasn't aware of the expression of  
26 interest. I think I was aware, I'd heard generally in

1 a background way about the program, but I didn't know  
2 this had gone out, no.

3 MR. GHIKAS: Q: Okay, and that didn't find its way into  
4 B.C. Hydro's response that we've just looked at.

5 MR. ELTON: A: It did not.

6 **Proceeding Time 2:38 p.m. T50**

7 MR. GHIKAS: Q: Thank you. And you'll see from the  
8 first paragraph that the program will support the  
9 purchase of LNG fueled port container trucks. So this  
10 program, as expressed in this request for expression  
11 of interest, is actually operating alongside the port  
12 electrification program that B.C. Hydro did highlight  
13 in this answer, right?

14 MR. ELTON: A: I think I'm -- the one that you just  
15 were saying that we highlighted, that was on page --  
16 again, page 40?

17 MR. GHIKAS: Q: BCSEA?

18 MR. ELTON: A: Yeah.

19 MR. GHIKAS: Q: Page 46, I believe.

20 MR. ELTON: A: Yeah. I think we made a reply with  
21 respect --

22 MR. GHIKAS: Q: 48, pardon me.

23 MR. ELTON: A: Thank you. I think our reply was aimed  
24 at fuel switching relating to electrification, or to  
25 electricity, rather than fuel switching between, as I  
26 take it this is, between diesel and LNG. In other

1 words, I think there are many -- there could be many  
2 fuel-switching initiatives that the government is  
3 involved with that don't involve electricity, and we  
4 wouldn't necessarily know about those or keep tabs on  
5 them.

6 MR. GHIKAS: Q: Okay. So, depending on the fuel and  
7 the circumstances, and the activity in question, the  
8 government may or may not support them, based on the  
9 merits.

10 MR. ELTON: A: Well, I don't want to pretend to be an  
11 expert on the government's general policy on fuel  
12 switching beyond electricity. Clearly, I think, there  
13 is an interest in electrification -- sorry, in fuel  
14 switching that goes from the use of gasoline, for  
15 example, or basic diesel, to natural gas or  
16 electricity. I think that's clear. I think the  
17 government's said elsewhere, and this may come up  
18 during this hearing, that plug-in vehicles it sees as  
19 part of the future.

20 So I think that part of it is fairly well-  
21 known, and I think it's -- so I think there is a  
22 general policy towards that. But as between  
23 electricity and natural gas, I continue to believe  
24 that the government is neutral on that.

25 MR. GHIKAS: Q: If I step back for a moment and I ask  
26 you, when you say that you perceive government to be

1 neutral on fuel choice, as between gas and  
2 electricity, you see that as a gap in a policy, don't  
3 you? Something that's waiting for clarification.

4 MR. ELTON: A: I've said before that I think -- yes, I  
5 expect that at some point in the future government  
6 will say something about that. But it hasn't. So I  
7 don't -- I'm not -- I wouldn't describe it as a gap in  
8 a critical sense. In other words, I think that with  
9 things like climate change, I think that jurisdictions  
10 generally are grappling with a fairly large issue,  
11 they tend to start, I think, in a fairly simple way.  
12 And then I think they'll develop more complex policies  
13 and approaches as time goes on.

14 MR. GHIKAS: Q: How do you know, Mr. Elton, that the  
15 policy isn't neutrality? You're assuming that some  
16 clarification is required. How do you know that the  
17 policy isn't being neutral on fuel choice?

18 MR. ELTON: A: I mean, nobody can ever know what  
19 government policy in the future will be, and I guess  
20 what you're saying is that if it isn't stated, then  
21 maybe it's a policy. I think from discussions with  
22 government, as you know, I mean Terasen has had  
23 discussions with government, we've had discussions  
24 with government, and Terasen and B.C. Hydro together  
25 have had discussions with government. And I think  
26 it's premature to say that neutrality is the policy.

1 MR. GHIKAS: Q: Okay. Maybe we can just digress here  
2 and go to page 61, for example. Because at 61 is an  
3 excerpt from the Energy Plan, page 21, and I'm going  
4 to suggest to you, Mr. Elton, that there is something  
5 stated in respect of government policy on the issue of  
6 fuel choice, and it's right at the top, and I  
7 apologize for my scribbles being in there, but it's  
8 conveniently highlighted, the passage that I'm  
9 interested in. And it says:

10 "It's important for British Columbians to  
11 understand the appropriate uses of different  
12 forms of energy, and utilize the right fuel  
13 for the right activity at the right time.  
14 There is potential to promote energy  
15 efficiency and alternative energy,  
16 supplemented by natural gas."

17 Now, wouldn't you say, Mr. Elton, that that is an  
18 expression of neutrality on fuel choice as a policy in  
19 and of itself, rather than some gap in policy?

20 MR. ELTON: A: I don't think that's a -- I mean, it's a  
21 general statement which I think is a very appropriate  
22 statement. I mean, the idea that you would want to  
23 use energy in the right place at the right time is  
24 something that probably no one would argue with. So I  
25 think that first statement is just one of those good  
26 statements that people put into these kinds of

1 policies.

2 MR. GHIKAS: Q: I'm sure your boss will be pleased to  
3 hear that.

4 MR. ELTON: A: Yeah. The second statement, which is  
5 about the idea of alternative energy supplemented by  
6 natural gas, then includes some examples, such as  
7 solar, thermal and geothermal, as examples of that.  
8 There are then various specific initiatives, in other  
9 words, specific things that government needs to do.  
10 May I -- this is such an important issue that I think  
11 if government had formed a definitive view as between  
12 natural gas and electricity for heating, for example,  
13 then it would be more likely to say something. And  
14 again, I think, based on the discussions that we've  
15 had with government, and maybe Ms. Van Ruyven can  
16 comment. I mean, we've been in meetings with, as I  
17 said, with government and with Terasen. Maybe Ms. Van  
18 Ruyven can comment?

19 MS. VAN RUYVEN: A: Yeah, and I think a couple of  
20 points to add is that you can see through their  
21 LiveSmart programs that the government very much has  
22 made a pretty clear statement that what they're most  
23 interested in is efficiency, regardless of the fuel  
24 choice.

25 MR. GHIKAS: Q: Okay.

26 MS. VAN RUYVEN: A: So if you have a house heated by

1 gas, all of those incentives in the LiveSmart program  
2 were meant to get in high-efficiency gas furnaces. So  
3 make the envelope of the building that you are in the  
4 most efficient it can be, regardless of fuel choice.

5 **Proceeding Time 2:44 p.m. T51**

6 So that's number one. And then to the  
7 conversations we've had with government,  
8 overwhelmingly these things that they're trying to do  
9 are reducing greenhouse gases in British Columbia. So  
10 you can see switching from diesel to cleaner gas is a  
11 positive thing, whether it's the transportation sector  
12 or the utility sector. So you can see as you read  
13 through these that I think an overwhelming desire is  
14 to reach that legislated 32 percent reduction in  
15 greenhouse gases. And in the discussions that I've  
16 been in with government and with Terasen, they've been  
17 very clear that they don't want to put forward a  
18 policy that actually sees B.C. Hydro incenting  
19 increases in greenhouses gases in British Columbia.  
20 That goes against the legislated greenhouse gas  
21 reduction that they are very much trying to put lots  
22 of programs in place to get at.

23 MR. GHIKAS: Q: Ms. Van Ruyven, the expressed policy  
24 that we have is in the Energy Plan, and I believe that  
25 B.C. Hydro has made it clear that that be ignored at  
26 everyone's peril. Is that fair to say?

1 MS. VAN RUYVEN: A: Well, I was just stating a  
2 legislated requirement for greenhouse gas reductions  
3 in British Columbia, and I believe in the  
4 conversations I have had with government is they  
5 support programs that get at actual reductions of  
6 greenhouse gases in British Columbia.

7 MR. GHIKAS: Q: Okay. We're going to come to that in a  
8 moment, but from what I understand you saying is that  
9 the greenhouse gas reduction targets for provincial  
10 GHGs trump all other policy.

