

**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.**  
**March 5, 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 13**

## APPEARANCES

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

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**CAARS**

VANCOUVER, B.C.

March 5, 2009

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

THE CHAIRPERSON: Please be seated.

**B.C. HYDRO PANEL 4 - LTAP ACTION ITEMS**

**CAM MATHESON, Resumed:**

**RANDY REIMANN, Resumed:**

**STEVE HOBSON, Resumed:**

**JAMES SCOURAS, Resumed:**

**MICHAEL JAMES SAVIDANT, Resumed:**

THE CHAIRPERSON: Mr. Godsoe, good morning.

MR. GODSOE: Mr. Chairman, Commissioners, good morning.

I have four undertakings to enter. The first is a request by JIESC that we reconcile the LTRIF and the service plan, and I ask that that undertaking be entered and marked Exhibit B-38.

THE CHAIRPERSON: Thank you.

THE HEARING OFFICER: B-38.

(B.C. HYDRO UNDERTAKING NO. 1, VOLUME 4, PAGE 362, LINES 3 TO 6 MARKED EXHIBIT B-38)

MR. GODSOE: Undertaking under number two arises from a request from BCOAPO to estimate the impact of the legislated return on equity on the LTRF, and I ask that that be entered and marked Exhibit B-39.

THE CHAIRPERSON: Thank you.

1 THE HEARING OFFICER: B-39.

2 (B.C. HYDRO UNDERTAKING NO. 2, VOLUME 4, PAGE 404,  
3 LINE 12 TO PAGE 406, LINE 24 MARKED EXHIBIT B-39)

4 MR. GODSOE: Undertaking number three arises from  
5 Commission counsel concerning elasticity factor for  
6 residential income, and I ask that that be entered and  
7 marked Exhibit B-40.

8 THE CHAIRPERSON: Thank you.

9 THE HEARING OFFICER: B-40.

10 (B.C. HYDRO UNDERTAKING NO. 14, VOLUME 8, PAGE 1329,  
11 LINE 1 TO PAGE 1330, LINE 5 MARKED EXHIBIT B-40)

12 MR. GODSOE: And lastly, an undertaking that arose from  
13 you, Mr. Chair, concerning how much dependable  
14 capacity is assumed for wind in each year of the base  
15 resource plan, and I ask that be entered and marked  
16 Exhibit B-41.

17 THE CHAIRPERSON: Thank you very much.

18 MR. GODSOE: And those conclude my preliminary matters.

19 THE HEARING OFFICER: B-41.

20 (B.C. HYDRO UNDERTAKING NO. 42, VOLUME 11, PAGE 1985,  
21 LINE 19 TO PAGE 1986, LINE 7 MARKED EXHIBIT B-41)

22 THE CHAIRPERSON: Now -- well, I was going to say as we  
23 closed last night, you and Mr. Weafer were -- Mr.  
24 Weafer is examining the panel, and asked a number of  
25 questions to which you took exception.

26 Have you been able to resolve that with Mr.

1           Weafer?

2   MR. GODSOE:    I continue to take exception to those  
3           questions. I understood that you were going to permit  
4           Mr. Weafer to examine on a generic level vis-à-vis  
5           capacity. I continue to maintain that that isn't  
6           relevant to this proceeding, but I understood that you  
7           had made that ruling.

8   THE CHAIRPERSON:   Well, I am -- I'll tell you why I  
9           consider it might -- it may be germane, and you can  
10          comment. And that is, in performing his evaluations  
11          of various portfolios, I imagine Mr. Reimann has to  
12          make certain assumptions as to how the shaping  
13          benefits might be allocated, and --

14   MR. GODSOE:    I don't think that's correct, but that  
15          question can be put to this panel.

16   THE CHAIRPERSON:   Thank you. And as far as -- Mr.  
17          Weafer, if you wish to record your client's views of  
18          the trade income cut-off, which you will not be  
19          surprised are known to the Commission already, I  
20          imagine you can continue to do that in argument.

21   MR. WEAFER:    Thank you, Mr. Chairman, and it will be our  
22          intention to do so, and really the level of  
23          questioning, in terms of the trade income issue, is  
24          intended to be fairly generic, and to get an  
25          understanding on the record in this proceeding, so  
26          that we can fairly argue it, so --

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**Proceeding Time 8:33 a.m. T2**

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THE CHAIRPERSON: And if you can do it without the words  
5 "prejudicial" and "per" -- or whatever the other one  
6 was, "detrimental".

7

MR. WEAVER: Well, I wrestled with the difference between  
8 "detriment" and "prejudicial", Mr. Chairman, to be  
9 honest, in terms of the question talking about  
10 detriment. So I'll use "detriment", but I'm not sure  
11 there's a --

12

MR. GODSOE: I will be frank. I will take exception to  
13 "detriment" as well. This is a legislated Section 1  
14 pursuant to HC2, and to ask my panel to comment  
15 whether government legislation is detrimental to  
16 customers, or prejudicial, I will take very strong  
17 exception to, Mr. Chair. I think that's  
18 inappropriate.

19

THE CHAIRPERSON: I think I've tried to convey that  
20 message to Mr. Weaver.

21

MR. WEAVER: Let me proceed, Mr. Chairman, and I don't  
22 intend to spend much time on this this morning.

23

**CROSS-EXAMINATION BY MR. WEAVER (CONTINUED):**

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MR. WEAVER: Q: And I take it from the discussion

25

yesterday that there's not a high level of detailed

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understanding of the Transfer Pricing Agreement with

1           this panel, and the preference would be to keep the  
2           discussion at a high level. Is that correct?

3 MR. REIMANN:    A:    That's correct, and when we do our  
4           modelling we don't have an inability in our models to  
5           distinguish between trade that would happen to  
6           Powerex's trade account, versus what would come back  
7           to Hydro. Any of the energy that is surplus to the  
8           system would fall to Hydro's account anyhow, and if  
9           Hydro as a system ever needs energy it gets first call  
10          on it, and first call to sell. But it's a pretty  
11          detailed agreement and we don't have the ability to  
12          model that within our system modelling.

13 MR. WEAVER:    Q:    Mr. Reimann, if you could make an  
14          assumption for a moment that the system is operating  
15          today at a level that the \$200 million trade income  
16          cap is being met or close to met each year, if we  
17          could go forward just on that assumption for now, if  
18          you're doing your long-term planning, I assume it does  
19          look at system capacity as well as energy issues. Is  
20          that fair?

21 MR. REIMANN:    A:    So what we do in each of our  
22          portfolios is we build the amount of capacity to meet  
23          the 14 percent reserve margin so that we know we have  
24          an adequate amount of capacity that's available to the  
25          system. And that's what we've built into the models.  
26          We haven't built in any surplus capacity over meeting

1 the reliability criteria. It's then based on that  
2 system with that capacity and that Powerex would take  
3 up -- undertake opportunistic trade and the ability to  
4 shift sales from one period to another.

5 MR. WEAFFER: Q: I think the answer to the question is  
6 yes then, Mr. Reimann, that you do take capacity  
7 issues and energy issues into account when designing  
8 your LTAP model, is that correct?

9 MR. REIMANN: A: To be specific, we do, and we do it to  
10 meet the reliability criteria based on the domestic  
11 customer need.

12 MR. WEAFFER: Q: Yes, and back to the first assumption  
13 that you're operating the system, today we're  
14 approaching the cap on a fairly frequent basis, the  
15 \$200 million cap.

16 MR. GODSOE: Well, Mr. Chairman, there's no evidence to  
17 that effect. My friend is giving evidence. Perhaps  
18 he can put that to this panel. I don't know that they  
19 can address it, but I take exception to that. There  
20 is no evidence on the record to that effect.

21 MR. WEAFFER: Right. I qualified it as an assumption, Mr.  
22 Chairman. I'm not saying that --

23 THE CHAIRPERSON: We will take it as an assumption.

24 MR. WEAFFER: That's what I indicated.

25 MR. WEAFFER: Q: So with that assumption in place that  
26 the system today puts you close to the cap or over the

1 cap, where you plan to exceed today's system capacity,  
2 would you agree with me that the benefit of that  
3 excess capacity is more likely to put you over the  
4 \$200 million cap, assuming today you're approaching  
5 the \$200 million cap?

6 **Proceeding Time 8:36 a.m. T03**

7 MR. REIMANN: A: Yeah, that's -- I mean, that's a  
8 fairly hypothetical situation, and I -- it would be  
9 unclear to me under what circumstance you would be at  
10 a \$200 million cap, and what the state of the system  
11 and the markets would be, and then to add some  
12 additional capacity to the system, whether that  
13 enhanced the trade opportunities to any significant  
14 degree or not. That's --

15 MR. MATHESON: A: Yeah, the premise of your question is  
16 a little troubling, in the sense that, you know,  
17 you've said what we're adding is going to put us at or  
18 over the \$200 million cap. I don't think that's -- I  
19 don't think we can accept that.

20 MR. WEAVER: Q: Would you agree that the likelihood of  
21 exceeding the cap would go up with the addition of  
22 capacity to the system?

23 MR. MATHESON: A: Well --

24 MR. REIMANN: A: Sorry, can you repeat the question?

25 MR. WEAVER: Q: Would you agree that the likelihood of  
26 exceeding the \$200 million cap would go up if B.C.

1 Hydro was adding capacity to the system, not needed  
2 for ratepayer service.

3 MR. REIMANN: A: So, let me try to put this into a  
4 long-term planning context. And it may be different  
5 one year over the next when capacity comes in, but we  
6 add capacity in the long run to make sure that the  
7 system is adequate to run, and I would think we keep  
8 adding capacity to keep us at a certain level of  
9 reserves and enable to meet the peak. So presuming  
10 that the load shape doesn't change and you keep adding  
11 capacity to maintain that relative same margin, I  
12 would not expect the trade income to change much over  
13 time, presuming market conditions don't change.

14 One year after, if you started to run short  
15 of capacity and you came to the point where you needed  
16 that next addition, and the next addition put some  
17 more surplus to the system, there may be a short-term  
18 period where you have more opportunities than you had  
19 before, but I think that would be a very sort of  
20 short-term view and not at all consistent with a long-  
21 term planning perspective.

22 **Proceeding Time 8:39 a.m. T4**

23 MR. WEAFFER: Q: If the long-term planning perspective  
24 is changed such that there's an increase in the level  
25 of capacity required on the system to service  
26 customers, in excess of the level required today, that

1           that would increase the likelihood of increased  
2           trading.

3 MR. REIMANN:    A:    It may.

4 MR. WEAVER:     Thank you.  I'll move on, Mr. Chairman.

5 THE CHAIRPERSON:   Thank you.

6 MR. WEAVER:     Q:     The next area I'd like to discuss is  
7           economic conservation potential, and the reference  
8           that I'm -- I will start from this Exhibit B-12, BCUC  
9           IR 3.259.4.

10 MR. HOBSON:     A:     Can you repeat the reference please?

11 MR. WEAVER:     Q:     Yes.  It's Exhibit B-12, BCUC IR  
12           3.259.4.  And this will result in an undertaking which  
13           I discussed with your counsel briefly this morning.  
14           And here staff was asking you to provide the economic  
15           conservation potential in 2020, and the response  
16           indicates that by linear interpolation that B.C. Hydro  
17           has come up with estimates of the old and new economic  
18           conservation potential in 2020.  And could you  
19           indicate whether you would be able to break down those  
20           old and new economic conservation potential by  
21           customer class, residential, commercial and  
22           industrial?

23 MR. HOBSON:     A:     I would think that we could, but I  
24           would have to check with specifics of the study and  
25           the model just to ensure.

26 MR. WEAVER:     Q:     Okay.  Could you undertake to do that?

1 MR. GODSOE: So subject to Mr. Hobson's qualifications,  
2 we'll take that undertaking and get back to my friend  
3 on that.

4 THE CHAIRPERSON: Thank you.

5 **Information Request**

6 MR. WEAVER: Q: Thank you, and the second part of the  
7 undertaking relates to the 2002 conservation potential  
8 review. And could you undertake to review that study  
9 to provide the same conservation potential for 2020 as  
10 fell out of the 2002 conservation potential review?  
11 Also by rate class.

12 MR. HOBSON: A: Yeah, and I want to back up just to  
13 your first undertaking. Is it the fiscal 2020  
14 specifically that you're after with respect to that  
15 breakdown across the three sectors?

16 MR. WEAVER: Q: If that -- and I realize from your  
17 response to the IR that you did that by an  
18 extrapolation. If that can be done, if that's the  
19 easiest way to do it, fine. If there's a point in  
20 time close to 2020 which would be easier, I'm fine  
21 with that as well.

22 MR. HOBSON: A: And I guess my question is, if we have  
23 the milestones already and we can break it down by  
24 sector by those milestones, is that fulfilling your --

25 MR. WEAVER: Q: That would be fine. If we went with  
26 2016, assuming you use that same milestone in 2002.

1 MR. HOBSON: A: Sorry, I was speaking now of the 2007  
2 in your first request of us, just so I was clear with  
3 that before we move to your next request.

4 MR. WEAVER: Q: Fine. If that is easier to do as  
5 opposed to an extrapolation. If you want to pick a --  
6 if we went with -- my concern about going to 2021 is I  
7 don't want to drop off --

8 MR. HOBSON: A: I see.

9 MR. WEAVER: Q: -- where you may have got to on the  
10 2002 study. So if 2016 is convenient and that is a  
11 point identified in the 2002 study as well, and that  
12 makes it easier for B.C. Hydro. We're happy to  
13 receive that. If the 2021 date is available in the  
14 2002 study, perhaps we could do both of those.

15 **Proceeding Time 8:43 a.m. T05**

16 MR. HOBSON: A: Okay, so you're looking for basically  
17 the same thing with the 2002 study?

18 MR. WEAVER: Q: Yes.

19 MR. HOBSON: A: Broken down by sector?

20 MR. WEAVER: Q: Correct.

21 MR. HOBSON: A: And that one I would definitely need to  
22 go back and look, because it's a more dated study.  
23 I'm not sure of the make-up of that off the top of my  
24 head.