11 MS. VAN RUYVEN: A: That's what I'm saying. They  
12 trump, they trump a --

13 MR. ELTON: A: With respect to this issue.

14 MS. VAN RUYVEN: A: With respect to this issue. They  
15 don't trump all the policies, but I do believe that at  
16 this point in time they certainly trump the western  
17 climate initiative's 15 percent reduction, which is  
18 not legislated. It's simply a target that the western  
19 climate initiative jurisdictions that have signed up  
20 will be working towards potentially implementing in  
21 2012.

22 MR. GHIKAS: Q: Now, I thought --

23 MR. ELTON: A: Sorry, I'm going to add a little bit to  
24 that. I mean this is a very important discussion, I  
25 think, and I think if I may I'll now refer to one of  
26 the comments that was made earlier in one of the

1 opening statements. I think it was Mr. Andrews -- I'm  
2 sorry, the open statement or argument? Opening  
3 statements. Mr. Andrews, the fourth of his four  
4 things, and it was along the lines of, you know, he  
5 made various comments about, you know, cost-  
6 effectiveness and so on, then said at the end, but it  
7 really is -- the way I put it is it's very hard to  
8 explain to people how you would encourage people to  
9 switch from electricity, which is clean in this  
10 province, to natural gas, when you are trying at the  
11 same time to promote a policy that deals with reduced  
12 GHGs. Even if there is a technical argument along  
13 regional lines that says that you might get to a  
14 different result, it is a very hard policy to explain  
15 to people.

16 That's why, when I'm saying that I think  
17 there is one day a policy that may well be developed  
18 in this, that's probably why I'm saying it. I think  
19 that governments start with simple policy lines.  
20 They've tried to explain a problem, greenhouse gases  
21 and climate change. They've given us all some fairly  
22 simple targets and have explained it in fairly simple  
23 terms. And again, I'm not saying that in any kind of  
24 negative way. It makes sense that you start by  
25 getting the point across to people. And anything that  
26 is more complicated than that, which seems to conflict

1 with it, is not likely to be government policy, and we  
2 don't believe it is government policy. And we've  
3 sought clarification on this and received the answer,  
4 it isn't government policy to encourage fuel switching  
5 from electricity to natural gas.

6 MR. GHIKAS: Q: Okay.

7 THE CHAIRPERSON: Mr. Ghikas, will you let me know when  
8 it's convenient to break?

9 MR. GHIKAS: I will ask one more or two more questions,  
10 Mr. Chairman. Thank you for the reminder.

11 MR. GHIKAS: Q: Let's just -- actually I'll hand out --  
12 well, let me ask you this, rather than handing that  
13 out now. Let's -- leaving cost out of it and let's  
14 deal with policy only at this point.

15 MR. ELTON: A: Yes.

16 MR. GHIKAS: Q: Let's assume that a measure could be  
17 taken in B.C. that results in a net reduction of  
18 greenhouse gases, where the greenhouse gas increases  
19 in the province, and the benefit -- the greenhouse gas  
20 benefit all occurs outside the province. Okay? Is it  
21 B.C. Hydro's position that adopting that policy that  
22 would result in a net reduction in greenhouse gases  
23 should not be pursued because government wouldn't want  
24 to count it against the 33 percent target? Is that  
25 your position?

26 MR. ELTON: A: That was a fairly complicated sentence

1 for me. Could you --

2 MR. GHIKAS: Q: I will repeat it again. I'd happily  
3 repeat it.

4 MR. ELTON: A: Well, maybe rather than repeat it again,  
5 if you could maybe break it down or something. Sorry.

6 **Proceeding Time 2:49 p.m. T52**

7 MR. GHIKAS: Q: Sure. No, that's okay. I want you to  
8 assume for a moment that B.C. Hydro has at its  
9 fingertips the ability to take a measure and implement  
10 it, and that measure, once implemented, would result  
11 on a regional basis in a net reduction in greenhouse  
12 gases. Okay?

13 MR. ELTON: A: Yes.

14 MR. GHIKAS: Q: The benefit all occurs outside the  
15 provincial boundaries.

16 MR. ELTON: A: The greenhouse gas benefit.

17 MR. GHIKAS: Q: The greenhouse gas benefit.

18 MR. ELTON: A: Yes.

19 MR. GHIKAS: Q: And the greenhouse gas cost, as it  
20 were, the emissions, are all occurring within the  
21 province. Okay?

22 MR. ELTON: A: Yes.

23 MR. GHIKAS: Q: Is it B.C. Hydro's position, from a  
24 policy perspective, that such a measure should not be  
25 pursued because the benefit wouldn't count towards the  
26 33 percent target in the greenhouse gas targets

1           reduction?

2 MR. ELTON:    A:    I'd put it slightly more broadly than  
3           that, and maybe ask Ms. Van Ruyven to comment as well.  
4           I think it would not be -- I think it would not be  
5           government policy to pursue that, for the -- first for  
6           the reason I've stated, that I think it would be -- it  
7           would not -- the government's policy as stated, and  
8           the legislation that's enacted, is in terms of B.C.  
9           targets, and it wouldn't -- it would conflict with  
10          that. Therefore, I don't think it would be  
11          government's policy to encourage that. And yes,  
12          you're right that one of the things that would  
13          underline that would be the difficulty of counting it.  
14          But I actually think it goes beyond that. I think  
15          it's just a simple commitment that the government  
16          made, that the climate change policy is not just about  
17          -- for example, not about offsets, primarily, not  
18          about regions primarily, it's about reducing  
19          greenhouse gases in the province of British Columbia,  
20          and that the -- I believe that -- I mean, what I've  
21          read is that the reason why that was adopted was  
22          because the government wanted British Columbia to take  
23          leadership.

24 MR. GHIKAS:   Q:    One last question for you on this  
25          point, Mr. Elton. Based on that assumed scenario that  
26          I've given you, who specifically is the beneficiary of

1           that approach to GHG policy?

2 MR. ELTON:    A:    Of which approach?

3 MR. GHIKAS:   Q:    I gave you a scenario.  Who  
4           specifically benefits from taking the view that you  
5           just took, with respect to the appropriate approach to  
6           such a measure?

7 MR. ELTON:    A:    Well, if the policy of the government is  
8           successful, it will reduce -- it will lead to a  
9           reduction in greenhouse gases.

10 MR. GHIKAS:   Q:    In the province.

11 MR. ELTON:    A:    In the province of British Columbia.

12 MR. GHIKAS:   Q:    But a net increase overall.

13 MR. ELTON:    A:    And if you accept the argument, which  
14           I've heard the government make, which is that some  
15           places have to take leadership, and that if they take  
16           leadership and can prove that you get good effects  
17           from doing this, and that it can be done, then other  
18           places will presumably do similar things.

19                    At some point, as this becomes more  
20           sophisticated, as people get more confident in  
21           regional markets and regional plans, then at some  
22           point the actions that governments take and the  
23           policies they measure will themselves become more  
24           sophisticated.

25 MR. GHIKAS:   Q:    So, who specifically is the  
26           beneficiary?

1 MR. ELTON: A: Well, the beneficiaries of government  
2 policies -- like, if one policy is more effective than  
3 another policy, then the beneficiaries are -- I guess  
4 it would be all of us, and the people that come after  
5 us.

6 MR. GHIKAS: Q: The people who are experiencing net  
7 increase in GHGs.

8 MR. ELTON: A: The people who are living in a province  
9 that achieves its targets.

10 MR. GHIKAS: That's a good time to break, Mr. Chair.

11 THE CHAIRPERSON: Yes, we'll break for 15 minutes.

12 MR. GHIKAS: Thank you.

13 **(PROCEEDINGS ADJOURNED AT 2:53 P.M.)**

14 **(PROCEEDINGS RESUMED AT 3:05 P.M.) T53/54**

15 THE CHAIRPERSON: Please be seated. Now, where is Mr.  
16 Ghikas?

17 MR. GHIKAS: I'm terribly sorry, Mr. Chairman.

18 THE CHAIRPERSON: It's quite all right, Mr. Ghikas. I  
19 should have looked before I told Mr. Bemister.

20 MR. GHIKAS: I was always told my sense of timing was  
21 bad.

22 THE CHAIRPERSON: Please proceed, anyway.

23 MR. GHIKAS: Thank you. I just want to hand out another  
24 document at this point. It's the province of British  
25 Columbia strategic plan for 2009 and 2010 to  
26 2011/2012. And I've provided a copy to your counsel.