25 MR. WEAVER: Q: If you could undertake to look, and if  
26 you can provide it, provide that?

1 MR. GODSOE: So, again, subject to the qualification Mr.  
2 Hobson stated, we'll get back to my friend on that.

3 **Information Request**

4 THE CHAIRPERSON: Thank you.

5 MR. WEAFFER: Q: Thank you, Mr. Hobson. Thank you, Mr.  
6 Godsoe.

7 Carrying on, in terms of -- and I'm  
8 finished with that information response, but  
9 continuing on with the economic conservation  
10 potential, there was a series of IRs which I don't  
11 believe you need to refer to, but they were CEC IRs in  
12 Exhibit B-12, 3.12-5 to 3.12-9, and we were looking at  
13 the Exhibit B-10, page 21, and DSM deliverability  
14 risk. And you would agree with me, and I don't  
15 believe you need the IRs, but would you agree with me  
16 that there are numerous changes to the economic  
17 potential going on all of the time on an ongoing  
18 basis?

19 MR. HOBSON: A: Sorry, I'm just flipping to your  
20 reference, Mr. Weafer.

21 MR. WEAFFER: Q: Oh, fair enough. Sorry, sorry. Take  
22 your time.

23 MR. HOBSON: A: What was the page reference?

24 MR. WEAFFER: Q: It was Exhibit B-12, CEC IRs 3.12.5  
25 through 3.12.9. And the context of the questions was  
26 around the adjustments made to the evidentiary update,

1           and I'd just like to focus on what, if any,  
2           adjustments were made to economic potential. And so  
3           the question again -- you'd agree with me that there  
4           is changes to economic potential going on on an  
5           ongoing basis. Is that fair?

6 MR. HOBSON:    A:    Relative to the study results, yeah. I  
7           think the study results represent a point in time, and  
8           within a certain scope. So I think it's fair to say  
9           that circumstances are changing around us at the point  
10          that study's complete.

11 MR. WEAVER:    Q:    And the 2007 CPR is -- does not  
12          identify all of the economic potential, correct?

13 MR. HOBSON:    A:    I think that's a fair statement.  
14          Again, it would be limited to the scope of the study.  
15          So presumably anything outside of the scope of that  
16          study would fall outside of what would be captured  
17          within that economic potential.

18 MR. WEAVER:    Q:    And so when B.C. Hydro filed its  
19          evidentiary update it made adjustments to load  
20          forecasts, but it didn't make any other assessments of  
21          what other changes were going in the economic  
22          circumstances we face in terms of economic potential.  
23          Is that a fair statement?

24 MR. HOBSON:    A:    I think it's fair just in the sense  
25          that we were pretty clear, I think, with respect to  
26          the adjustment we did make, and it was driven off of

1 the rates and the economic conditions with respect to  
2 what changes were in the load forecast. So to the  
3 degree that the load forecast change was picking up a  
4 variety of different things that are going on within  
5 the market, then I would suggest our adjustment picked  
6 up those changes.

7 MR. WEAFFER: Q: So, for example, would those  
8 adjustments pick up the probability that we may see  
9 the price of equipment and technology related to  
10 delivering DSM savings drop in a time where there may  
11 be excess manufacturing capacity in other  
12 jurisdictions?

13 MR. HOBSON: A: I think we answered that, 12-6. But  
14 maybe I could comment further. I guess to the degree  
15 that the load forecast had picked up some of that  
16 conceptually within the load forecast results, then  
17 again I think that would carry through to the  
18 adjustment we made. To the degree that that's  
19 occurring outside of those load forecast results, then  
20 it would be an adjustment we did not make.

21 MR. WEAFFER: Q: And with respect to the federal  
22 government retrofit program, in terms of trying to  
23 incent upgrades, would that have been captured in your  
24 adjustments? Or would that be new economic potential  
25 arising?

26 MR. HOBSON: A: Can you repeat that, please?

1 MR. WEAFFER: Q: With respect to the federal government  
2 retrofit program encouraging conservation investments  
3 in housing since this 2007 CPR, that's a new  
4 development, you'd agree? Since the 2007 CPR.

5 **Proceeding Time 8:48 a.m. T6**

6 MR. HOBSON: A: I don't think it would impact the  
7 economic potential within the CPR at all, actually,  
8 because it's not going to change the economics of the  
9 measures from the perspective of the measures  
10 themselves. It's going to change it with respect to  
11 the economics that a consumer might face. But I don't  
12 know that it would change the economics within the CPR  
13 itself.

14 MR. WEAFFER: Q: Now, one of the matters you did address  
15 in the IR 3.12.5, CEC IR 3.12.5, in terms of factors  
16 that could influence economic conservation potentials,  
17 is the 2007 CPR include changes in technological  
18 development and costs, that scenario that you do --  
19 B.C. Hydro does see economic potential, is that  
20 correct?

21 MR. HOBSON: A: Well, I think all that response is  
22 highlighting is to the degree that you had changes in  
23 those areas, then it would potentially open up a  
24 change in the economic potential.

25 MR. WEAFFER: Q: And those changes are ongoing, you'd  
26 agree?

1 MR. HOBSON: A: I would agree.

2 MR. WEAVER: Q: So I'd like to spend some time on  
3 additional technological developments, and if I could  
4 refer you to Exhibit B-4, and this would be CEC IR  
5 2.3.11, Attachment 1, and that's portions of the --

6 MR. HOBSON: A: Am I finished with --

7 MR. WEAVER: Q: Yes, finished with that information  
8 request, yes, thank you. Still on the same topic but  
9 different reference.

10 And here we're looking at excerpts of the  
11 2007 Conservation Potential Review provided in  
12 response to the information request.

13 MR. MATHESON: A: Mr. Weaver, could you give us that  
14 request again, please?

15 MR. WEAVER: Q: Sure, it's Exhibit B-4 and it's  
16 response to CECBC IR 2.3.14, Attachment 1. And if I  
17 could --

18 MR. MATHESON: A: Mr. Weaver, we're still waiting for  
19 that.

20 MR. MATHESON: Q: Oh, I'm sorry.

21 MR. HOBSON: A: I think we have that.

22 MR. WEAVER: Q: And I'm going to focus on Chapter 4 of  
23 the report which starts at page 183 of 263, the  
24 chapter referring to emerging technologies. Now, here  
25 --

26 MR. HOBSON: A: Sorry 183 of 262?

1 MR. WEAVER: Q: Of 263. It's Attachment 1, should say  
2 "Emerging technologies" at the start of the page.  
3 MR. HOBSON: A: We had the wrong attachment. My  
4 apologies. I'm with you now.  
5 MR. FULTON: Mr. Chairman, before we proceed further, I  
6 understand that the people at the back of the room are  
7 having difficulty hearing, so that if people could  
8 speak more closely to their mikes and ask the Hearing  
9 Officer also if he could turn up the volume up a bit  
10 if possible.  
11 THE CHAIRPERSON: Thank you, Mr. Fulton. And before you  
12 begin, Mr. Weaver, I have still not found the  
13 reference. I've probably got the same problem as the  
14 panel have. This is 2-3-11, is it? That's the one  
15 with 263 pages in it.  
16 MR. WEAVER: That's correct and we're --  
17 THE CHAIRPERSON: Okay.  
18 MR. WEAVER: At the bottom in bold is page 183 of 263.  
19 THE CHAIRPERSON: I see that. I was at --  
20 MR. WEAVER: The original pagination I think would have  
21 been page 163, but the exhibit --  
22 THE CHAIRPERSON: I'm there, Mr. Weaver, thank you.  
23 MR. WEAVER: Thank you, Mr. Chairman.  
24 MR. WEAVER: Q: Now, looking at -- now, this is the  
25 emerging technologies chapter. These were not  
26 included in the CPR study, is that correct?

1 MR. HOBSON: A: In the core numbers of the CPR, that's  
2 correct.

3 MR. WEAVER: Q: Now, if we look at the list of emerging  
4 technologies in bullet points, four-fifths down the  
5 page, they include features dealing with the building  
6 shelf, lighting, alternative energy, high efficiency  
7 appliances, direct current service and operation, and  
8 customer controls. Correct?

9 MR. HOBSON: A: That's correct.

10 MR. WEAVER: Q: Now, looking at that list, would you  
11 agree with me that many, if not most of these, are  
12 being advanced into energy conservation initiatives in  
13 B.C. at this time?

14 MR. HOBSON: A: They may be by name, but I think what  
15 would be important to look at would be what's in  
16 behind these labels and essentially what are the  
17 specific technologies themselves that are being  
18 referenced here, versus what you might think is  
19 showing up within initiatives today.

20 MR. WEAVER: Q: Is it your understanding that the  
21 province is aiming for 100,000 solar roof homes?

22 MR. HOBSON: A: That's my understanding of the  
23 province's goal, yes.

24 MR. WEAVER: Q: And is it your understanding that the  
25 provincially mandated SMI project will also be able to  
26 support a number of customer-side controls?

1 MR. HOBSON: A: It will be able to support it, but I  
2 think this is not looking the grid itself necessarily,  
3 but I think it's looking at applications that then  
4 play off of that capability. So I think it's a  
5 further step.

6 **Proceeding Time 8:54 a.m. T07**

7 MR. WEAFFER: Q: With respect to LED lighting and light  
8 pipes, would you agree with me that they're becoming  
9 commercially available?

10 MR. HOBSON: A: I think they're becoming commercially  
11 available in very selected applications, but I think  
12 the technology in a number of applications still has  
13 quite a ways to go. I think there's expectations that  
14 it will develop. But I think we're a ways from  
15 understanding the specifics with respect to costs and  
16 performance in certain applications.

17 MR. WEAFFER: Q: Would you agree with me that passive  
18 insulations, overhangs and shadings have actually been  
19 commercially available for some time now?

20 MR. HOBSON: A: Yeah, and this was, I guess, my  
21 original point. I think, you know, these are labels  
22 being applied to technologies and there could be a  
23 number or a range of performance and application. So  
24 while you can see something like advanced glazing,  
25 what's in behind that could be one of a number of  
26 things, and we could have advanced glazings at our

1 part of existing initiatives, but you could have  
2 different advanced glazings that are getting into  
3 higher performance that would be more suitable for  
4 maybe what's been looked at within the emerging  
5 technologies.

6 MR. WEAVER: Q: And you'd agree with me that, as we go  
7 down the road and investigate and implement these  
8 technologies over the next 20 years in the term of the  
9 LTAP, there are programs such as B.C. Hydro's  
10 PowerSmart and the provincial government's LiveSmart  
11 programs that will assist in implementing these  
12 emerging technologies.

13 MR. HOBSON: A: Yeah, you know, and I think we're  
14 counting on that to a degree. I mean, we've got  
15 within our plan a whole section within our supporting  
16 initiatives that's looking at technology innovation  
17 and trying to ensure that we move some of these  
18 emerging technologies along. And part of that is  
19 recognizing that, similar to the discussion we had a  
20 few days ago with respect to codes and standards, not  
21 everything we put forward is going to work exactly as  
22 we put forward, and part of what we're going to count  
23 on is some of these new technologies moving along that  
24 are going to pick up the slack, so to speak, with  
25 respect to some of the things that maybe don't  
26 materialize quite how we planned.

1 MR. WEAVER: Q: In terms of what the CPR identified as  
2 possible opportunities, if I could turn you to page  
3 204 of 263 in the same exhibit, and looking at the  
4 bottom of the boxed table, at 1,318 gigawatt hours  
5 achievable by 2026. That, I take it, is -- do you  
6 have any comment on that target? That potential.

7 MR. HOBSON: A: Well, I'm not sure that it's a target,  
8 and I'm not sure that it's --

9 MR. WEAVER: Q: Sorry, a "potential" is the --

10 MR. HOBSON: A: I'm not sure that it's achievable.  
11 That's being illustrated here. I think it's just  
12 illustrating a potential savings with respect to  
13 emerging. And these are intended to provide some very  
14 early signposts or illustrations of what might occur  
15 in these areas, and the intent here is to try to, I  
16 think, assist groups that are involved in demand-side  
17 management to have an understanding of technologies  
18 that may materialize over time, and that may be an  
19 area for them to focus on in trying to move forward.

20 MR. WEAVER: Q: Thank you, Mr. Hobson. I'd just like  
21 to move to the commercial CPR report, and moving  
22 through to page 165 of 262 in the commercial report,  
23 which is also at CECBC IR 2.3.14, attachment 1.

24 MR. HOBSON: A: And the page reference again? 165?

25 MR. WEAVER: Q: 165 of 262. And here I'm looking at  
26 the list of emerging technologies for the commercial

1 sector. Do you have that reference?

2 MR. HOBSON: A: I do.

3 MR. WEAFFER: Q: And these include advanced building  
4 envelopes, LED lighting and light pipes, advanced  
5 HVAC, on-site electric generation and smart controls  
6 for building, correct?

7 MR. HOBSON: A: That's correct.

8 MR. WEAFFER: Q: And would you agree with me there's a  
9 case to be made that many of these technologies are  
10 also available and being implemented now?

11 MR. HOBSON: A: Yes, although my same comments from  
12 earlier would apply.

13 **Proceeding Time 8:59 a.m. T8**

14 MR. WEAFFER: Q: And if we turn to page 180 of 262,  
15 looking at the potential in the second paragraph,  
16 "Technically, if all new commercial  
17 buildings were constructed to NZEC levels  
18 beginning in F2016, then annual savings  
19 would reach approximately 3,000 gigawatt  
20 hours a year by F2026."

21 I take it --

22 MR. HOBSON: A: I see that.

23 MR. WEAFFER: Q: I take it you have the same comments on  
24 that target as you have on the residential, or do you  
25 have any different views with respect to commercial?

26 MR. HOBSON: A: No, I think that's fair. The same



1 Exhibit B-12, CEC IRs 3.11.3 through 3.11.7.

2 MR. HOBSON: A: I have that.

3 MR. WEAFFER: Q: And turning firstly to CEC IR 3.11.3:

4 "Please provide the projections of the  
5 behavioural changes included in the CPR  
6 economic conservation potential."

7 And response:

8 "The 2007 CPR projected the gross economic  
9 conservation potential from behavioural  
10 changes to be 3200 gigawatt hours a year in  
11 2026."

12 Can we agree that this 3200 gigawatt hours  
13 a year in 2026 included in the 2007 CPR, is  
14 significant and that it will be captured through B.C.  
15 Hydro's efforts to create a culture of conservation  
16 through such approaches as rate structures?

17 MR. HOBSON: A: Among other things, that's the intent  
18 is a significant amount, and I think we've put in  
19 place a number of initiatives that are designed to  
20 target that potential.

21 MR. WEAFFER: Q: And the first question focused on rate  
22 structures. That's the first --

23 MR. HOBSON: A: Rate structures would be a portion of  
24 it, yes.

25 MR. WEAFFER: Q: And can you help me with what are the  
26 other DSM plans which will help capture this potential

1 for behavioural change, just a high level?

2 MR. HOBSON: A: The residential behaviour program would  
3 be one, and there are components, albeit smaller  
4 components, within some of the commercial programs  
5 through the PowerSmart Partners program, I believe,  
6 and the product incentive program would also have  
7 smaller components that would align some of these  
8 numbers, I believe.

9 MR. WEAVER: Q: In B.C. Hydro's recent pilot project  
10 with Smart Meters, B.C. Hydro gained some experience  
11 with the sorts of changes people would make to their  
12 behaviour to become more energy efficient. Is that  
13 correct?

14 MR. HOBSON: A: That's correct.

15 MR. WEAVER: Q: Was the result something in the order  
16 of 7 to 10 percent energy savings as well as  
17 significant shifts to non-peak use in response to some  
18 significant rate price signals?

19 MR. HOBSON: A: I would have to check the details. I  
20 don't know the details of those results. They sound  
21 in the right ballpark but I would have to check that  
22 to confirm it.

23 MR. WEAVER: Q: Can you undertake to provide a response  
24 to that, with that information?

25 MR. GODSOE: We can, and I think we'll have to put some  
26 qualifiers around that result as well.

1 THE CHAIRPERSON: I think we need to just answer the  
2 question by saying "subject to check". He says he's  
3 accepted the numbers.

4 MR. HOBSON: A: I think they're in the 7 to 10 percent  
5 --

6 MR. GODSOE: I'd prefer to take an undertaking, as I  
7 think we need to make some qualifications around that  
8 number, Mr. Chairman.

9 THE CHAIRPERSON: As you wish.

10 **Information Request**

11 MR. WEAVER: And I'm fine with that, Mr. Chairman. The 7  
12 to 10 percent is a ballpark range though, and then  
13 you'll check that that's a correct ballpark range.

14 MR. HOBSON: A: Yeah, and probably to Mr. Godsoe's  
15 point, there is going to be limitations with a study  
16 of that nature that we would have to take a look at in  
17 terms of its applicability.

18 MR. WEAVER: Q: Now, the residential load is  
19 approximately 16,000 gigawatt hours a year, correct?

20 MR. HOBSON: A: I believe it's in around that, yes.

21 MR. WEAVER: Q: So 1 percent, say, through behavioural  
22 changes would amount to approximately 1600 gigawatt  
23 hours a year, correct?

24 **Proceeding Time 9:04 a.m. T09**

25 MR. HOBSON: A: Say that again, please?

26 MR. WEAVER: Q: One percent saved through behavioural

1 changes would amount to 1600 gigawatt hours a year?

2 MR. HOBSON: A: I think that's about a 10 percent

3 change.

4 MR. WEAFFER: Q: Oh, sorry.

5 MR. GODSOE: This is why lawyers went to law school,

6 because none of us can do numbers.

7 MR. WEAFFER: Q: And I have a very smart consultant, so

8 I'll have to talk to him. 160 -- sorry, 160 gigawatt

9 hours a year.

10 MR. HOBSON: A: That would be correct, yes.

11 MR. WEAFFER: Q: Thank you. Thank you. Would you agree

12 with me that behaviour changes can also be among the

13 lowest or least-cost opportunities to capture?

14 MR. HOBSON: A: Yes.

15 MR. WEAFFER: Q: Now, as I understand it --

16 MR. HOBSON: A: Actually, I should back up from that.

17 I'm thinking of it with respect to the consumer

18 perspective. They will still be some of the most

19 cost-effective, but behavioural in their nature,

20 there's not a cost to the measure. I think as we take

21 a look what -- at what's going to be needed to start

22 to shift or shape consumers' behaviours, and what's

23 needed to be put in place by a utility to try to make

24 that shift, then that would add additional costs. But

25 given the low-cost nature of the measure itself, in

26 many cases no cost, then the combined effort ends up,

1 I still think, producing fairly cost-effective energy  
2 savings and it would be in amongst the more cost-  
3 effective.

4 MR. WEAVER: Q: Thank you. As I understand it, and I  
5 apologize I don't have a reference, the DSM programs  
6 looking to effect behavioural changes are focusing on  
7 capturing about 400 gigawatt hours a year through to  
8 2028. Does that sound accurate? Is that consistent  
9 with your --

10 MR. HOBSON: A: It sounds in the right ballpark. It  
11 would be helpful to have a reference, and maybe I  
12 should take a moment to -- yeah, it would like -- it  
13 would be fair to say you would be between the 300 to  
14 400 range or in the 400 ballpark.

15 MR. WEAVER: Q: Would you agree with me that this is a  
16 tiny portion of the potential?

17 MR. HOBSON: A: It is a smaller portion of the  
18 potential within the program itself, yes.

19 MR. WEAVER: Q: Would you also confirm that behaviour  
20 is also a key factor in commercial loads?

21 MR. HOBSON: A: It can be a key factor in commercial  
22 loads. There is a distinction, I suppose, between  
23 behavioural change and operational practice, which  
24 becomes a little bit blurred. But behavioural still  
25 has a role to play within commercial, certainly.

26 MR. WEAVER: Q: It's a key factor, you'd agree.

1 MR. HOBSON: A: I don't know how you characterize that  
2 as being key. I think there's still important savings  
3 for us to be targeting there. With respect to the  
4 relative size of those savings compared to other  
5 savings, I'd suggest they're smaller. But important  
6 nonetheless. There's still potential savings for us  
7 to be targeting.

8 MR. WEAFFER: Q: Can you confirm that behaviour was not  
9 assessed for commercial loads in the 2007 CPR?

10 MR. HOBSON: A: I would have to check. I believe  
11 behavior -- and this is more to my point in terms of  
12 -- there's somewhat of a continuum between behaviour  
13 change and operational change, but I believe behaviour  
14 change was a portion of the CPR for the commercial  
15 study.

16 MR. WEAFFER: Q: Would you undertake to confirm that?  
17 My understanding -- my instructions are it was not, so  
18 would you undertake to confirm whether behaviour was  
19 assessed for commercial loads in the 2007 CPR?

20 MR. HOBSON: A: Yeah. And my only qualifier to that  
21 is, it could have been characterized within that study  
22 as operational. But even within that, I believe there  
23 was a distinction.

24 MR. WEAFFER: Q: Okay.

25 MR. GODSOE: We'll take that undertaking.

26

**Information Request**

1

2 THE CHAIRPERSON: Thank you, Mr. Godsoe.

3 MR. WEAVER: Q: Can you confirm that your PowerSmart  
4 Partners program in part attempt to get behavioural  
5 changes and building maintenance practice changes  
6 which can lead to significant energy efficiency  
7 opportunities?

8 MR. HOBSON: A: There's part of the design of that  
9 initiative that does go after those savings, yes.

10 MR. WEAVER: Q: Thank you. I'm moving on from that  
11 topic, although still looking at opportunities for  
12 added DSM. There was discussion with Mr. Wallace  
13 yesterday around conservation rates, and I don't wish  
14 to go over that which he covered, but I just have an  
15 add-on in terms of understanding how conservation --  
16 how DSM savings get identified through rates. And the  
17 reference -- actually, I don't -- the reference isn't  
18 relevant. It's a general question in understanding of  
19 -- for the calculation I'm trying to get to.

20 In terms of inclining block or two-part  
21 rates, when there is an inclining block or two-part  
22 rate, or a tier rate, and a portion of that load at  
23 the margin is exposed to a higher price and a portion  
24 is exposed to a lower price, how does the DSM  
25 calculation work? Does it count against the whole  
26 load exposed to the price increase at the margin or



1 a negative savings?

2 MR. HOBSON: A: Again, I'm not sure of the specifics  
3 within the model, but I think based on what I  
4 outlined, I assume that it would take the net effect  
5 of applying that rate structure to the rate class as a  
6 whole.

7 MR. WEAVER: Q: So it takes those who have received the  
8 conservation price signal and those that have  
9 potentially received an opposite signal, and nets out  
10 the difference in terms of calculating the DSM  
11 savings.

12 MR. HOBSON: A: Yeah. And my understanding is, it's  
13 not precisely going in and looking at those individual  
14 customers but it's looking at the class as a whole.  
15 And in looking at the class as a whole, my  
16 understanding is it would arrive at an outcome similar  
17 to what you've described.

18 MR. WEAVER: Q: Okay, thank you. Moving on. And here  
19 my reference is Exhibit B-12, CEC IR 3.10.1. And the  
20 discussion centered around B.C. Hydro's reliance on  
21 non-firm Heritage hydro and market resources and, as I  
22 understand it, B.C. Hydro is precluded from relying on  
23 DSM savings for planning purposes, correct?

24 MR. REIMANN: A: I'm not sure I heard you correctly.

25 MR. MATHESON: A: Did you say DSM savings?

26 MR. WEAVER: Q: B.C. Hydro is precluded from relying

1 for planning purposes on DSM savings.

2 MR. REIMANN: A: No.

3 MR. GODSOE: No, that's not correct.

4 MR. WEAVER: Q: Okay, thank you. I'll move on from  
5 that. Sorry, Mr. Chairman. I am going to move to a  
6 different topic, then. The premise was incorrect,  
7 we'll leave the line.

8 I did want to --

9 MR. GODSOE: Maybe I can help you out. You said DSM.  
10 Did you mean downstream benefits?

11 MR. WEAVER: No.

12 MR. GODSOE: No, it was DSM.

13 MR. WEAVER: No.

14 MR. GODSOE: Electricity supply obligation definition, I  
15 think, in SD 10, it answers that quite clearly.

16 MR. WEAVER: Thank you, Mr. Godsoe.

17 MR. WEAVER: Q: I'd like to move to the topic of DSM  
18 amortization, and my reference for this -- this is a  
19 topic for this panel, just to confirm. The reference  
20 is from Appendix K at page 96, which sets out the  
21 persistence in years of DSM program activity.

22 **Proceeding Time 9:15 a.m. T11**

23 MR. HOBSON: A: Can you give me the reference again  
24 please, Mr. Weaver?

25 MR. WEAVER: Q: It's Appendix K, page 96.

26 MR. HOBSON: A: I have that.

1 MR. WEAVER: Q: And here we see the weighted average of  
2 the persistence in years of the programs as 11 years.  
3 MR. HOBSON: A: On page 99?  
4 MR. WEAVER: Q: I have 96 on my reference here.  
5 MR. HOBSON: A: Oh, sorry, I'm looking at page 99 of  
6 213 where I think you're looking.  
7 MR. WEAVER: Q: Oh, that's correct, that's correct,  
8 yes, Mr. Hobson.  
9 MR. HOBSON: A: Yeah.  
10 MR. WEAVER: Q: You're on the right page. Thank you.  
11 MR. HOBSON: A: Sorry, and your question?  
12 MR. WEAVER: Q: So here we see the persistence of the  
13 programs is, the weighted average is 11 years. Would  
14 you agree with me that that was at a minimum point to  
15 an amortization period of at least 11 years for DSM  
16 programs?  
17 MR. HOBSON: A: Can you say that again please?  
18 MR. WEAVER: Q: The persistence in years of these DSM  
19 programs has a weighted average of 11 years. As I  
20 understand B.C. Hydro's amortization of DSM programs  
21 it's done over 10 years?  
22 MR. HOBSON: A: It's done over 10 years, that's  
23 correct.  
24 MR. WEAVER: Q: And would you agree with me on the face  
25 of this description of the persistence of the  
26 programs, that the customers are at least seeing the

1 effect over 11 years?

2 MR. HOBSON: A: On average the effect would be over 11  
3 years.

4 MR. WEAVER: Q: So can you help me with how B.C. Hydro  
5 arrived at the 10-year period for amortization of its  
6 DSM programs?

7 MR. HOBSON: A: I think in part it stems from the  
8 history surrounding this, in that -- and this probably  
9 goes back more than 10 years now, where B.C. Hydro  
10 moved to a 10-year amortization period and consistent  
11 with a Commission direction that allowed B.C. Hydro to  
12 amortize up to a 10-year amount. And B.C. Hydro has  
13 followed that practice since that point. And this is  
14 more of a check to see if we are still in the same  
15 ballpark of that 10-year period and whether or not it  
16 would warrant us making a change.

17 So for example, if we had a weighted  
18 average that was significantly below 10 years or  
19 significantly above 10 years, I think we would revisit  
20 that practice. But coming in at 11 years against an  
21 amortization of 10, I think the belief at that point  
22 was we were still in the right range of using 10  
23 years.

24 MR. WEAVER: Q: Would you agree with this, that this  
25 review of the program shows that 11 years is, at a  
26 minimum, a more appropriate period for amortization of

1 the costs of these programs?

2 MR. HOBSON: A: I'm not sure I can speak to that. I  
3 think we're starting to get into financial or  
4 accounting issues. What I can say is that the 11  
5 years is the weighted average of the persistence of  
6 the benefits the ratepayers would see. I think there  
7 are a number of tradeoffs to consider when you set  
8 amortization periods, and I think those are things  
9 that are Corporate Finance Group would have to balance  
10 in making a decision with respect to when an  
11 appropriate amortization period would be.

12 MR. WEAVER: Q: And if it's not your area of expertise  
13 that's fine, but would you agree me at a high level  
14 that the amortization period should match the lifetime  
15 of a program?

16 MR. HOBSON: A: Again, I think that's probably  
17 something that gets a little bit out of my expertise.  
18 I think in general a policy where you're matching cost  
19 to benefits is a good approach. I think, as I've  
20 explained though, I think there's a number of  
21 tradeoffs that I would imagine a Corporate Finance  
22 Group would look at when arriving at an amortization  
23 period, and that would start quickly to get outside of  
24 my area of expertise in terms of how they would  
25 balance those tradeoffs when arriving at what an  
26 appropriate level would be.