1                                   C13-6, I think. Yes. C13-6. C13-6, I  
2       believe.

3   THE HEARING OFFICER:    Marked C13-6.

4       (EXCERPT FROM PROVINCE OF BRITISH COLUMBIA STRATEGIC  
5       PLAN FOR 2009/10 - 2011/12, MARKED EXHIBIT C13-6)

6   THE CHAIRPERSON:    I didn't get one.

7   COMMISSIONER MILBOURNE:   Are we allowed to have one?

8   THE CHAIRPERSON:    Thanks.

9   MR. GHIKAS:    Q:    Before the break, we were having a  
10       discussion, Ms. Van Ruyven, about fuel neutrality, and  
11       you were referencing some off-the-record discussions  
12       you were having with government about not wanting to  
13       favour any -- B.C. Hydro to favour any particular  
14       energy form. Is that a fair synopsis of what you were  
15       saying?

16   MS. VAN RUYVEN:    A:    I think I was relating back to a  
17       comment that was made by the Climate Change  
18       Secretariat about government not being able to support  
19       a policy where it would see B.C. Hydro incenting  
20       customers to switch to gas, thereby increasing  
21       greenhouses gases within the province.

22   MR. GODSOE:    I take objection to the use of the term  
23       "off-the-record discussions". Ms. Van Ruyven was at  
24       the meeting, that's been established. So I don't know  
25       what you mean by that, Mr. Ghikas.

26   MR. GHIKAS:    Q:    Okay, I'll -- I'm obviously -- my

1           understanding of what the nature of the meeting was  
2           was incorrect, Ms. Van Ruyven, so that's fine. What  
3           --  
4 MR. ELTON:    A:   Well, perhaps if I could comment on  
5           that. I think that these hearings -- it happens  
6           fairly often that we're asked about, you know,  
7           meetings that we've had with government, and frankly,  
8           we try and answer those questions frankly because  
9           otherwise I think it would be difficult. So I think  
10          we certainly will never discuss Cabinet meetings and  
11          those kinds of meetings where we sign confidentiality  
12          agreements, and I think we'll use discretion -- we try  
13          to use discretion in terms of how we talk about  
14          discussion with government officials. But also I want  
15          to be clear that I can't authoritatively tell anyone  
16          what government policy is. And I think you know that.  
17          So, that's up to the government to do. So I just  
18          wanted to clear that up.  
19 MR. GHIKAS:   Q:   Right. And your understanding of what  
20          the government policy is right now is that it's  
21          neutral with respect to fuel choice.  
22 MR. ELTON:    A:   Yes.  
23 MR. GHIKAS:   Q:   Now, this document, C13-6, the  
24          strategic plan, can we agree that this is an up-to-  
25          the-minute expression of government policy? It's  
26          dated February 2009.

1 MR. ELTON: A: We can.

2 MR. GHIKAS: Q: Okay. And if you look in the second  
3 paragraph there, it's talking about the carbon tax.  
4 This is -- it's hard to see on the photocopy, but this  
5 is page 35 of the strategic plan. At the last  
6 sentence there:

7 "The tax has the advantage of providing an  
8 incentive without favouring one way to  
9 reduce emissions over another. It gives  
10 British Columbians a choice on how they wish  
11 to adapt their behaviour to reduce their  
12 consumption of fossil fuels."

13 Can we agree that the policy being expressed here on  
14 fuel choice is to send appropriate price signals, in  
15 this case the carbon tax, and allow British Columbians  
16 to respond accordingly?

17 **Proceeding Time 10:19 a.m. T17**

18 MR. ELTON: A: Well, to me the most significant thing  
19 in the sentence you just -- the two sentences you just  
20 read out is the -- what is the purpose of it? It is  
21 to provide an incentive, yes, to get British  
22 Columbians a choice on how they wish to adapt their  
23 behaviour to reduce their consumption of fossil fuels.  
24 In other words, this is clearly a policy that is  
25 talking about reducing the consumption of fossil fuels  
26 by British Columbians. If you go to the next

1 paragraph it talks about the provincial goals of  
2 reducing our greenhouse gas emissions by 32 percent.

3 MR. GHIKAS: Q: Okay.

4 MR. ELTON: A: So yes, it's -- I'm not sure that I'm  
5 quite answering your question, but yes, it's about  
6 giving people a choice. But the carbon tax is being  
7 used to reduce the consumption of fossil fuels in  
8 British Columbia.

9 MR. GHIKAS: Q: Okay. I assume that B.C. Hydro is not  
10 going so far as to suggest that government wouldn't  
11 favour any activity that generated GHGs in the  
12 province, because it would count against your 33  
13 percent target.

14 MR. ELTON: A: Certainly. I mean clearly, there are --  
15 this is not a policy of eliminating greenhouse gas  
16 emissions. It's a policy of reducing them by 33  
17 percent by 2020. So there are many activities. I  
18 mean, we're in the middle of a very significant  
19 economic recession, and the government clearly is  
20 interested in promoting many activities that will  
21 actually increase greenhouse gas emissions. But its  
22 overall goal is that we reduce them by 33 percent by  
23 2020.

24 MR. GHIKAS: Q: Right. So to put it another way, the  
25 provincial GHG emissions target is going to have to  
26 give way to other compelling interests.

1 MR. ELTON: A: Well, the strategic plan that you're  
2 showing me here was, as you just said, produced -- I'm  
3 sorry, give me the date again? It was a couple --

4 MR. GHIKAS: Q: February 2009.

5 MR. ELTON: A: Right. So they just produced a  
6 strategic plan, a throne speech and a budget, and so  
7 they did that in the full knowledge of the economic  
8 circumstances. I think many people said, "Are you  
9 going to change the GHG targets or are you going to  
10 change the application of the carbon tax?" and they  
11 said, "No, we're not." In other words they actually  
12 said, "These targets are still very important."  
13 Because I think again, if you -- I know you've read  
14 the throne speech. It talks about yes, we have an  
15 economic crisis, and we are trying -- we the Province  
16 of British Columbia needs to get beyond that crisis,  
17 but one of the ways of doing it is to get into a post  
18 -- you know, a lower carbon economy. So, no, I don't  
19 agree with the premise of the question.

20 MR. GHIKAS: Q: The Energy Plan contemplates the  
21 ongoing production of natural gas and fossil fuels in  
22 the province, right?

23 MR. ELTON: A: It does.

24 MR. GHIKAS: Q: Right. And I think we can agree that  
25 that is currently being done with government's  
26 tutelage at a record pace.

1 MR. ELTON: A: Well, I suspect the record pace may be  
2 under threat right now, but it certainly has been at a  
3 record pace in the last few years.

4 MR. GHIKAS: Q: Right. And I assume you'll accept,  
5 subject to check, that the production of greenhouse  
6 gas -- sorry, the production of fossil fuels generates  
7 in itself greenhouse gases.

8 MR. ELTON: A: Yes.

9 MR. GHIKAS: Q: Right. So that's an example, you'll  
10 agree with me, where economic and societal benefits  
11 have trumped the GHG target.

12 MR. ELTON: A: Or where the --

13 MR. GHIKAS: Q: Or making progress towards the GHG  
14 target.

15 MR. ELTON: A: Thank you, or where the GHG target was  
16 set, bearing in mind the economic potential of the  
17 province in different sectors. And so that clearly  
18 included an expansion in the natural gas industry.

19 MR. GHIKAS: Q: On the issue of whether or not the  
20 substitution of fuel for electricity in certain  
21 applications, such as space and water heating, the  
22 issue with respect to whether that generates -- makes  
23 available renewable power to export into the rest of  
24 the western interconnection. On the factual issue,  
25 B.C. Hydro is advancing the view that it makes -- that  
26 there's no medium to long-term linkage between making

1 those -- between making the -- sorry, let me back up.

2 If you can turn to -- let's do this with a  
3 document. It'll be easier.

4 **Proceeding Time 3:15 p.m. T56**

5 If you can turn to page 47 please. Okay.  
6 On page 47 of the package, this is BCSEA 2-29-2, and  
7 you'll see with respect to the issue of whether fuel  
8 switching from electricity to natural gas will lead to  
9 decreased electricity consumption in B.C., and in turn  
10 to incremental exports to the Western Electricity  
11 Coordinating Council Region, B.C. Hydro's fundamental  
12 position is that there is no medium to long-term  
13 linkage between fuel switching and increased exports.

14 MS. VAN RUYVEN: A: That's correct, and maybe I can  
15 expand on that a little bit to say that in the short  
16 term there may be some increased exports, but we  
17 would, in sort of our two-year planning cycle, we  
18 would adjust our load forecast to show the reduction  
19 in electricity from the fuel switching, and then we  
20 would also adapt all of our LTAP plans to reflect that  
21 reduced load forecast, so it wouldn't lead to  
22 incremental exports beyond sort of that two-year  
23 planning horizon. We would then we back in a net  
24 balance resource LTAP kind of situation. So that's  
25 really what we mean by it doesn't lead to surplus or  
26 additional exports in the medium to long term, and

1           that timeframe is really -- short-term is kind of that  
2           two-year planning window. We would adjust our plans  
3           accordingly.

4 MR. GHIKAS:   Q:   And B.C. Hydro is adjusting its load  
5           forecast so as to not acquire more expensive power to  
6           supply new load.

7 MS. VAN RUYVEN:   A:   We would adjust our plans  
8           accordingly, based on a new load forecast. Whether  
9           that was the supply side or the demand side, that  
10          would be in our long-term acquisition plan.

11 MR. GHIKAS:   Q:   Will you agree with me, Ms. Van Ruyven,  
12          that the answer you've given me is solely with respect  
13          to B.C. Hydro's response to changes in load?

14 MS. VAN RUYVEN:   A:   No, that would be applicable to any  
15          change in load. That's why we do the load forecast  
16          every year is there's lots of things that can affect  
17          our load forecast and we always have to be adjusting  
18          our planning. That's why we do it on a two-year  
19          cycle.

20 MR. GHIKAS:   Q:   Well, let me rephrase that. Regardless  
21          of B.C. Hydro's net supply and demand balance, the  
22          amount of energy and the amount of energy we'd need to  
23          purchase, B.C. Hydro was not the only potential  
24          purchaser or renewable power generated in B.C. over  
25          the medium to long term, is it?

26 MS. VAN RUYVEN:   A:   Yes, that's true. There are other

1 potential purchasers.

2 MR. GHIKAS: Q: And there certainly isn't any law or  
3 policy requiring IPPs to sell only to B.C. Hydro, is  
4 that --

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

6 MR. GHIKAS: Q: And there isn't any law or policy that  
7 would preclude IPPs from continuing to build for  
8 direct export.

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

10 MR. GHIKAS: Q: If you can turn to page 68 please, this  
11 is a response from an information request in the  
12 Terasen Energy Efficiency and Conservation Programs  
13 Application. It was a request by Terasen to B.C.  
14 Hydro based on B.C. Hydro's evidence filed in its  
15 Terasen Utilities IR 1.4.0. Does B.C. Hydro accept  
16 that -- accept the accuracy of that response and, I  
17 believe, adopt it here as your own?

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

19 MR. GHIKAS: Q: Thank you. If you can turn over the  
20 page, this is a document that's not in the record but  
21 it is a transcript of an interview between Rick Cluff  
22 on CBC and -- CBC Radio on October 21<sup>st</sup>, 2008, and  
23 Minister Neufeld as he then was, and Terasen listened  
24 to and transcribed that interview. Will you accept,  
25 subject to check, that the transcript is accurate?

26 MS. VAN RUYVEN: A: Yes, we accept that.

1 MR. GHIKAS: Q: Thank you. And you'll see from the  
2 introductory paragraphs, you'll see he's being  
3 interviewed about IPP power in B.C. And the part that  
4 I'm interested in is over on page 2, near the bottom  
5 of the page. It's the --

6 **Proceeding Time 3:20 p.m. T57**

7 MR. ELTON: A: Seventy?

8 MR. GHIKAS: Q: Sorry, yes, page 70. Yes.

9 MR. ELTON: A: Seventy, yes.

10 MR. GHIKAS: Q: And it's the passage towards the  
11 bottom, it's his last substantive paragraph, it starts  
12 "As I said ..."

13 MR. ELTON: A: Yes.

14 MR. GHIKAS: Q: And you'll see that the transcript  
15 records Mr. Neufeld stating that we have huge  
16 opportunities in the province to build generation for  
17 export, also between jurisdictions south of us that  
18 generate with coal. Do you see that?

19 MR. ELTON: A: I do see that.

20 MR. GHIKAS: Q: Okay. And now, can we agree that, if  
21 IPP generation were built for export, how B.C. Hydro  
22 adjusts its load forecast in response to fuel choice  
23 would be irrelevant to whether clean IPP power was  
24 displacing gas or coal-fired generation somewhere in  
25 the interconnected grid.

26 MR. ELTON: A: So, let me just think through that. So,

1 on the one hand, we're talking about adjusting our  
2 load forecast for fuel choice. In other words, we're  
3 saying that -- I need to understand that premise of  
4 your question. So is one of the premises of your  
5 question is around B.C. Hydro acting to change its  
6 load forecast because of actions it's taken, or the  
7 public has taken, to fuel-switch to natural gas for  
8 space heating? Is that one of the premises?

9 MR. GHIKAS: Q: Well, it's simpler than that. It's --  
10 just because you don't buy it doesn't mean that they  
11 can't sell it to somebody in the United States. It's  
12 real simple.

13 MR. ELTON: A: As you pointed out, they can do it now.  
14 They can sell it now, yes.

15 MR. GHIKAS: Q: And I have one follow-up question  
16 touching on that, and that was related to -- and I  
17 should have asked you this before, but this is  
18 actually a good time to ask you. It's page 42 of the  
19 booklet. And you'll recall that we saw some  
20 statistics that you referred us to earlier that  
21 referenced about 58 percent of the generation in the  
22 western interconnection being either coal- or gas-  
23 fired. Do you recall that?

24 MR. ELTON: A: Yes.

25 MR. GHIKAS: Q: Okay. Now, in terms of whether that  
26 generation is what is being displaced, the relevant

1 consideration would be whether it's on the margin,  
2 right?

3 MR. ELTON: A: Yes.

4 MR. GHIKAS: Q: Okay. And in this IR, it confirms  
5 that, in the western interconnection, either natural  
6 gas-fired generation or coal-fired generation would be  
7 on the margin more than 80 percent of the time, right?

8 MR. ELTON: A: Yes.

9 MR. GHIKAS: Q: Okay.

10 MR. GODSOE: Sorry, just for my friend's benefit, Panel 3  
11 might have a lot more to add on what the marginal unit  
12 is in the Western Electricity Coordination Council  
13 region.

14 MR. GHIKAS: Q: And one last question on that point, on  
15 page 43, you'll see -- this is Terasen Utilities,  
16 2.4.1, Exhibit B-4, and in that response you'll see  
17 that B.C. Hydro says that generally renewable --  
18 starting in the second sentence --

19 "Generally renewable resources have high  
20 capital costs but low operating costs.

21 Renewable resources will typically run and  
22 displace non-renewable resources, which  
23 typically have higher variable costs."

24 And it goes on to say:

25 "Certainly there are conditions when higher  
26 variable cost resources run while lower



1       presume, that B.C. Hydro in that application opposed  
2       the approval of fuel-switching measures based on  
3       similar reasons that we've seen here.

4 MS. VAN RUYVEN:   A:   Yes.  It was -- we applaud the  
5       overall plan, and it was really a small portion of  
6       that plan that we filed some evidence.