1 savings, and if you're looking to amortize costs in  
2 general the -- you know, vast majority of the costs  
3 within our demand-side management plan are aimed at  
4 concepts around programs versus codes and standards.  
5 There's certainly interplay between the two, and  
6 there's a lot of situations where programs -- and I  
7 think we've documented this likely with letters from  
8 both the federal and provincial government, but  
9 programs can play a key role in paving the way for  
10 codes and standards to move forward. That aside, the  
11 bulk of our expenditures are directed towards program  
12 activity, not codes and standards.

13 MR. WEAVER: Q: Well, would you agree with me that the  
14 impact of codes and standards on behaviour is for a  
15 period longer than ten years?

16 MR. HOBSON: A: Can you repeat that, please?

17 MR. WEAVER: Q: Would you agree with me that the period  
18 of impact of codes and standards changes is for a  
19 period of longer than ten years?

20 MR. HOBSON: A: I think I would fall back to my  
21 previous comments. I think there would certainly be  
22 codes and standards that would drive out activity  
23 beyond that. And whether or not that came in over ten  
24 years, I expect it would, but I haven't done that  
25 calculation.

26 MR. WEAVER: Q: Just before moving off the topic, Mr.

1 Austin took us back to the 1980s last year, and I did  
2 want to go to the PowerSmart 1 program and its  
3 lifespan. And this is discussed in IPPBC IR 3.15.9.  
4 And there, I don't think you need to turn to it, but  
5 the table, in terms of the lifespan and impact of  
6 PowerSmart 1 commences in 1989 and carries through to  
7 2008. Would that not indicate a fairly long time  
8 period of these programs being in place and having  
9 effect?

10 MR. HOBSON: A: For some of them, and I think that's  
11 consistent with what you see here as well. So, you'll  
12 see a trailing off -- it might be best if I do turn to  
13 the reference --

14 MR. WEAVER: Q: That's fine, yes.

15 MR. HOBSON: A: -- and specify numbers.

16 MR. WEAVER: Q: It's Exhibit B-12, IPPBC IR 3.15.9.

17 MR. HOBSON: A: Yeah. So, if you look at the -- I'm  
18 going to flip back to page 99 of 213, which is the  
19 persistence table within our current application, and  
20 you'll see a range of different persistence levels  
21 depending on the initiative. And what that tells you  
22 is that some energy savings are going to persist for a  
23 shorter period of time than others, and there are  
24 quite a number of initiatives that have persistence  
25 that carry out for quite a period of time. And so  
26 consistent with that, when you look at the table from

1 the IR reference of 3.15.9, you'll see that there are  
2 savings that do persist quite a period out into time,  
3 but you'll also see that those savings numbers are  
4 starting to decay. And that decay is indicating the  
5 fall-off related to the persistence values expiring,  
6 essentially, over time. So, it's not surprising, and  
7 it shouldn't be surprising, that we do have some  
8 savings that are still in play quite a period out into  
9 time, but that they are dropping off.

10 MR. WEAFFER: Q: Quite a period of time, in excess of  
11 ten years, you'd agree.

12 MR. HOBSON: A: For some of them, and I think you would  
13 see the same if we modeled the plan we have now,  
14 you'll see some savings will persist for a much longer  
15 period than ten years, and others will be shorter.  
16 And what we've indicated in the table is an average.

17 MR. WEAFFER: Q: Just focusing now off amortization but  
18 on DSM spending, and here --

19 MR. HOBSON: A: Do I still need the reference, Mr. --

20 MR. WEAFFER: Q: No, you won't need the reference.

21 We're finished with the amortization period, thanks.

22 The reference was -- here is CEC IR 3.19.1.  
23 And the topic is risk of over-collection on DSM  
24 expenditures.

25 Sorry, over- and under-expenditures, I  
26 should say more clearly. The purpose of the IRs was

1 to try and understand the risk of B.C. Hydro  
2 underspending on DSM plans. Can you quantify what  
3 might be an expected level of underspending on DSM  
4 plans?

5 **Proceeding Time 9:24 a.m. T13**

6 MR. HOBSON: A: I'm not sure I understand your  
7 question.

8 MR. WEAFFER: Q: Has B.C. Hydro got a history of  
9 underspending on DSM plans, underspending to budget?

10 MR. HOBSON: A: I'd say over the last few years our  
11 tendency has been to underspend.

12 MR. WEAFFER: Q: Has B.C. Hydro ever overspent on its  
13 DSM budgets?

14 MR. HOBSON: A: I'm not certain. If you went back over  
15 the records, B.C. Hydro has got a long history of DSM  
16 and I'm not -- I couldn't speak to that.

17 MR. WEAFFER: Q: Could you undertake to provide for the  
18 last 10 year whether it's overspent on its DSM  
19 budgets?

20 MR. GODSOE: I'm going to have to check whether that's  
21 possible.

22 THE CHAIRPERSON: I have a suspicion -- not a suspicion.  
23 I have a recollection that this ground was fairly well  
24 ploughed at the last IEP/LTAP, was it not?

25 MR. WEAFFER: It's not on the record --

26 THE CHAIRPERSON: I get a feeling of *déjà vu* here.

1 MR. WEAFFER: It's not a matter that's been dealt with in  
2 this proceeding, Mr. Chairman. It's a fairly  
3 straightforward question, I suggest, and there is a --

4 THE CHAIRPERSON: Well, it would certainly be helpful if  
5 B.C. Hydro could inform themselves as to whether they  
6 did address this at the last LTAP.

7 MR. GODSOE: We don't need to take time to -- I know it  
8 was addressed. My friend is right, it's not on the  
9 record here, but it was absolutely addressed in the  
10 IEP. All I'm suggesting is I need some time to figure  
11 out whether this is doable or not. So I'm not  
12 prepared to take the undertaking quite yet.

13 THE CHAIRPERSON: I'll give you that time, Mr. Godsoe.

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

15 MR. WEAFFER: Q: In this application there is a  
16 significant investment in DSM plans. Can you tell me  
17 whether you believe there's a greater risk that B.C.  
18 Hydro will underspend on its DSM plans as a result of  
19 the fairly aggressive program that's put forward?

20 MR. HOBSON: A: I think in total I wouldn't see it as  
21 being a greater risk. I think what we've outlined are  
22 a number of risks associated with DSM over the last  
23 few days. One of those risks that we face is that  
24 we're reliant upon participants moving forward. We do  
25 have fairly aggressive targets. We've set them in a  
26 manner that we think we can achieve and the dollars

1           that we believe are required to achieve them. But I'm  
2           not sure that the risk of being underspent or  
3           overspent has shifted from where we've been in the  
4           past.

5 MR. WEAFFER:   Q:    If you look at the status of B.C. Hydro  
6           today with respect to implementation of the DSM  
7           initiatives, and assuming endorsement from the  
8           Commission, can you tell me at a high level how much  
9           of the organization and infrastructure and support  
10          spending is in place to support the DSM planned  
11          expenditures?

12 MR. HOBSON:   A:    I think the infrastructure is largely  
13          in place. I think the key will be in the initial  
14          period is ramping up new programs and actually getting  
15          new programs in place. And one of the difficult  
16          things with new initiatives when you put them in  
17          market is getting traction within the marketplace.  
18          And sometimes it's not the participants that are the  
19          difficulty, it's the trade ally support that you  
20          require to actually get the traction within the  
21          marketplace, and estimating the ramp upon that  
22          sometimes is difficult.

23                        So I think the infrastructure internally is  
24                        there, but with some of the newer initiatives, pegging  
25                        the specific timing in terms of the ramp-up can be a  
26                        difficult thing to estimate and sometimes we get that

1 on one side of the fence or the other.

2 MR. WEAVER: Q: I take it from that response that there  
3 is a risk of underspending on these programs.

4 MR. HOBSON: A: Consistent with what I outlined before,  
5 yes.

6 MR. WEAVER: Q: Has B.C. Hydro considered establishing  
7 a deferral account for under or overspending on DSM  
8 budgeted expenditures?

9 MR. HOBSON: A: I'm recalling an IR that we may have  
10 been asked something similar.

11 MR. GODSOE: There is an IR. The answer is no.

12 MR. HOBSON: A: I'll find the IR.

13 MR. WEAVER: Q: I think the IR response is -- or sorry,  
14 the IR is JIESC 3.26.2, but the question was not  
15 specific to a deferral account, so that that's why  
16 I've asked specific question. There the question was  
17 why has B.C. Hydro not proposed applying excess  
18 recoveries of DSM cost against recoveries in future  
19 years.

20 **Proceeding Time 9:29 a.m. T14**

21 MR. HOBSON: A: So, again, this -- well I should maybe  
22 have a look at the IR response first.

23 And your question was, have we considered?

24 MR. WEAVER: Q: Yes.

25 MR. HOBSON: A: Again, that may be something that gets  
26 beyond my ability to answer and more within Corporate

1 Finance. It wouldn't be something that our group  
2 would take a look at. I mean, the deferral of it is  
3 more of an accounting issue in terms of how it's  
4 applied. But I think the answer actually gets into  
5 some of the considerations that have been put on the  
6 table with respect to why it may not have gone any  
7 further if it had been considered.

8 MR. WEAVER: Q: But given the prior discussion around  
9 the level of DSM expenditures and potential risk of  
10 under spending, that would be a topic, I take it,  
11 finance would talk to you about in terms of are we  
12 going to have a material level of under spending this  
13 year, is that correct?

14 MR. HOBSON: A: We would have discussions with that, no  
15 different than any other part of B.C. Hydro with  
16 respect to actuals against plan.

17 MR. MATHESON: A: I would have thought the question of  
18 a deferral account would have been better put in a  
19 revenue requirement application, Mr. Weaver, wouldn't  
20 you?

21 MR. WEAVER: Q: Well, the volume of the DSM  
22 expenditures is something that we're dealing with in  
23 this proceeding, so that the issue is certainly live  
24 here, Mr. Matheson.

25 I'm going to move on from that topic and  
26 I'm -- I'd like to deal with a topic which arises out

1 of Exhibit B-12, BCUC staff IR 3.258.1, and we're  
2 dealing with the evidentiary update and the level of  
3 risk associated with achieving the 10,900 gigawatt  
4 hours in fiscal 2020.

5 MR. MATHESON: A: Yeah, we've read that.

6 MR. WEAFFER: Q: Okay. Would this analysis of risk of  
7 achieving the original 10,900 gigawatt hours also be  
8 affected by the level of expenditures B.C. Hydro is  
9 planning to make?

10 MR. HOBSON: A: Sorry, when you say the analysis,  
11 you're meaning the probability distribution?

12 MR. WEAFFER: Q: Yes.

13 MR. HOBSON: A: I think what was done with the  
14 probability distribution was more of an update to that  
15 distribution.

16 MR. REIMANN: A: Sorry, can you repeat the question?

17 MR. WEAFFER: Q: Would this analysis of risk of  
18 achieving the original 10,900 gigawatt hours also be  
19 affected by the level of expenditure B.C. Hydro is  
20 planning to make?

21 MR. HOBSON: A: In general our analysis of risk in  
22 making the adjustment within the evidentiary update  
23 did consider the amount of expenditure level that we  
24 would be putting forward.

25 MR. WEAFFER: Q: So when the opportunity for savings is  
26 lowered at the time the forecast load increase is

1 reduced, then we would expect that the effort and  
2 expenditure B.C. Hydro would require to obtain the  
3 reduced level of savings opportunity would be reduced  
4 also.

5 MR. HOBSON: A: Can you say that again, please?

6 MR. WEAVER: Q: When the opportunity for savings is  
7 lowered at the time the forecast load increase is  
8 reduced, then we would expect the effort and  
9 expenditure B.C. Hydro would require to obtain the  
10 reduced level of savings opportunity to be reduced.

11 MR. HOBSON: A: I'm not following that.

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

13 MR. WEAVER: Q: If you -- B.C. Hydro in its evidentiary  
14 update reduced its load forecast but kept the level of  
15 expenditures on DSM the same, correct?

16 MR. HOBSON: A: That's correct.

17 MR. WEAVER: Q: So I'd suggest to you that one of two  
18 things has occurred. B.C. Hydro has reduced its  
19 productivity in achieving DSM savings, or (2) the  
20 additional expenditures will result in achieving more  
21 than the reduced levels of savings anticipated. Are  
22 those the two --

23 MR. HOBSON: A: Yeah. What we saw at the time was, as  
24 a result of the reduction in the load forecast and in  
25 part the reasons for why the load forecast had been  
26 reduced, that we were concerned that two things had

1           happened. One would be that the rate changes that  
2           were driving a portion of that load forecast  
3           adjustment, to the degree that those are essentially  
4           materializing now as natural conservation or energy  
5           savings but captured within the load forecast. Those  
6           are more than likely to be capturing the lower-cost  
7           opportunities that are in the marketplace. Those are  
8           the things that people would be responding to on their  
9           own first. And to that degree, the lower-cost  
10          opportunities would be what would be eroding from our  
11          potential. So to achieve a similar level of savings,  
12          we would have to assume that we're going further up  
13          that cost curve.

14                        The other thing that we were concerned  
15          about was the other drivers behind the reduction in  
16          the load forecast had to do with economic conditions,  
17          and that in light of those economic conditions the  
18          concern was some of the barriers that in place within  
19          the market had likely strengthened. And for that  
20          reason we were seeing that there would likely be a  
21          change in the relationship between the dollars  
22          required to achieve a level of savings than what we  
23          had previously put forward.

24   MR. WEAFFER:    Q:    So the level of savings and the level  
25                        of expenditures are not necessarily linearly related.  
26                        Is that a fair summary of what you said there?

1 MR. HOBSON: A: I think that's fair, yes.

2 MR. WEAFFER: Q: And B.C. Hydro applied judgment in  
3 terms of determining that. That's not a formulaic  
4 calculation and you applied your judgment to those  
5 changes.

6 MR. HOBSON: A: Absolutely, yeah.

7 MR. WEAFFER: Q: Would you agree with me that the  
8 reality is that by maintaining the level of  
9 expenditures B.C. Hydro has increased the likelihood  
10 of achieving the reduced level of savings shown in the  
11 evidentiary update, versus the likelihood of achieving  
12 the same level in the original application?