7 MR. GHIKAS:    Q:    If you can turn to page 72 of the  
8       package, please, this is a letter filed by government  
9       in that application as Exhibit C1-4, dated October  
10      24<sup>th</sup>, 2008.  And you'll see that it's expressing the  
11      Ministry's approval of the application.

12                    I seem to have the wrong letter here,  
13      that's embarrassing.  I can take this up with the next  
14      panel.  Thank you.

15 THE CHAIRPERSON:  You referred to some evidence that B.C.  
16      Hydro had filed?

17 MR. GHIKAS:    Yes.

18 THE CHAIRPERSON:  Is that in front of us here?  Were you  
19      going to refer to that?

20 MR. GHIKAS:    No, I wasn't.  I was going to refer you to a  
21      letter filed by the -- I can ask --

22      Q:    What I can ask is, are you aware, Ms. Van Ruyven,  
23      that the Ministry endorsed wholeheartedly the plans  
24      put forward by Terasen?

25 MS. VAN RUYVEN:  A:    I'm not aware that they  
26      wholeheartedly endorsed your plan.  I did not have a

1 conversation with them about that.

2 MR. GHIKAS: Q: Okay, thanks. I can follow up with the  
3 rest on it.

4 THE CHAIRPERSON: Very good.

5 MR. GHIKAS: Thank you.

6 THE CHAIRPERSON: Does that conclude your examination,  
7 Mr. Ghikas? Thank you.

8 MR. GHIKAS: It does, Mr. Chairman, thank you.

9 MR. GODSOE: And it might be best to put that letter --  
10 and I know which letter my friend is speaking of -- to  
11 Panel 4.

12 MR. GHIKAS: Thank you.

13 THE CHAIRPERSON: Mr. Wallace, are you next?

14 MR. WALLACE: Thank you, Mr. Chairman.

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

16 MR. WALLACE: Q: Panel, if any of my questions are  
17 better answered by another panel, don't hesitate to  
18 pass them on.

19 I'd like to start out by asking you a few  
20 questions about the update, and the circumstances  
21 around it. It was filed on December 22<sup>nd</sup>, and I assume  
22 most of the work was done in the preceding month or  
23 two?

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

25 MR. WALLACE: Q: And it contains an updated load  
26 forecast, and do you know sort of when the information

1 cut-off for the updated load forecast was?

2 Approximately.

3 MS. VAN RUYVEN: A: Again, I think Mr. Ince will have  
4 the exact date on Panel 2, but it was sort of mid- to  
5 late October.

6 MR. WALLACE: Q: Okay. And clearly the economy's taken  
7 a significant shift since that time. Have you updated  
8 it any further since then, or had a look at what's  
9 happening to your load since that point?

10 MS. VAN RUYVEN: A: No, we haven't updated our load  
11 forecast. However, we do talk in general terms in the  
12 evidentiary update about some changed circumstances.  
13 But again, that was filed on December 22<sup>nd</sup>, and as we  
14 know, in the world we're living in today, one week can  
15 make a big difference. So, no, we had to draw a line  
16 in the sand at some point in the time, because this is  
17 a long-term resource plan, and that was basically  
18 based on October input of Conference Board of Canada  
19 forecasts of the economy.

20 MR. WALLACE: Q: Okay. But in part, it was also based  
21 on knowledge of what was happening with your customers  
22 and particularly your industrial customers.

23 MS. VAN RUYVEN: A: Yes, we do a very thorough  
24 customer-by-customer bottom-up planning on the  
25 industrial side as to closures, those sorts of things.

26 **Proceeding Time 3:31 p.m. T59**

1 MR. WALLACE: Q: Okay, and between mid-October or  
2 whenever it was, October, and now, have you had any  
3 updates on what -- from an operational point of view,  
4 not from a load forecasting point of view, what has  
5 happened to your load and what that would look like  
6 for 2009 and '10 at least?

7 MS. VAN RUYVEN: A: Again, Mr. Ince will have the  
8 detail on that in Panel 2.

9 MR. WALLACE: Q: Okay, thank you.

10 Now, in the update at page 6, the update  
11 states:

12 "This downturn is not expected to be  
13 structural. That is, after the current  
14 slowdown, the rate of economic growth is  
15 expected to resume."

16 Would you agree with me that today it looks like there  
17 will be structural changes, particularly in the forest  
18 industry, and that the rate of growth in that industry  
19 will not resume?

20 MR. ELTON: A: It's a difficult question to answer. I  
21 think -- because what do we mean by structural? And I  
22 mean the irony, Mr. Wallace, is that your customers --  
23 I'm sorry, the people that you represent are the  
24 people that know the most, I suspect, about what will  
25 happen to the future.

26 MR. WALLACE: Q: Well, and I don't think they even know

1 the answer.

2 MR. ELTON: A: No, I don't think they do.

3 MR. WALLACE: Q: I can --

4 MR. ELTON: A: Right. I think that's an important  
5 point. I think the general point we made is that if  
6 you look at, for example, forecasts of B.C. growth,  
7 economists are obviously still revising forecasts  
8 quite often as to the expected growth in '09 and '10  
9 and maybe '11. But there are still forecasts of  
10 growth after that, that while they wouldn't get you --  
11 which suggests that the rate of growth would resume at  
12 the old rates, although, of course, you wouldn't get  
13 back to the place where you would have been.

14 The forest industry specifically, on the  
15 other hand, I think there are some signs that it could  
16 be worse than that.

17 MR. WALLACE: Q: And does B.C. Hydro have anything more  
18 current than what was used for the December 22<sup>nd</sup> update  
19 with respect to where it expects its industrial load  
20 to go?

21 MS. VAN RUYVEN: A: No, no, we only have how our actual  
22 load is tracking against the new load forecasts that  
23 form part of the evidentiary update.

24 MR. WALLACE: Q: Okay, and --

25 MS. VAN RUYVEN: A: So we only have our actuals.

26 MR. WALLACE: Q: And can you tell me how your actual

1 load is tracking against the evidentiary update?

2 MS. VAN RUYVEN: A: Again, I think Mr. Ince is better  
3 prepared to answer that.

4 MR. WALLACE: Q: Okay, thank you.

5 As you heard, the JIESC has a bit of a  
6 concern about Site C and an interest in it, and I'd  
7 just like to go to the detail on that a bit. In B-1  
8 at page 3-29, and you don't have to turn to it,  
9 there's a Table 3-19 which is a matrix of Site C  
10 costs. I'm just wondering, does B.C. Hydro have a  
11 preferred cost? They range there from about 50 to 100  
12 dollars.

13 MR. ELTON: A: You mean the expected cost of energy  
14 from Site C?

15 MR. WALLACE: Q: Yes.

16 MR. ELTON: A: No, there is a large range and that's  
17 because there's frankly a lot of work still to do, and  
18 there's engineering work and so on, which is part of  
19 the current phase that we're in, which really hadn't  
20 been updated for many years. And what we've said is  
21 that we will update our cost estimate at the end of  
22 this phase. So later on in 2009 we are to present to  
23 our board and then to government a recommendation with  
24 respect to Site C, and that would include revised cost  
25 forecasts.

26 MR. WALLACE: Q: Okay, and so at this time you don't

1           have a preference anywhere from that range of 50 to  
2           100.

3 MR. ELTON:    A:    We don't.  We'd rather just describe it  
4           as a very wide range to emphasize the uncertainty  
5           around cost.

6 MR. WALLACE:   Q:    Okay, and when I looked at the  
7           material you filed, it looked like that next step in  
8           terms of making a recommendation was to happen  
9           sometime in the sort of June, July, August period?  Is  
10          that still the schedule?

11 MR. ELTON:    A:    Yes, it is.  I think it might be  
12          September but it's in that -- of '09.  It's in that  
13          area.

14 MR. WALLACE:   Q:    I'd like to turn to the issue of DSM  
15          versus IPP purchases generally.  I take it that you do  
16          agree that B.C. Hydro must pursue all cost-effective  
17          DSM before relying on supply-side resources?

18 MS. VAN RUYVEN:  A:    Yes, we agree.

19 MR. WALLACE:   Q:    And I won't go into the statutory  
20          background, then, for that.  I'd like to put a letter  
21          to you, and I think you're familiar with it, an e-mail  
22          from the Minister of Energy to Mr. Potts, the  
23          executive director of the JIESC.

24 MR. ELTON:    A:    Thank you.

25 MR. WALLACE:   Q:    And you have seen this letter before?

26 MR. ELTON:    A:    Yes.

1 **Proceeding Time 3:36 p.m. T60**

2 MR. WALLACE: Q: And in that letter, and I'd just like  
3 to read into the record part of it from page 2 of 4.  
4 Minister writing.

5 "I understand from your email that the Joint  
6 Electricity Steering Committee is interested  
7 in low cost power for its membership, as  
8 well as other B.C. Hydro customers.  
9 Government too has the objective of  
10 preserving British Columbia's electricity  
11 rate advantage. The government has  
12 implemented several measures supporting this  
13 objective, the most recent of which was  
14 removing the termination provisions in the  
15 Heritage Contract.

16 B.C. Hydro's action plan to cost-  
17 effectively ..."

18 And that's the word I'm going to want to emphasize to you.

19 "... meet growing customer electricity  
20 requirements, consistent with the direction  
21 set out in the Energy Plan, is through the  
22 long-term acquisition plan (LTAP) currently  
23 under review by the British Columbia  
24 Utilities Commission. As you note, B.C.  
25 Hydro filed an evidentiary update to the  
26 LTAP in late 2008, decreasing their planned

1 acquisition of electricity from IPPs to  
2 3,000 gigawatt hours. In addition, B.C.  
3 Hydro submitted a letter to the BCUC on  
4 January 12<sup>th</sup>, 2009 indicating that B.C. Hydro  
5 is open to acquiring additional supply from  
6 IPPs if the potential electricity purchase  
7 agreements are cost-effective."

8 And again, I'd like to stress "cost-effective".

9 Is it your -- is this paragraph I just read  
10 to you, or two paragraphs, consistent with your  
11 understanding of the government's energy policy?

12 MR. ELTON: A: Yes, it is.

13 MR. WALLACE: Q: And is it your understanding that  
14 acquisition from IPPs must be cost-effective?

15 MR. ELTON: A: Yes.

16 MR. WALLACE: Q: Thank you.

17 Do you -- or, can you confirm for me that  
18 the level of anticipated prices out of the clean power  
19 Call is in the range of \$120 to \$125 a megawatt hour?

20 MS. VAN RUYVEN: A: No, I can't confirm that.

21 MR. WALLACE: Q: Oh.

22 MS. VAN RUYVEN: A: I can't.

23 MR. WALLACE: Q: I thought I got that from Hydro  
24 material. I may be wrong.

25 MS. VAN RUYVEN: A: No, it's not the clean power Call,  
26 it's simply when we do our portfolio analysis, we use

1 our resource options report, which is a fairly  
2 thorough study of potential resources in British  
3 Columbia, and out of that we pick a proxy price for  
4 supply curves basically. It has nothing to do with  
5 expected prices from the clean power Call. Those are  
6 completely, at this point, in -- confidential.

7 MR. WALLACE: Q: Okay. Thank you for clarifying that.  
8 Can I re-phrase it, then. Is it -- am I correct that  
9 your estimate at this time is that IPP resources are  
10 likely to come in at the \$120 to \$125 a megawatt?

11 MS. VAN RUYVEN: A: No, we don't know what they're  
12 going to come in at.

13 MR. WALLACE: Q: Okay.

14 MS. VAN RUYVEN: A: We have an RFP process with some  
15 negotiation that needs to take place, and we're in the  
16 middle of that, and so we don't know the outcome of a  
17 potential range of prices.

18 MR. WALLACE: Q: Can you clarify --

19 MR. GODSOE: Maybe I can be of assistance to my friend.

20 MR. WALLACE: Thank you. I did pick those numbers out of  
21 your application, so --

22 MR. GODSOE: Right, and I think you're looking at Exhibit  
23 B-12, response to JIESC IR 3.29.2. And I think Panel  
24 3 can assist you on how that was extracted from the  
25 resource options update, what was used in terms of  
26 clean power Call terms and conditions and how we

1 arrived at that, and then how that would relate to a  
2 proxy for the clean power Call prices.

3 MR. WALLACE: Okay, and that's Panel 3?

4 MR. GODSOE: Panel 3.

5 MR. WALLACE: Okay. Well, then, I'll leave that to Panel  
6 3. Thank you.

7 Oh, if we could mark the letter as the next  
8 exhibit. My belief is it is probably exhibit JIESC  
9 20-5.

10 THE HEARING OFFICER: C20-5.

11 (E-MAIL LETTER DATED FEBRUARY 11, 2009 FROM BLAIR  
12 LESTROM, MINISTER, TO DANIEL POTTS, JIESC, MARKED  
13 EXHIBIT C20-5)

14 MR. WALLACE: Q: Now, I'll back away, then, just for  
15 the moment from IPPs and go to DSM.

16 In the last hearing, Mr. Elton, transcript  
17 page 796, and I've provided a copy to you and to your  
18 counsel, I'm going to put a statement to you and if  
19 you accept it, we probably won't have to mark the  
20 transcript. You state, page 796:

21 "Our view is that we need people to  
22 understand that we need more DSM, better,  
23 more efficient use of energy, more  
24 conservation, because if we can't convince  
25 people that we use electricity efficiently  
26 in this province, we will not be able to

1           convince them that anything needs to be  
2           built. We will not be able to convince them  
3           that we need more transmission lines or more  
4           generation projects anywhere because they  
5           will say, 'Look, you folks are all talking  
6           about conservation energy efficiency, and  
7           these are great goals, and you're not doing  
8           it.'

9           And is that still B.C. Hydro's position?

10   MR. ELTON:    A:    Yes.

11   MR. WALLACE:  Q:    Okay.

12   MR. ELTON:    A:    I should add that, of course, since I  
13           said that, the government has of course made that --  
14           the government has strengthened its commitment to DSM  
15           measures in the legislation.

16   MR. WALLACE:  Q:    Okay. And you also said, at page 744:

17           "And if there were no DSM, I think you would  
18           find when you listened to what the public  
19           says, and what stakeholders say when we talk  
20           to them, over and over again, you hear 'I  
21           want to know that we're doing everything we  
22           can in conservation and energy efficiency,'  
23           because frankly that's a large region why  
24           people support new projects being built."

25           And again, does that remain your position?

26   MR. ELTON:    A:    It does.

1 MR. WALLACE: Q: Thank you. And that attitude of the  
2 public, you're still continuing to experience?

3 MR. ELTON: A: Yes. Good examples, I think, would be  
4 with respect to the -- you know, the consultation on  
5 Site C, that theme comes up. Whenever we do any kind  
6 of general opinion surveys, we get the same answers.  
7 And I think in terms of things like the advisory  
8 committee on the energy conservation efficiency, Ms.  
9 Van Ruyven might comment that the same themes occur.

10 **Proceeding Time 3:42 p.m. T61**

11 MS. VAN RUYVEN: A: Yes, that's -- we're certainly  
12 hearing that consistently across all of our  
13 stakeholder engagement and surveys that we do.

14 MR. WALLACE: Q: Thank you.

15 Turning to the LTAP DSM, Plan A is the plan  
16 that you intend to implement?

17 MS. VAN RUYVEN: A: That's what we're putting forward  
18 in the LTAP, yes.

19 MR. WALLACE: Q: And in Exhibit B-1, the application at  
20 Table 3-4, it was costed at \$41. Does that remain the  
21 case?

22 MS. VAN RUYVEN: A: I believe now with the plan being  
23 reduced to 9600 gigawatt hours by 2020, it drops that  
24 levelized cost to \$38, but that would have to be  
25 subject to check.

26 MR. WALLACE: Q: And is there a panel I would check

1           that with?