13 MR. HOBSON: A: Can you say that again please?

14 MR. WEAFFER: Q: You've increased your likelihood of  
15 achieving the DSM savings by maintaining the level of  
16 expenditures, notwithstanding the reduction in the  
17 load?

18 MR. HOBSON: A: Well, I think what we've done is, by  
19 putting forward a reduced level of savings but  
20 maintaining the expenditures, we've improved our  
21 chances of achieving the level of savings we have  
22 adjusted to, versus what it otherwise would have been  
23 if we had also adjusted those expenditures.

24 MR. WEAFFER: Q: Thank you. I've got a more technical  
25 set of questions to understand the response to an IR  
26 on this same topic, and here the reference is Exhibit

1 B-12, BCUC IR 3.259.3. And I can assure you as we go  
2 through these questions, when I say "I" it will be my  
3 consultant, because he will understand this far better  
4 than I do from the record, I hope.

5 And here we have the components of the  
6 calculation that underpin the reduction in the  
7 expected DSM savings from 10,900 to 9600 gigawatt  
8 hours by 2020, and I just want to go through the table  
9 to ensure that we're -- that Mr. Craig is  
10 understanding it completely and correctly.

11 MR. HOBSON: A: I agree it's complicated and I'll help  
12 you the best I can.

13 MR. WEAFFER: Q: Thank you, Mr. Hobson. You clearly  
14 know you could lose me very quickly now, so you have  
15 the advantage.

16 Now, we follow the steps from Step 1 to  
17 Step 2 to Step 3. Can you tell us how the number in  
18 Step 4 relates to the number in Step 3?

19 **Proceeding Time 9:39 a.m. T16**

20 MR. HOBSON: A: Well, I think the difference is we're  
21 shifting from the mid-level of savings to the planned  
22 level of savings is the main distinction. Both are at  
23 the customer meter. So it's really with respect to  
24 the distributions that we spoke of within Chapter 5,  
25 it's really taking a look at a different point in the  
26 distribution that was used in the LTAP analysis. So

1 as DSM plans were put together and numbers were  
2 formulated, we then applied the risk framework  
3 analysis that's outlined in Chapter 5 and Appendix F-  
4 14. F-14. And in doing so, we get a distribution  
5 curve and for the LTAP analysis they're taking points  
6 off that distribution curve And so what we're really  
7 doing here is, we're shifting on that distribution  
8 curve with respect to showing how the adjustment was  
9 made, and moving from mid to planned.

10 MR. WEAFFER: Q: And you may have partially answered  
11 this there, but if you now -- could you please explain  
12 to me the difference between DSM Option A planned  
13 savings and the DSM planned savings from Step 4 to  
14 Step 5?

15 MR. HOBSON: A: I think it's -- the difference between  
16 taking a look at DSM Option A itself that was analyzed  
17 in the LTAP analysis, chapter 3, and chapter 5, and  
18 then taking a look at the DSM plan that's put forward  
19 in Chapter 6 of Appendix K, and there are some  
20 adjustments to that, and we've spoken about a few of  
21 those earlier within the proceeding so far. So the  
22 RIB would be an example of one of those adjustments  
23 that was made, and there are some others. They're  
24 fairly minor in nature, but it's basically moving from  
25 a point on the curve from the Option A over to the DSM  
26 plan to reflect the DSM plan savings.

1 MR. WEAVER: Q: I don't wish to put you to a lot of  
2 work, but are those assumptions available and captured  
3 anywhere on the record? You say they're minor. I  
4 don't know what minor really means, so are those  
5 captured anywhere?

6 MR. HOBSON: A: I think some of them are but, I mean,  
7 they're minor in the sense that we're talking about,  
8 you know, what is it, a couple of hundred -- less than  
9 200 gigawatt hours out of a plan of 10,600. So --

10 MR. WEAVER: Q: That's the total? Or a number of  
11 adjustments of that amount?

12 MR. HOBSON: A: That's the total.

13 MR. WEAVER: Q: Okay, that's fine. Moving along, Mr.  
14 Craig follow Steps 6 and 7, but can you explain where  
15 the number in Step 8 comes from and what this  
16 adjustment is about?

17 MR. HOBSON: A: So I think at this point we're just  
18 moving from planned levels of savings back to the mid-  
19 level of savings, and we're moving from the DSM plan  
20 to the adjusted.

21 MR. WEAVER: Q: Okay.

22 MR. HOBSON: A: Adjusted DSM plan at that point. But I  
23 think the key distinction is moving from the plan to  
24 the mid.

25 MR. WEAVER: Q: So as we understand it, the overall  
26 change at the system level is about a 12 percent

1 reduction, which we understand to be an 11 percent  
2 reduction in conservation potential. Is that correct?  
3 MR. HOBSON: A: I believe the reduction in our DSM  
4 plan, if what you're referring to, is 11 percent, and  
5 that sounds correct to me.  
6 MR. WEAFFER: Q: Can you tell me whether or not the  
7 economic conservation potential in the 2007 CPR was  
8 greater than the conservation potential in the 2002  
9 CPR?  
10 MR. HOBSON: A: I can't off the top of my head, and I  
11 think it would be somewhat apples-to-oranges, in that  
12 they cover different time periods and the scope would  
13 have been different, but the specific numbers, we're  
14 going to go further out into time and have a broader  
15 scope, so I would expect that they would be larger.  
16 MR. WEAFFER: Q: Can you confirm that?  
17 MR. HOBSON: A: I think you'll get that as part of you  
18 asked for in your earlier undertakings.  
19 MR. WEAFFER: Q: Oh, that -- okay. Thank you.  
20 I just have a few clean-up questions now.  
21 And some of them may be just clarification issues. If  
22 I could turn you to Exhibit B-12 and BCUC staff IR  
23 3.269.2.  
24 MR. REIMANN: A: I have that.  
25 MR. WEAFFER: Q: And this may be a definitional issue,  
26 and I apologize if it is, but as I took -- we took

1 from the response that -- and the attachment that in  
2 defining future resources, all that come from IPP  
3 projects, as opposed to having an option where some  
4 was coming from additional DSM, are we understanding  
5 that correctly?

6 MR. REIMANN: A: Yeah, we didn't intend necessarily  
7 that that would be a commitment to acquiring IPP  
8 energy for that, but given that we'd identified the  
9 level of DSM that we could commit to, and for the  
10 purposes of filing this with the BCTC for transmission  
11 planning purposes, we wanted to select additional  
12 resource options that would meet the gap or fill the  
13 gap.

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

15 MR. WEAFFER: Q: So would this represent an abandonment  
16 of having any potential in DSM Option B, or further  
17 potential in Option DSM prime or other options that  
18 have been discussed in this proceeding?

19 MR. REIMANN: A: No, not at all. What we've said about  
20 the future resource options is that we have not yet  
21 and do not yet need to decide or commit to what those  
22 future resources are. We're keeping our options open.

23 MR. WEAFFER: Thank you, Mr. Reimann. Thank you, B.C.  
24 Hydro Panel. Mr. Chairman, those are my questions.

25 THE CHAIRPERSON: Thank you, Mr. Weafer.

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

1 MR. ANDREWS: Q: Good morning, members of the witness  
2 panel. I am going to begin at Exhibit B-4, BCUC IR  
3 2.198.1. The general topic here is the difference  
4 between DSM Option B and DSM Option A, and  
5 specifically regarding the programs components of  
6 those DSM options, can you confirm that DSM -- that  
7 the initiatives in DSM A were expanded to larger  
8 versions in DSM B, to capture higher levels of  
9 economic conservation potential while maintaining  
10 portfolio costs below new electricity supply?

11 MR. HOBSON: A: Yes, in general our approach in moving  
12 from Option A to Option B was to look at individual  
13 programs and what we could do to get more savings from  
14 those programs. So not all programs changed, but  
15 those that did were on that basis.

16 MR. ANDREWS: Q: Thank you. I'd like to refer you to  
17 Exhibit B-3, BCUC IR 1.50.3. This was an amended  
18 Table 4. It lists the program savings and all  
19 ratepayers costs in DSM Options A and B.

20 MR. HOBSON: A: We have that.

21 MR. ANDREWS: Q: The table. Just to clarify, this is  
22 essentially the same as the earlier, the unamended  
23 version of the table except the items have been  
24 reordered. Is that correct?

25 MR. HOBSON: A: No, I can't recall what the change was  
26 in the amendment, so --

1 MR. ANDREWS: Q: And I'd also just like to confirm that  
2 you have said that in scaling back in the December '08  
3 evidentiary update the size of the expected savings  
4 from DSM A, you did that on the basis of keeping it  
5 the same proportion of the economic potential. But my  
6 question is, is it correct to assume that you did not  
7 also do a bottom-up analysis of the expected savings  
8 for DSM A?

9 MR. HOBSON: A: No, we did not go through initiative by  
10 initiative. It was purely a top-down, higher-level  
11 adjustment to the plan as a whole.

12 MR. ANDREWS: Q: So looking at this Table 4 Amended,  
13 the differences in the planned energy savings between  
14 A and B, although the numbers will now be somewhat  
15 lower, the rough proportions between the two will not  
16 have changed. Is that correct?

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

18 MR. HOBSON: A: We haven't done that assessment, so  
19 what I can tell you is, when we made the adjustment in  
20 the evidentiary update, we made the adjustment at the  
21 plan level. We have not gone in and made the  
22 adjustment at the individual initiative level. We  
23 haven't done that assessment.

24 MR. ANDREWS: Q: Now, looking at -- in more detail at  
25 Table 4 amended, there are three headings,  
26 Residential, Commercial and Industrial, and then under

1       each one of those headings there are programs. And  
2       first I should confirm, is the term "program" the  
3       proper word to use for the item's behavioural voltage  
4       optimization and so on?

5 MR. HOBSON:    A:    I think that would be fine if we used  
6       that terminology.

7 MR. ANDREWS:   Q:    Yes, thank you. And I think as you  
8       explained in discussion with Mr. Weafer, the  
9       difference in size between expected savings from A and  
10       B varies by program. Some are larger, some are none  
11       at all, correct?

12 MR. HOBSON:    A:    That's correct.

13 MR. ANDREWS:   Q:    So, using as an example under the  
14       residential and the program lighting, the difference  
15       there is between program A at 148 gigawatt hours per  
16       year and B at 273 gigawatt hours.

17 MR. HOBSON:    A:    That's correct.

18 MR. ANDREWS:   Q:    And just before I follow up with that,  
19       all but one of the DSM B programs passes the total  
20       resource cost test, and I don't know if you need to  
21       look to it, but my reference is Exhibit B-3, BCUC IR  
22       1.166.1. Is that correct?

23 MR. HOBSON:    A:    It's probably best if we can get the  
24       reference.

25 MR. ANDREWS:   Q:    Okay. So that was Exhibit B-3, BCUC  
26       IR 1.166.1.

1 MR. HOBSON: A: I have that.

2 MR. ANDREWS: Q: On the second page in the response,  
3 there is a table. Under the heading "all ratepayers  
4 test", all of the numbers are greater than 1, with the  
5 exception of load displacement programs, residential,  
6 which is 0.9. Correct?

7 MR. HOBSON: A: That appears to be correct, yes.

8 MR. ANDREWS: Q: Thank you. So, coming back to the  
9 table --

10 MR. HOBSON: A: The previous IR reference?

11 MR. ANDREWS: Q: The Table 4 amended we were looking  
12 at.

13 MR. HOBSON: A: That was 2.198.1?

14 MR. ANDREWS: Q: 1.50.3, in Exhibit B-3.

15 MR. HOBSON: A: Oh, sorry, I didn't have the right one  
16 written down.

17 MR. ANDREWS: Q: And now I will be turning to Appendix  
18 K in Exhibit B-1. I'm going to follow up a bit here  
19 about the lighting residential program as an example.  
20 So I would turn to sub-appendix F, which provides  
21 program summaries. It begins at page 137 of 213.

22 MR. HOBSON: A: Can you give me the page reference  
23 again, please?

24 MR. ANDREWS: Q: 137 of 213.

25 MR. HOBSON: A: And it's the lighting program in  
26 particular on page 141?

1 MR. ANDREWS: Q: That's correct.

2 MR. HOBSON: A: Okay.

3 MR. ANDREWS: Q: So just so we orient ourselves, this  
4 is Sub-appendix F, which provides program summaries,  
5 and these summaries correspond to the line items in  
6 Table 4 amended. Correct?

7 MR. HOBSON: A: Can you say that again, please?

8 MR. ANDREWS: Q: The Sub-appendix F provides program  
9 summaries that correspond to the line items in Table 4  
10 amended.

11 MR. HOBSON: A: Not to the numbers necessarily, but --  
12 for the reasons I outlined earlier in terms of some of  
13 the adjustments, but the content or the topic or the  
14 subject of the program would align, yes.

15 MR. ANDREWS: Q: Yes. Well, Sub-appendix F doesn't  
16 have numbers.

17 MR. HOBSON: A: Oh, sorry, I thought you were looking  
18 again at the Table 4.

19 MR. ANDREWS: Q: Table 4 has the numbers and what I  
20 just want to confirm is that the programs that are  
21 described in Table 4 --

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

23 MR. ANDREWS: Q: Same programs.

24 MR. HOBSON: A: Are the same programs that are in Sub-  
25 appendix F.

26 MR. ANDREWS: Q: Yeah. So for lighting at page 141,

1 the current emphasis of the program is on encouraging  
2 the use of compact fluorescent lamps, correct?

3 MR. HOBSON: A: That's one of the components of the  
4 program and it's a large component of it.

5 MR. ANDREWS: Q: And one of the emerging areas is  
6 what's described here as LED technology for lighting?

7 MR. HOBSON: A: Right, which is further out in time  
8 within the cost and energy streams of that program.

9 MR. ANDREWS: Q: Mr. Plunkett yesterday used the term  
10 "solid state lighting". Can you confirm that that  
11 generally describes LED technology?

12 MR. HOBSON: A: Yeah, I'm not certain as to what Mr.  
13 Plunkett was speaking to, but solid state would be  
14 used in referencing LED lighting.

15 MR. ANDREWS: Q: With the compact fluorescent lamps, is  
16 it fair to say that Hydro is at or is approaching a  
17 market transformation degree of response?

18 MR. HOBSON: A: Part of what I did hear from Mr.  
19 Plunkett yesterday, I think we're in a similar  
20 situation as he is in Vermont. So market  
21 transformation is a question of degree. We have a  
22 significant penetration that we've built up of CFLs  
23 since getting involved in this market heavily back in  
24 around 2001. With that said, and Mr. Plunkett used  
25 some numbers, I believe, in the 40 range, so a single  
26 family home has, you know, 40-some-odd opportunities

1 for a light bulb, if you will, on average. And we've  
2 got a significant penetration of CFLs built up, but we  
3 still have quite a gap between the number of CFLs  
4 you'd find within a home and the total number of  
5 opportunities for a light bulb. And part of that is  
6 there is not suitability for CFLs in all of those  
7 applications.

8 So there's still room. We've overcome a  
9 lot of the barriers, but there's still a lot of work  
10 to do, I think, in CFL. There's still a lot of  
11 potential still remaining, but the market is moving  
12 quickly, I think, in this area.

13 MR. ANDREWS: Q: Thank you. Now, the LED technology,  
14 it's LEDs that are used in the new type of seasonal  
15 lights, correct?

16 MR. HOBSON: A: Yes, yes.

17 MR. ANDREWS: Q: But the LED technology -- that's  
18 identified LED seasonal lights as a sub-program, but  
19 the LED technology that you're looking at when the  
20 market is ready is for room lighting and outdoor  
21 lighting. It is not the same type of thing as a  
22 seasonal light, correct?

23 MR. HOBSON: A: It's a similar technology but it's a  
24 different application. So when we talk about seasonal  
25 lights, or people would refer to them as Christmas or  
26 holiday lights, that's more the application we're

1            talking about. When we look at the LED lighting as  
2            that separate component, then we're getting into more  
3            your general lighting within a home, whether it's  
4            accent or ambient lighting.

5 MR. ANDREWS:    Q:    Thank you. And in general your  
6            intention with the LED lighting program when it goes  
7            forward is to produce the similar progress toward a  
8            market transformation as you have had or are in the  
9            process of achieving with the compact fluorescents, is  
10           that fair to say?

11 MR. HOBSON:    A:    That would be the general intent, yes.

12 MR. ANDREWS:    Q:    In the program description, the status  
13            of the LED home lighting is described as perhaps  
14            coming to operational in 2011. Has anything changed  
15            in terms of the timing of the LED coming onto the  
16            market?

17 MR. HOBSON:    A:    Not that I'm aware of. I'm not sure of  
18            any --

19 MR. ANDREWS:    Q:    The reference, sorry, is page 144,  
20            about the middle of the page under "Timing". It says,  
21            "The LED element is planned to start in fiscal 2011."

22 MR. HOBSON:    A:    Yeah, I see that. I'm not aware of  
23            anything since putting this together that would alter  
24            the timing. I would expect that the timing, similar  
25            to when we got into CFLs, would be somewhat of a slow  
26            ramp-up that would build.

1 MR. ANDREWS: Q: Thank you. And I assume that there  
2 will be certain types of LED lighting available sooner  
3 than other types.

4 MR. HOBSON: A: And I think we see that already with  
5 the seasoning lighting, yes.

6 MR. ANDREWS: Q: Okay.

7 MR. HOBSON: A: We also see it in commercial signage,  
8 and we're starting to see it with accent lighting  
9 already.

10 MR. ANDREWS: Q: Is accent --

11 THE CHAIRPERSON: Mr. Andrews -- sorry.

12 MR. ANDREWS: Go ahead.

13 THE CHAIRPERSON: Keep going. It was going to point out  
14 it's around break time, so when it's convenient.

15 MR. ANDREWS: Let me just finish on this topic then.

16 MR. ANDREWS: Q: Accent lighting, is that typically  
17 track lighting, are they synonymous or is there a  
18 difference?

19 MR. HOBSON: A: There's a difference. Track lighting  
20 could be used for accent lighting. It could also and  
21 often is used within houses for ambient lighting.

22 MR. ANDREWS: Okay. Well, I'll stop at that point then.

23 THE CHAIRPERSON: Okay, we'll recess for 15 minutes.

24 **(PROCEEDINGS ADJOURNED AT 10:00 A.M.)**

25 **(PROCEEDINGS RESUMED AT 10:15 A.M.)** **T21**

26 THE CHAIRPERSON: Please be seated.

1 MR. ANDREWS: Q: Mr. Hobson, we were talking about LED  
2 lights. The comparisons are often made between CFLs  
3 and incandescents, and LEDs and incandescents. How do  
4 the LEDs compare to halogen light bulbs?

5 MR. HOBSON: A: In terms of efficiency levels?

6 MR. ANDREWS: Q: Yes.

7 MR. HOBSON: A: Well, it will somewhat depend on the  
8 type of light, but halogens won't be terribly  
9 different than an incandescent bulb, and an LED would  
10 typically be about 90 percent more efficient than an  
11 incandescent.

12 MR. ANDREWS: Q: So is it fair to say that CFLs are  
13 awkward as a replacement for a halogen light?

14 MR. HOBSON: A: It depends on the type of halogen bulb.  
15 So we should be clear. There's different types of  
16 halogen bulbs, and you may -- your reference to me  
17 earlier on track lighting, I'm assuming you're talking  
18 about very small track lights, and the halogen bulbs  
19 that go within those.

20 MR. ANDREWS: Q: Yeah, let's use that as an example.

21 MR. HOBSON: A: Yeah. CFLs -- there are CFL bulbs  
22 actually available now that are a replacement for  
23 certain types of halogens of that nature. But I don't  
24 think that they have much of a market share, and I  
25 would suggest that LEDs going forward may be a more  
26 suitable alternative for those.

1 MR. ANDREWS: Q: Okay. What is the nature of the light  
2 -- the type of light from LEDs that -- in earlier  
3 discussions -- your earlier evidence, it was said that  
4 some people prefer the light from CFLs and others do  
5 not, or for different purposes one is preferred over  
6 the other. How do LEDs fit into that?

7 MR. HOBSON: A: In terms of consumer preferences?

8 MR. ANDREWS: Q: Yes.

9 MR. HOBSON: A: Well, I think we're still early days  
10 with respect to that, but the issue -- if you took it  
11 with the seasonal LEDs, I remember when we first  
12 brought those into the -- into Canada, actually, into  
13 the province, you know, there was as many people that  
14 didn't like those, and we were quite concerned about  
15 the type of light, and people were used to Christmas  
16 lights being sparkly lights. And we were amazed by  
17 the reaction that we got, and how many people liked  
18 the LED lights because they were different, and  
19 they've taken hold. So sometimes it takes a little  
20 while for people's preferences around lights, it's  
21 more of a personal preference, and I think we're in  
22 early days in understanding how that's going to take  
23 shape with LEDs going forward.

24 The larger issue, I think, with LEDs  
25 currently is the amount of light you can actually  
26 punch out from them. And the applicability of the

1 size of an LED bulb, if you will, that would go into a  
2 fixture, and the amount of light, useable light, you  
3 could actually get into a space to make it a  
4 replacement. And that's where the technology is  
5 having to need to advance before I think it will  
6 become mainstream. And so to get that amount of light  
7 out, you're getting into higher-cost product, and the  
8 real changes will have to be in the amount of light  
9 that they can get out within keeping it in the same  
10 size that would be a suitable replacement for what's  
11 in market now.

12 MR. ANDREWS: Q: Thank you. And then just to go back  
13 to the Table 4 amended for lighting, with the  
14 expenditures at the --

15 MR. MATHESON: A: Mr. Andrews, can you give us a --  
16 when you say Table 4 amended, what are you referring  
17 to?

18 MR. ANDREWS: Q: Oh, yeah, you may want to keep this  
19 handy. This is Exhibit B-3, BCUC IR 1.50.3. It's the  
20 table showing planned energy savings from A and B.

21 MR. MATHESON: A: Okay.

22 MR. ANDREWS: Q: So for lighting, as an example, the  
23 expenditures on B, within the B category would be --  
24 just looking at the numerical comparison for general  
25 purposes, going from 148 to 273 is 125 additional  
26 gigawatt hours per year, and the number is not

1 important, but it's more than 50 percent of the  
2 savings from DSM A are proposed or estimated there for  
3 DSM B. And the way that those would be changed would  
4 be by -- in expansion of the same type of lighting  
5 program that would be under A, but with higher  
6 incentives or more expenditures on the activities  
7 within the program. Is that correct?

8 MR. HOBSON: A: Yes. It's my understanding is, it's a  
9 changed offer. I'm assuming you don't need me to  
10 comment on the numbers that you put forward in your  
11 statement.

12 MR. ANDREWS: Q: No.

13 **Proceeding Time 10:20 a.m. T21**

14 MR. HOBSON: A: But the general intent with the change  
15 would be -- it's a changed offer that's a more  
16 attractive offer, and we're assuming a higher level of  
17 participation as a result of the change in offer.

18 MR. ANDREWS: Q: Thank you. I'd like to -- oh, one  
19 thing, just to confirm, my reference here is Exhibit  
20 B-1, Appendix F-17, page 9. I want to confirm that  
21 the supporting initiatives expenditures are the same  
22 for both DSM A and DSM B.

23 MR. HOBSON: A: They are, yes.

24 MR. ANDREWS: Q: Okay. Now, I'm going to talk about  
25 heat pumps, electric heat pumps at this point, and one  
26 aspect of this and I'll refer you here to Exhibit C13-

1 12, page --

2 MR. HOBSON: A: Mr. Andrews, are we done with 50.3 now?

3 MR. ANDREWS: Q: Let's keep that open if you wouldn't  
4 mind, we may come back to that.

5 So C-13-12. This is the external review  
6 panel consultative report, page 24.

7 MR. HOBSON: A: I have that.

8 MR. ANDREWS: Q: And the discussion here, the  
9 participants in the review panel are providing their  
10 summarized comments on fuel switching. And I'm  
11 looking at the comment by Nicholas Heap of the David  
12 Suzuki Foundation, and his first paragraph, last  
13 sentence, he says:

14 "A shift towards ground-source or air-source  
15 heat pumps, however, will provide heat far  
16 more efficiently than electric resistance  
17 heating can provide, without increasing GHG  
18 emissions."

19 Do you see that?

20 MR. HOBSON: A: I see that.

21 MR. ANDREWS: Q: Is it fair to say that electric heat  
22 pumps, although they may not be suitable in all  
23 situations, are in some situations an alternative to  
24 an electric resistance heating?

25 MR. HOBSON: A: You put a lot of qualifiers around  
26 that, so I think that would be a fair statement, yes.

1 MR. ANDREWS: Q: All right. And by electric resistance  
2 heating in the residential category, we're typically  
3 talking about baseboard heaters?

4 MR. HOBSON: A: I think that's the intent behind Mr.  
5 Heap's reference, yes.

6 MR. ANDREWS: Q: Okay.

7 I'd like to refer you now to Exhibit B-3,  
8 ESVI IR 1.8.3.

9 MR. HOBSON: A: Are we finished with the external  
10 review panel?

11 MR. ANDREWS: Q: Yes.

12 MR. HOBSON: A: Attachment 1.

13 MR. ANDREWS: Q: I have that.

14 MR. HOBSON: A: So they -- the IR itself relates to  
15 B.C. Hydro's renovation rebate program and LiveSmart.  
16 First, can you confirm that LiveSmart B.C. is a  
17 program run by the Ministry of Energy, Mines and  
18 Petroleum Resources?

19 MR. ANDREWS: Q: Yeah, LiveSmart is sort of an umbrella  
20 initiative that combines a variety of different  
21 initiatives under one umbrella. So essentially our  
22 renovation rebate program nests within the umbrella of  
23 LiveSmart, and in that it provides, I think, the  
24 provincial government's response to a coordinated  
25 effort between Terasen and B.C. Hydro, in that it  
26 provides a one-stop shop or a seamless view to the

1 customer across gas and electricity under the  
2 LiveSmart umbrella. But it ties back to specific  
3 initiatives either by B.C. Hydro, by government, or by  
4 Terasen within that.

5 MR. HOBSON: A: Does B.C. Hydro contribute financially  
6 to the LiveSmart B.C. programs?

7 MR. ANDREWS: Q: Consistent with what I just outlined.  
8 So the LiveSmart program for the perspective of  
9 electricity is essentially our renovation rebate  
10 program. It's just nested under an umbrella or a  
11 brand called LiveSmart.

12 **Proceeding Time 10:24 a.m. T22**

13 MR. ANDREWS: Q: So, is it fair to say, then, that some  
14 of the funding for the LiveSmart umbrella of programs  
15 comes from B.C. Hydro, other funding would come from  
16 other sources such as Terasen?

17 MR. HOBSON: A: Right. So, if you had something that  
18 was targeting specifically gas, then that would come  
19 from a source other than B.C. Hydro. If you had  
20 something that's targeting electricity, I think it's  
21 fair to say that that funding is coming from B.C.  
22 Hydro.

23 MR. ANDREWS: Q: So now back in terms of the  
24 expenditures that B.C. Hydro is proposing in this  
25 LTAP, those expenditures -- or some of those, the  
26 applicable ones, would be delivered through the

1 LiveSmart B.C. rubric. Is that --

2 MR. HOBSON: A: Sorry, I didn't catch the end.

3 MR. ANDREWS: Q: That some of those expenditures, and  
4 you've used the example of the residential renovation  
5 rebate program, would be delivered through the  
6 LiveSmart B.C. heading.

7 MR. HOBSON: A: That's correct.

8 MR. ANDREWS: Q: Okay. On page 2 of 4 in the  
9 description of LiveSmart B.C., there is a list of  
10 items for which rebates are available. Do you have  
11 that?

12 MR. HOBSON: A: I see that, yes.

13 MR. ANDREWS: Q: Is this program in place now?

14 MR. HOBSON: A: Yes.

15 MR. ANDREWS: Q: And back to heat pumps, about halfway  
16 down the page, air source heat pumps are described,  
17 and there are a variety of different values of  
18 incentive rebate payments, depending on the area of  
19 B.C. ranging from, it looks like, \$1,060 up to \$1450.  
20 Is that correct?