2 MS. VAN RUYVEN:   A:   Yes, Mr. Hobson on Panel 3 can  
3           confirm that.

4 MR. WALLACE:    Q:   Okay, thank you.  And Plan B was  
5           originally in the application costed at \$42?

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

7 MR. WALLACE:    Q:   And what would it be now?

8 MS. VAN RUYVEN:   A:   I'm not sure if we've actually  
9           taken Plan B and done the same calculation as we did  
10          on the adjusted Plan A.

11 MR. WALLACE:    I should ask Mr. Hobson.

12 MR. GODSOE:    Yeah, I think start with Panel 3 and it  
13          might be pushed to Panel 4, but either way it is Mr.  
14          Hobson.

15 MR. WALLACE:    Okay.

16 MR. GODSOE:    And Mr. Reimann.

17 MR. WALLACE:    Thank you.

18 MR. WALLACE:    Q:   Now, I guess I'm having a little  
19          trouble with the \$120 -- is there a dollar figure that  
20          you have in mind at which IPP source power would not  
21          be competitive with those prices?  Clearly you're  
22          prepared to pay some premium to have diversity.  Is  
23          there a limit on that premium?

24 MR. ELTON:      A:   We haven't -- so I think the simple  
25          answer is there isn't, there isn't a limit.  We have  
26          not arrived at a figure.  It's something that we've

1       discussed as a concept with our board, but we have not  
2       reached a conclusion.

3 MR. WALLACE:    Q:    Okay.

4 MR. ELTON:     A:     So we have, I have to say we have with  
5       our board -- and again the board of directors is also  
6       not privy to any information at the moment with  
7       respect to what bids might say. We have actually in  
8       discussions used a figure of \$120, which is the same  
9       figure that you were, I believe, putting your way.  
10      We've used that as a proxy for the discussions.

11 MR. WALLACE:    Q:     Okay, and so do you consider \$120 to  
12      be cost-effective in comparison to those figures of 38  
13      to 45?

14 MR. ELTON:     A:     We haven't reached that conclusion. I  
15      think it's -- I mean, Ms. Van Ruyven talked earlier  
16      about what cost-effectiveness is, and there were  
17      several elements to it, and maybe with respect to IPP  
18      purchases there's maybe a few things that I'll talk  
19      about and Ms. Van Ruyven might add.

20                    There's clearly -- the diversity issue is  
21      an important one. In other words that, as we've  
22      explained, we are concerned if all it was was DSM,  
23      given that some of our DSM plans are quite early, you  
24      know, some of them are quite new. The question of to  
25      the extent that you might be buying IPP power that you  
26      might have to sell, the question of what you might be

1       able to sell it for is obviously an important  
2       consideration in terms of cost-effectiveness. The  
3       question of what other people are buying IPP power is  
4       relevant too. In other words, an indicator of whether  
5       we're doing a good job of acquisition and whether  
6       we're getting the right kind of bids. You know, is it  
7       a healthy competitive process? Is there something  
8       about B.C. power that is more or less competitive than  
9       other jurisdictions? Because in the end, if there is  
10      an increase in renewable power in the region, and B.C.  
11      power happens to be cheaper, for example, then that  
12      would help its competitiveness.

13                   And then, as you say, there is the question  
14      of comparison with other sources. In other words, I  
15      think we've been assuming that IPP power, or renewable  
16      power, is at the top of the cost curve, generally  
17      speaking, top of our cost curve. You know, the  
18      question will be when we get the bids in, is it still  
19      at the top of the cost curve? And if so, by how much?

20 MR. WALLACE:    Q:    Okay. Well, you have DSM in the range  
21      of \$40 opportunities.

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

23 MR. WALLACE:    Q:    And there's sufficient DSM there, at  
24      least theoretically, to cover your full requirements  
25      at this time.

26 MS. VAN RUYVEN:   A:    If you don't take into account sort

1 of the deliverability risk or the diversity aspects of  
2 how we defined cost-effectiveness, yes, I would agree  
3 with that.

4 MR. WALLACE: Q: Right. And Plan B would -- I mean, to  
5 the best of your knowledge Plan B would deliver  
6 sufficient resource to meet your requirements, but  
7 subject again to diversity --

8 **Proceeding Time 3:47 p.m. T62**

9 MS. VAN RUYVEN: A: Yeah, but Plan B would have greater  
10 risk in that you are going up to the maximum  
11 achievable in your conservation potential review on  
12 every single program. So that if you didn't get there  
13 on one program, you had -- you would not have any  
14 ability to substitute something else, because you're  
15 at the max of everything you said was available. So  
16 you'd have to be 100 percent correct on all of your  
17 programs, and they'd have to be performing exactly at  
18 the maximum in Plan B. And we thought that was quite  
19 risky, given that this is kind of a new era we're  
20 heading into. We've tripled our target that we've  
21 ever had before on DSM, and it is early days, and we  
22 would -- we thought by putting all of those programs  
23 right to the maximum was just too great of risk.

24 MR. WALLACE: Q: Now, that's a risk, though, at 40 --  
25 roughly \$40. Would that be the same risk at \$80? I  
26 mean, does anybody know what DSM you would pick up at

1           \$80 to \$100?

2 MS. VAN RUYVEN:   A:   Yeah, the conservation potential  
3           review did look at --

4 MR. WALLACE:    Q:    Yeah.

5 MS. VAN RUYVEN:   A:    -- going up the cost curve.  But  
6           they also looked at what was -- they felt was  
7           achievable.

8 MR. WALLACE:    Q:    And it said you could -- at \$40, and  
9           \$41, you could achieve all your requirements.  Surely  
10          at \$60 you'd have a lot more assurance, say, than at  
11          \$40.

12 MS. VAN RUYVEN:   A:    I'm not sure that that necessarily  
13          follows, because it depends on what programs you would  
14          be designing for that, and how much uptake you would  
15          have from the customers.

16 MR. ELTON:     A:    I think it's a difficult question to  
17          answer in general terms, because I think what we're  
18          concerned about if we did that, is that we might end  
19          up paying \$60 for things that we could have got for  
20          \$40.  So in other words, we've tried to do this so  
21          that we move up the cost curve reasonably gradually.  
22          And so, the trick would be to design programs that --  
23          where you were paying \$60 here and \$40 here, and it  
24          all worked.  And I think, again, it's early days.  So  
25          that's a question, I think, would get to the detailed  
26          design of the DSM programs, that you would probably

1 get to with Panel --

2 MR. GODSOE: Four.

3 MR. ELTON: A: -- 4, sorry, thank you.

4 THE CHAIRPERSON: Mr. Wallace, one of the problems I'm  
5 having with your conversation with Ms. Van Ruyven is,  
6 you keep talking about a \$40 or \$41. Is that the  
7 average?

8 MR. WALLACE: I'll let Ms. Van Ruyven answer the  
9 question.

10 THE CHAIRPERSON: All right.

11 MS. VAN RUYVEN: A: So, the new DSM plan that we have  
12 filed in the evidentiary update at 9600 gigawatt hours  
13 by 2020 has a levelized megawatt per hour cost of \$38.  
14 On average. So that would be all of our programs and  
15 supporting programs all -- including codes and  
16 standards, rates and all of the program costs, when  
17 you levelize it, it's \$38.

18 THE CHAIRPERSON: Right. That -- okay. Thank you.

19 MS. VAN RUYVEN: A: And that's to have a comparator to  
20 other resources.

21 MR. WALLACE: Q: Okay. And I'm prepared to leave  
22 further questions to Panel 4 on that.

23 Mr. Elton, you raised the question that one  
24 of the things that you look at when you're considering  
25 buying power is what you might be able to sell it at,  
26 if it turned out you didn't require it. And obviously

1           that's a concern to the customers. In the material,  
2           you do have some -- or, a graph of anticipated prices,  
3           and that's in Canadian prices, at 4 dash -- Figure 4-6  
4           in the LTAP, page 421. Are the prices that are set  
5           out in that graph representative of what you think you  
6           would be able to sell the power at?