21 MR. HOBSON: A: Are you asking me to confirm the  
22 numbers in the table?

23 MR. ANDREWS: Q: Yeah.

24 MR. HOBSON: A: Can you repeat them, please?

25 MR. ANDREWS: Q: Well, from 1,060 up to 1450. That's  
26 air-source heat pump --

1 MR. HOBSON: A: Yeah. I see that, yeah. One -- 1,060  
2 to 1450 would be the range that I'm seeing in that  
3 row.

4 MR. ANDREWS: Q: So, and my question isn't specifically  
5 to do with the numbers, but these are -- that's a  
6 fairly substantial incentive, but granted the capital  
7 cost of an air source heat pump is fairly substantial  
8 as well. Correct?

9 MR. HOBSON: A: That's correct, the capital cost is  
10 substantial.

11 MR. ANDREWS: Q: And just, because we'll be coming to  
12 it in a moment, also ground-source heat pumps have  
13 incentives in this program in a similar order of  
14 magnitude, \$1,000 up to \$1250?

15 MR. HOBSON: A: That's correct.

16 MR. ANDREWS: Q: And then just to expand the purview or  
17 the type of electric heat pumps, at the bottom of the  
18 page, electric water heaters have \$130 incentive for  
19 electric heat pump water heaters. Correct?

20 MR. HOBSON: A: I see that, yes.

21 MR. ANDREWS: Q: So that's another example of a heat  
22 pump application.

23 MR. HOBSON: A: Are you asking me to confirm that?

24 MR. ANDREWS: Q: Yes. We've talked about space heating  
25 by heat pumps, and electric heat pumps can also be  
26 used for water heating.

1 MR. HOBSON: A: That's my understanding, yes.

2 MR. ANDREWS: Q: Yeah. With reference to the  
3 transcript Volume 7, page 1131 and 32, which you don't  
4 need to go to, Mr. Ince indicated that he was unsure  
5 of the -- of how electric heat pumps would provide  
6 more than 100 percent efficiency, and if I asked you  
7 the question in terms of what I understand is the more  
8 correct term, the coefficient of performance, can you  
9 provide the panel with a high-level explanation of how  
10 a heat pump works?

11 MR. HOBSON: A: Works?

12 MR. ANDREWS: Q: So as to achieve that alchemy?

13 **Proceeding Time 10:29 a.m. T23**

14 MR. HOBSON: A: I'll try. Essentially you're drawing  
15 -- in a case of an air source heat pump, you're  
16 drawing energy or heat from the air; in the case for  
17 ground source or geothermal, you're drawing it either  
18 from -- heat energy from the earth or from the water,  
19 and you're running typically a fluid or -- a fluid  
20 through a series of pipes and you're getting a  
21 transfer of heat.

22 So the reason you get such a high  
23 efficiency performance from it is you're drawing  
24 essentially free energy, if you will, through these  
25 sources of air, water or earth. And that's what's  
26 resulting in the high coefficients.

1 MR. ANDREWS: Q: And for the air source heat pumps, is  
2 it fair to say that the coefficient of performance for  
3 them is larger than a baseboard heater, but not nearly  
4 as large as ground source?

5 MR. HOBSON: A: I think that's a fair characterization,  
6 yes.

7 MR. ANDREWS: Q: I'm going to explore a little more  
8 about heat pumps fit into this world, so I'll refer  
9 you to Exhibit B-3, BCUC 171.3.

10 MR. HOBSON: A: Do I still need the reference to the  
11 LiveSmart tables?

12 MR. ANDREWS: Q: No, you don't.

13 MR. HOBSON: A: Can you repeat the reference again  
14 please?

15 MR. ANDREWS: Q: Exhibit B-3, BCUC IR 1.171.3.

16 MR. HOBSON: A: I have that.

17 MR. ANDREWS: Q: One of the things that's indicated in  
18 this response is that 48 percent of B.C. Hydro  
19 customer heat with forced air furnaces, correct?

20 MR. HOBSON: A: I see that, yeah.

21 MR. ANDREWS: Q: And the relevance of that to heat  
22 pumps is that forced air furnaces involve ducting in  
23 the premises.

24 MR. HOBSON: A: Correct. Maybe I should read the  
25 passage if you're going to get into it.

26 Okay, sorry, and your question?

1 MR. ANDREWS: Q: Forced air furnaces require ducting in  
2 the premises. That's the way it works is --  
3 MR. HOBSON: A: That's correct.  
4 MR. ANDREWS: Q: -- you have one single source of heat  
5 which is transferred via air through ducts.  
6 MR. HOBSON: A: That's right.  
7 MR. ANDREWS: Q: And when we're talking about an  
8 electric heat pump furnace, at least the standard  
9 application would be one that also requires ducting in  
10 the premises.  
11 MR. HOBSON: A: I think the standard application, I  
12 think that's correct, yes.  
13 MR. ANDREWS: Q: And so where you're dealing with  
14 retrofits or the end of life of an existing forced air  
15 furnace, an electric heat pump furnace would be an  
16 especially feasible option because the ducts exist  
17 already, correct?  
18 MR. HOBSON: A: Relative to other heating systems --  
19 MR. ANDREWS: Q: Relative to premises that don't have  
20 ducting.  
21 MR. HOBSON: A: Yeah, I would agree.  
22 MR. ANDREWS: Q: Yeah. Another important aspect of  
23 heat pumps, for better or for worse, is that they also  
24 provide cooling, presumably, in the summer, correct?  
25 MR. HOBSON: A: That's right, they have that  
26 capability.

1 MR. ANDREWS: Q: So on the one hand that creates a  
2 potential new use of -- or it doesn't create the  
3 potential, but it would be one way of meeting a new  
4 use of energy. That is summer heating -- excuse me,  
5 that is summer cooling, in situations where summer  
6 cooling was not previously utilized.

7 MR. HOBSON: A: Right, it could establish a larger end  
8 use for electric cooling load.

9 MR. ANDREWS: Q: And for that matter could be any other  
10 source of energy used for cooling. Gas can be used  
11 for --

12 MR. HOBSON: A: Oh, I see.

13 MR. ANDREWS: Q: In big HVAC systems or so on. But my  
14 point here is that the whole area of summer cooling is  
15 one that potentially may increase.

16 **Proceeding Time 10:34 a.m. T24**

17 MR. HOBSON: A: In terms of people choosing to have  
18 cooling within the summer? Yeah, it potentially could  
19 increase. It's fairly low currently.

20 MR. ANDREWS: Q: Yeah. And in fact, coming back to  
21 heat -- electric heat pumps in particular, it's fair  
22 to say that one of the basic selling features of an  
23 electric heat pump system is that it can be described  
24 as central air cooling, compared to other types of  
25 forced-air furnaces.

26 MR. HOBSON: A: I would think that would be one of the

1 benefits that installers would sell.

2 MR. ANDREWS: Q: Yeah. Now, another aspect of electric  
3 air source or ground source heat pumps is that their  
4 co-efficient of performance varies with the ambient  
5 temperature. Is that correct?

6 MR. HOBSON: A: That's correct.

7 MR. ANDREWS: Q: So generally heat pumps operate less  
8 efficiently in colder climates. And then --

9 MR. HOBSON: A: That's right, and I think if you go  
10 back to the IR response, that's one of the things that  
11 was noted within the IR response as well, in terms of  
12 the requirement for supplemental heating in especially  
13 cold temperatures.

14 MR. ANDREWS: Q: Let me just separate. Is it true that  
15 there are two effects that we're dealing with? One is  
16 that in colder temperatures, the efficiency of an  
17 electric heat pump may be less than in warmer  
18 temperatures? And in addition, in cold snaps where  
19 the temperature goes below a certain point, the heat  
20 pump has to rely on resistance heating just to provide  
21 the necessary heat?

22 MR. HOBSON: A: That's my understanding.

23 MR. ANDREWS: Q: So one of the implications of that is  
24 that there is a limitation on the benefits to capacity  
25 reduction and peak load that you would otherwise get  
26 from an electric --

1 MR. HOBSON: A: Can you say that again, please ?

2 MR. ANDREWS: Q: When considering electric heat pumps  
3 in relation to, for example, electric baseboard  
4 heating, for energy it's clear that they're more  
5 energy efficient. But when it comes to the ability to  
6 meet peak load, the benefit of an electric heat pump  
7 diminishes in relation to the benefit of an electric  
8 baseboard heater.

9 MR. HOBSON: A: I think it depends on how it's  
10 installed.

11 MR. ANDREWS: Q: Can you explain that, then?

12 MR. HOBSON: A: Well, from an electric utility  
13 standpoint, the starting point would be if you took a  
14 look at the area where you were installing and, if it  
15 was an air source or a ground source heat pump, for  
16 starters, would significantly change, I think, the  
17 performance of the heat pump, given the temperatures.

18 MR. ANDREWS: Q: Yes.

19 MR. HOBSON: A: The other thing would be, what would be  
20 the supplemental heating? And from an individual  
21 utility standpoint, it could make a big difference  
22 with respect to capacity concerns dependent upon the  
23 supplemental heating, I suppose.

24 MR. ANDREWS: Q: All right, thank you.

25 I think we've covered some of this, but I  
26 will refer you to Exhibit B-4, CEC IR 2.3.11,

1 attachment 1. This is the residential sector CPR  
2 2007, page 110 of 263.

3 MR. HOBSON: A: Can you repeat the reference, please?

4 MR. ANDREWS: Q: Exhibit B-4, CEC 2.3.11, attachment 1.  
5 Conservation potential review 2007, residential  
6 sector, page 110 of 263. So, for example, the  
7 beginning of the discussion puts in more succinct  
8 language than I may have used that "air source heat  
9 pumps are now the baseline technology for replacement  
10 of forced air electric furnaces in existing  
11 dwellings."

12 **Proceeding Time 10:39 a.m. T25**

13 MR. HOBSON: A: I see that.

14 MR. ANDREWS: Q: And that that is what you -- is it  
15 correct, that is correct and that's what you told me  
16 earlier in relation to the premises that have ducting  
17 and are looking at replacement of existing furnaces?

18 MR. HOBSON: A: No, I think this talks about electric  
19 furnaces.

20 MR. ANDREWS: Q: Fair enough, I stand corrected. So  
21 just to clarify then, the previous discussion was to  
22 do with furnaces that may have been fired by propane  
23 or oil.

24 MR. HOBSON: A: Yeah, I think you brought me before to  
25 furnaces that were air --

26 MR. ANDREWS: Q: Forced air.

1 MR. HOBSON: A: Forced air furnaces, and they were -- I  
2 can't remember if the reference was gas and oil or  
3 not. But I'm pretty sure it wasn't electric.

4 MR. ANDREWS: Q: Yes, so I guess the record will make  
5 it clear, but I think it was all forced air furnaces  
6 of which some 83 percent were fuel other than  
7 electric.

8 And then just to confirm that one of the  
9 advantages of the air source heat pump, we've talked  
10 about that it provides space cooling in summer months,  
11 but to confirm that this is at no incremental capital  
12 cost. This is at the last sentence of the first  
13 paragraph.

14 MR. HOBSON: A: Yes, I see that.

15 MR. ANDREWS: Q: Is that correct?

16 MR. HOBSON: A: Oh, is it correct? I would assume that  
17 there wouldn't be any incremental capital costs.  
18 There'd be a change presumably in operating and maybe  
19 maintenance costs as a result, but I wouldn't imagine  
20 that there's increased capital cost.

21 MR. ANDREWS: Q: Thank you.

22 Turning to the commercial sector, reference  
23 is Exhibit B-4, BCSEA 2.28.1, Attachment 1. You can  
24 put the other one away. This is the CPR 2007 fuel  
25 switching commercial sector report, and I'm looking at  
26 page 33 of 111.

1 MR. HOBSON: A: Would you just repeat the reference to  
2 make sure I'm with you?

3 MR. ANDREWS: Q: Page 33 of 111 at Attachment 2, and I  
4 believe I said it had 1 previously, but it is --

5 MR. HOBSON: A: Attachment 2.

6 MR. ANDREWS: Q: -- Attachment 2 of BCSEA IR 2.228.1,  
7 Exhibit B-4.

8 MR. HOBSON: A: And the page number?

9 MR. ANDREWS: Q: 33 of 111. It's a paragraph at the  
10 bottom of the page titled "Space Heating".

11 MR. HOBSON: A: I see that.

12 MR. ANDREWS: Q: So it indicates that space heating  
13 accounts for 4 percent of the total electricity  
14 consumption in the commercial sector, correct?

15 MR. HOBSON: A: That's correct.

16 MR. ANDREWS: Q: And to put the electric heat pumps in  
17 context, it says that of that space heating load,  
18 approximately two-thirds is met by electric resistance  
19 heating and heat pumps represent the remainder.

20 MR. HOBSON: A: That's correct.

21 MR. ANDREWS: Q: And the last sentence indicates that  
22 there's some increase in the use of heat pumps in new  
23 construction.

24 MR. HOBSON: A: That's right.

25 MR. ANDREWS: Q: So it would be that increase in new  
26 construction that to the extent that it was cost-

1 effective and met the other requirements of your DSM  
2 programs, that Hydro would be aiming to bolster. That  
3 is, if they're saying that there's an increase in heat  
4 pumps now, and if the programs indicated it was cost-  
5 effective to do so, that would be the kind of thing  
6 that you would be trying to increase.

7 MR. HOBSON: A: That's right. If there were cost-  
8 effective electricity savings and it was within  
9 technology firm programs, that would be absolutely one  
10 of the things we'd be looking to increase.

11 MR. ANDREWS: Q: Right. And on the next page, 34,

12

13

**Proceeding Time 10:44 a.m. T26**

14 MR. ANDREWS: Q: Right. And on the next page, 34,  
15 under the heading "space cooling", and the text  
16 indicates that, in the last sentence of the -- no, the  
17 second sentence of the paragraph says that,

18

"Over the past few years, the market

19

penetration of space cooling equipment has

20

increased due to the increasing size --"

21

Excuse me,

22

"...the increasing use of space cooling in new

23

construction."

24

Is that your -- well, first, can you confirm that

25

that's what it says?

26

MR. HOBSON: A: Yes.

1 MR. ANDREWS: Q: And is that consistent with your  
2 experience?

3 MR. HOBSON: A: Yeah, I think in general I would agree  
4 with that. The degree to what the increase is that's  
5 occurring, I couldn't comment, but in -- directionally  
6 I think that would be a fair characterization.