7 MR. ELTON:    A:    Let me get there, please. You're on  
8           page 4-21.

9 MR. WALLACE:   Q:    It's Exhibit B-1, page 4-21, graph  
10           entitled -- section 4.4.3, "2008 electricity price  
11           forecasts for the forecast for mid-C in Canadian  
12           dollars".

13 MR. ELTON:    A:    Yes. Those are forecasts -- those are  
14           market price forecasts for electricity, yes.

15 MR. WALLACE:   Q:    And those are the prices that you  
16           think you would have to take into account and consider  
17           in what you might be able to sell the power at?

18 MR. ELTON:    A:    Broadly speaking, yeah. I think that  
19           the challenge with all of this is that you have -- you  
20           would be entering into contracts now, long-term  
21           contracts. If you -- maybe I should back up a little  
22           bit to explain why I was talking about the issue of  
23           selling power that you wouldn't be supplying for  
24           domestic purposes.

25                            We've already talked about the fact that  
26           the self-sufficiency definition is at critical water,



1 difference between critical water and average water is  
2 approximately 4400 gigawatt hours?

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

4 MR. WALLACE: Q: Thank you. And so on average you  
5 would have approximately 4400 gigawatt hours to sell.

6 MS. VAN RUYVEN: A: On an average year, yes.

7 MR. WALLACE: Q: Thank you. And you wouldn't want to  
8 sell that long-term because you have to keep it  
9 available to you in order to be self-sufficient.

10 MR. ELTON: A: I believe that's right. I mean, I think  
11 it will be interesting to see as time goes on, you  
12 know, how does this actually work, you know, how do  
13 you, you know, what else is available. But generally  
14 speaking you would not expect to be able to sell it  
15 long-term.

16 MR. WALLACE: Q: Thank you.

17 I'd like to then turn to Fort Nelson, if I  
18 could. B.C. Hydro is currently considering a number  
19 of options, as I understand it, for a long-term  
20 solution to what's happening up there. They include,  
21 as I have it and please correct me if I'm wrong,  
22 expanding the existing plant, strengthening the  
23 Alberta connection or connecting to the B.C. grid?

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

25 MR. WALLACE: Q: And my impression from BCTC's capital  
26 plan, and you may not be familiar with it, is that

1           they seem to be working toward a connection with the  
2           B.C. grid rather than the other two alternatives. My  
3           question is, how closely are you working with BCTC on  
4           these issues?

5 MS. VAN RUYVEN:    A:    Again I think that's probably a  
6           question that's better left for Mr. Rich on Panel 2.  
7           However, we are working closely with BCTC. It's not a  
8           surprise that that is the one option they are working  
9           on because that's the transmission option. They would  
10          not be working on the upgrade to the gas-fired plant  
11          or necessarily working on strengthening the  
12          interconnection to Alberta.

13 MR. WALLACE:     Q:    Okay. Now, the Throne Speech also  
14          mentioned, I think, a northeast transmission line. Is  
15          that the transmission line to Fort Nelson?

16 MS. VAN RUYVEN:   A:    Yes, I believe that would be -- I  
17          don't think there is any other northeast part of the  
18          province, so --

19 MR. WALLACE:     Q:    I agree. Just for the record.

20 MS. VAN RUYVEN:   A:    Yes, I agree.

21 MR. WALLACE:     Q:    Thank you. And does the Throne Speech  
22          make any difference with respect to the options you're  
23          considering?

24 MS. VAN RUYVEN:   A:    No. We need to consider to look at  
25          all options for Fort Nelson.

26 MR. WALLACE:     Q:    BCTC is also looking at generation --

1 MR. ELTON: A: Perhaps I could just add to that.

2 MR. WALLACE: Q: Oh, sorry.

3 MR. ELTON: A: Just to be clear. We are as interested  
4 -- we are equally interested in the prospect of a  
5 transmission solution. It's just that BCTC is the  
6 body that obviously does the -- you know, will plan  
7 and execute that. But I mean, as key stakeholders  
8 we've certainly expressed our interest in that option,  
9 in the transmission option as well as in the  
10 generation option.

11 MR. WALLACE: Q: Thank you. BCTC is also looking at  
12 generation clusters, and as part of its about 10  
13 million in its current capital plan for definition  
14 phase, and my understanding is could have as much as  
15 50 to 60 million over the next two to three years for  
16 definition, with a total project cost potentially of  
17 the \$2 billion range. Again, I'm interested in what  
18 sort of discussion is going on between BCTC and B.C.  
19 Hydro about future requirements, given that they don't  
20 look huge from the LTAP, and also given that a recent  
21 information request from B.C. Hydro to BCTC seems to  
22 imply, some areas at least, limited discussion. Can  
23 you comment for me?

24 MS. VAN RUYVEN: A: Well, again, Mr. Rich is our key  
25 contact. He's on Panel 2 and he has those discussions  
26 with BCTC on a regular basis, so I think he's better

1 prepared to talk about the details of those  
2 discussions and how frequently they occur.

3 MR. ELTON: A: I think if I could add -- oh, sorry.

4 THE CHAIRPERSON: After you. No, you finish.

5 MR. ELTON: A: So I think if I could add to that, I  
6 think that BCTC will obviously be getting signals from  
7 other places than just B.C. Hydro. So as has been  
8 mentioned earlier, there are other customers for  
9 potential IPPs than just B.C. Hydro. So I think -- I  
10 understood that one of the things BCTC was looking at  
11 was the concept that if projects are to be built, it  
12 would make sense -- it might well make sense to  
13 cluster them because that would reduce overall  
14 transmission costs. Something we also support.

15 **Proceeding Time 3:58 p.m. T64**

16 MR. WALLACE: Q: Okay. And would Mr. Rich be the  
17 person for me to ask about how B.C. Hydro's needs are  
18 integrated with those other customer needs in  
19 considering projects that might be this expensive?

20 MR. GODSOE: I think it starts with Panel 2, but if  
21 you're getting at how does the clean -- how does the  
22 Call integrate with BCTC's clustering notion, that's  
23 Panel 4. So, probably start with Panel 2, Mr. Rich,  
24 although he's more the Fort Nelson expert, but then it  
25 can move to Panel 4. But one way or another, we'll  
26 have somebody answer your question.

1 THE CHAIRPERSON: Mr. Wallace, I think this conversation  
2 that you've had with this panel, when I come to look  
3 at it, or as this panel comes to look at it in a  
4 couple of months' time, is going to make an awful lot  
5 more sense if you have the documents to which you have  
6 been alluding in front of us.

7 MR. WALLACE: I will try and do that as I get into a more  
8 detailed discussion then with Mr. Rich.

9 THE CHAIRPERSON: Okay. Thank you.

10 MR. WALLACE: And Panel 4.

11 THE CHAIRPERSON: Because you've referenced an IR that I  
12 have absolutely no knowledge what it is. You've  
13 referenced something else --

14 MR. WALLACE: Yes, no, and the reason -- I could put it  
15 forward now. I think it would be better with somebody  
16 who's going to look at it in more detail. I don't  
17 expect at the level of this panel they would be  
18 dealing with an Information Request, and the  
19 circumstances around it.

20 THE CHAIRPERSON: No, I'm sure, but it --

21 MR. WALLACE: Or hopefully, I like to think that there's  
22 a stage you could get away from those.

23 THE CHAIRPERSON: It would certainly help this Panel if  
24 you could come with references.

25 MR. WALLACE: I definitely would be quite happy to put  
26 that Information Request to Mr. Rich.

1 THE CHAIRPERSON: Thank you.

2 MR. WALLACE: And to Panel 4 if necessary. I'd like --

3 THE CHAIRPERSON: Can I also -- we're getting close to  
4 4:00. How much longer do you --

5 MR. WALLACE: Oh, I'll be a while yet. If this is a  
6 convenient time to break, that would be fine.

7 THE CHAIRPERSON: Okay. Let's -- we'll break till 8:30  
8 tomorrow morning.

9 MR. WALLACE: Thank you.

10 THE CHAIRPERSON: Thank you.

11 **(PROCEEDINGS ADJOURNED AT 4:00 P.M.)**

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