7 MR. ANDREWS: Q: Thank you. Now, this is as far as I'm  
8 going to take electric heat pumps in relation to fuel  
9 switching, which is to ask you to confirm that in  
10 order to compare the consequences of natural gas as a  
11 heat source to electricity as a heat source, one would  
12 need to know what proportion of the electricity being  
13 used for space heating was by baseboard heating or by  
14 electric heat pumps. Is that correct?

15 MR. HOBSON: A: Can you walk me through that again,  
16 please ?

17 MR. ANDREWS: Q: In order to compare the use of gas for  
18 space heating to the use of electricity for space  
19 heating, and these comparisons would be both financial  
20 and carbon consequences, on the electricity side of  
21 the equation one needs to know what proportion of the  
22 electric space heating would be done by baseboard  
23 heaters compared to being done by electric heat pumps.

24 MR. HOBSON: A: Yeah, and I think similar on the gas  
25 side you'd need to look at the efficiency of not only  
26 the gas furnace that was going in, but also the

1 efficiency of the building shell that you're dealing  
2 with, with whatever example it is. So --

3 MR. ANDREWS: Q: Thank you. And then coming back to  
4 Table 4 Amended, the DSM A and B expected savings,  
5 using the renovation rebate program as an example,  
6 would you agree with me that the increment of expected  
7 savings in DSM B over A would be one of the areas in  
8 which, to the extent that electric heat pumps are  
9 taken up within that offer in the LiveSmart program,  
10 that there would be more funding available either for  
11 the incentive, if that was cost-effective, or for  
12 other activities to encourage electric heat pumps?

13 MR. HOBSON: A: I'm not certain if the specific  
14 assumptions that drove the level of savings from A to  
15 B was specific to heat pumps. I would imagine it's  
16 probably general across a number of factors.  
17 Renovation rebate includes a number of different  
18 concepts, ranging from insulation of walls through to  
19 concepts like heat pumps. So, I would imagine it's a  
20 mix of things that are driving that.

21 MR. ANDREWS: Q: Thank you. I have a question about  
22 street lighting, and where, for example -- with  
23 relation to Table 4 Amended, where does street  
24 lighting fit in, if at all?

25 MR. HOBSON: A: That's a good question. Subject to  
26 check, I believe street lighting would fit in within

1 the PowerSmart Partners. But it may also fit within  
2 our product incentive program.

3 MR. ANDREWS: Q: So PowerSmart Partners would be under  
4 industrial --

5 MR. HOBSON: A: Commercial. Commercial.

6 MR. ANDREWS: Q: Under commercial. Okay. Are you  
7 aware of developments in solid state or LED lighting  
8 for street technology, for street lights?

9 MR. HOBSON: A: I am. I can't speak to the  
10 technologies around street lighting in a lot of depth,  
11 but I am aware of a number of different advancements  
12 that are being looked at, and we've been involved in a  
13 number of projects and pilot projects ranging from  
14 looking at different types of lighting, also to  
15 dimming and dimming at different times, and there's  
16 been pilot projects, I believe, in Prince George where  
17 they've taken a look at late evening hours in more  
18 remote areas and actually a dimming of the lighting in  
19 those areas to get efficiency. And we've been  
20 involved, I believe, with the municipalities in that  
21 case and looking at that, along with transportation  
22 authorities.

23 MR. ANDREWS: Q: Are those things that would continue  
24 in the DSM expenditures within this 2008 LTAP and the  
25 three-year expenditures?

26

**Proceeding Time 10:49 a.m. T27**

1 MR. HOBSON: A: Street lighting?

2 MR. ANDREWS: Q: That is, they're not specifically  
3 listed, but are we to assume that what you --

4 MR. HOBSON: A: Yes.

5 MR. ANDREWS: Q: -- that the work that you've described  
6 is part of the package?

7 MR. HOBSON: A: Yes. Our activity, consistent with  
8 what I outlined, would be part of that package, and to  
9 the degree that there are outcomes from the activities  
10 I spoke of, and they've -- there are technologies that  
11 are available through those two programs and those  
12 expenditures to move those technologies forward will  
13 also be included within those program expenditures.

14 MR. ANDREWS: Q: Thank you. And now I have a question  
15 that Mr. Godsoe may be able to help with me as well,  
16 which is, I've been -- is it correct to assume that  
17 the LTAP in 2011 is intended to include DSM -- a  
18 schedule of DSM expenditures that would be for three  
19 years subsequent to the three years for which there  
20 are expenditures in this LTAP?

21 MR. GODSOE: So it's correct to assume that the next LTAP  
22 in 2011 will include expenditures and the DSM plan. I  
23 can't confirm it would be three years.

24 MR. ANDREWS: Thank you. Those are my questions. Thank  
25 you very much, panel.

26 THE CHAIRPERSON: Mr. Andrews. Who's next?

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

2 MR. GATHERCOLE: Q: Good morning, Commissioners. Good  
3 morning, panel. My name is Dick Gathercole, and I'm  
4 the counsel for Peace Valley Environmental  
5 Association. And I expect most of my questions will  
6 be addressed to Mr. Savidant, although, Mr. Matheson,  
7 I will have a couple for you later on. And the rest  
8 of you can probably relax.

9 Mr. Savidant, perhaps we can start with a  
10 question that Mr. Elton referred to you, for what he  
11 referred to as a full explanation. And the reference,  
12 you don't need to go to it, is transcript Volume 5,  
13 page 656. And the issue was what happened to the --

14 MR. MATHESON: A: Mr. Gathercole, let us get the  
15 transcript reference, if you don't mind.

16 MR. GATHERCOLE: Q: Okay. Volume --

17 MR. SAVIDANT: A: I'm there.

18 MR. GATHERCOLE: Q: Okay. The issue was the \$7 million  
19 in Stage 1.

20 MR. SAVIDANT: A: Sorry, can you --

21 MR. GATHERCOLE: Q: The issue was -- if you look, the  
22 reference is in Exhibit B-3, the Joint Industry  
23 Electricity Steering Committee Information Request  
24 1.1.1.

25 MR. SAVIDANT: A: Yes.

26 MR. GATHERCOLE: Q: On page 2 of 2.

1 MR. SAVIDANT: A: Yes.

2 MR. GATHERCOLE: Q: Which indicated the Stage 1  
3 spending detail and the -- in the 2006, and on the  
4 right-hand column, the 2006 IEP/LTAP, the total  
5 approved was 14,700,000. And the amount actually  
6 expended was 7,700,000. We need an oral response, Mr.  
7 Savidant.

8 MR. SAVIDANT: A: Yes, that's correct.

9 MR. GATHERCOLE: Q: And what I was -- what I wanted to  
10 find out was, is the 7 million that wasn't spent in  
11 Stage 1 included in the 41 million for Stage 2?

12 MR. SAVIDANT: A: So --

13 MR. GATHERCOLE: Q: Or is it an addition to the 41  
14 million in --

15 MR. SAVIDANT: A: The expected spending in Stage 2 is  
16 the same thing we're requesting endorsement from this  
17 Commission on, which is the \$41 million.

18 MR. GATHERCOLE: Q: 41 million.

19 MR. SAVIDANT: A: I wouldn't say that all that \$7  
20 million would have necessarily gone into Stage 2, it  
21 may have moved into Stage 3 as well, but our expected  
22 spending on Stage 2 is the same we're requesting  
23 endorsement of.

24 MR. GATHERCOLE: Q: I guess what I'm wondering is,  
25 because you've already had approval for the \$7  
26 million, why you're asking for approval for \$41

1 million?

2 MR. SAVIDANT: A: Well, we're requesting approval for  
3 our expected spending on Stage 2, and that -- we  
4 expect that to be \$41 million.

5 MR. GATHERCOLE: Q: Turning to that Stage 2  
6 expenditure, if you look at Exhibit B-4, Peace Valley  
7 Environmental Association IR 2.1.2.

8 MR. SAVIDANT: A: Yes.

9 MR. GATHERCOLE: Q: You have that. And it indicates  
10 that the total budget will be substantially committed  
11 or spent assuming a BCUC decision by the second  
12 quarter of 2009.

13 Putting aside the decision of the  
14 Commission, do you anticipate that you will have  
15 expended or committed by June of this year the 41  
16 million?

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

18 MR. SAVIDANT: A: I believe the IR speaks for itself.  
19 Yes, I would expect.

20 MR. GATHERCOLE: Q: I just wonder what you meant by  
21 "substantially".

22 MR. SAVIDANT: A: We would have committed the majority  
23 of that.

24 MR. GATHERCOLE: Q: Well, the majority could be as  
25 little as 22 million.

26 MR. SAVIDANT: A: We'll have committed close to \$41

1 million, I would expect.

2 MR. GATHERCOLE: Q: If you could turn then to Exhibit  
3 B-1, B-1-1, and Appendix L-2 to the LTAP.

4 MR. SAVIDANT: A: Yes.

5 MR. GATHERCOLE: Q: And on pages 19 and 20 of 20 in  
6 that document, it breaks down the budget for Stage 2,  
7 correct?

8 MR. SAVIDANT: A: That's correct.

9 MR. GATHERCOLE: Q: And project definition is the  
10 largest portion of the budget, \$20,900,000.

11 MR. SAVIDANT: A: That's correct.

12 MR. GATHERCOLE: Q: Slightly over 50 percent. Is there  
13 any reason why you didn't break it down? You list  
14 under "Project Definition" on page 19, five different  
15 aspects or categories. Is there any particular reason  
16 why you didn't break it down between categories?

17 MR. SAVIDANT: A: There is a significant amount of  
18 overlap between those sections. There would be a bit  
19 of a challenge to break it down between those  
20 categories.

21 MR. GATHERCOLE: Q: Okay. What I'm primarily  
22 interested in is how much of the 20,900,000 is devoted  
23 to environmental and engineering studies? I take it  
24 there'd be some overlap there.

25 MR. SAVIDANT: A: There would be some overlap. I would  
26 say, and again I'm going to use the majority, but

1 definitely more than half of that 20.9 would be  
2 environmental and engineering studies.

3 MR. GATHERCOLE: Q: Thank you. And the last one is  
4 "regulatory". I was wondering what that referred to  
5 with respect to Stage 2.

6 MR. SAVIDANT: A: As part of the work in Stage 2, we  
7 have had discussions with some of the regulatory  
8 agencies, Federal Environmental Assessment Agency,  
9 Provincial Environmental Agency, and this Commission  
10 as to what the potential regulatory process would look  
11 like for a potential Stage 3. And that's what those  
12 expenditures would include.

13 MR. GATHERCOLE: Q: And the second largest category of  
14 the budget is consultation at 9,800,000?

15 MR. SAVIDANT: A: That's correct.

16 MR. GATHERCOLE: Q: And again it's not broken down. Is  
17 it for the same reason that there's overlap between  
18 the four aspects or categories there?

19 MR. SAVIDANT: A: That's part of the reason, yes.

20 MR. GATHERCOLE: Q: Okay. And just for the record, in  
21 Exhibit B-3, BCUC Information Request 1.27.1.

22 MR. SAVIDANT: A: I'm there.

23 MR. GATHERCOLE: Q: And there you break it down, Stage  
24 2 spending by categories of internal labour, external  
25 labour, and other expenses?

26 MR. SAVIDANT: A: That's correct.

1 MR. GATHERCOLE: Q: And about slightly under 60 percent  
2 of the total budget is external labour.

3 MR. SAVIDANT: A: I'll accept your math subject to  
4 check.

5 MR. GATHERCOLE: Q: And that, I take it, would  
6 primarily be consultants.

7 MR. SAVIDANT: A: Primarily, yes.

8 MR. GATHERCOLE: Q: Okay, I'd like to just briefly look  
9 at the engineering and environmental work that is set  
10 out in this document for Stage 2.

11 MR. SAVIDANT: A: Which document are you talking about?

12 MR. GATHERCOLE: Q: Appendix L-2. But first I'd like  
13 to refer you to Exhibit B-3, PVA IR 1.2.1.

14 MR. SAVIDANT: A: Yes.

15 MR. GATHERCOLE: Q: And there we ask how relevant B.C.  
16 Hydro considers the engineering design and other  
17 studies that were carried out at the time of the first  
18 application. And the hearing, I believe, was 1982, so  
19 the application was probably 1981. And you give a  
20 history of the studies that have been done in response  
21 to the IR, correct? You talk about studies were done  
22 prior to 1981 and then studies that were done that  
23 commenced in 1989.

24 **Proceeding Time 11:00 a.m. T29**

25 MR. SAVIDANT: A: Yes, it does discuss some of those  
26 studies in there. I don't think it's a comprehensive

1 history of the studies we've done.

2 MR. GATHERCOLE: Q: No. But you indicate in the first  
3 sentence of the response that "much of this work  
4 remains relevant today." But then you go on to say  
5 that "some design issues remain unresolved and since  
6 then, changes in codes and standards require review of  
7 some other elements of the design." And then you list  
8 the ones that need to be reviewed, correct?

9 MR. SAVIDANT: A: The IR does do that, yes.

10 MR. GATHERCOLE: Q: Yes. And then in the last  
11 paragraph, you talk again about environmental and  
12 socio-economic studies with the 1981 studies providing  
13 the basis -- the baseline. However, these studies,  
14 you say, require some updating.

15 MR. SAVIDANT: A: Yes, and maybe I should clarify that  
16 a little bit. The 1981 and '82 studies did collect  
17 some information on environmental and social issues  
18 and, given that B.C. Hydro does have a presence in  
19 that area, that additional information has been  
20 conducted since then to today. However, in some cases  
21 that information does need to be updated, due to  
22 changes in human use of the area up there as well as  
23 climate changes and other changes up there. We would  
24 need to update that information before proceeding to  
25 an environmental assessment, if we move to Stage 3.

26 MR. GATHERCOLE: Q: Well, looking at engineering

1 studies, and I briefly explored this subject with Mr.  
2 Elton in Panel 1, and the reference there is page 636  
3 of Volume 5 of the transcript. And I was asking him  
4 particularly with respect to what was involved in  
5 Stage 4, because Stage 4 in Exhibit B1-1, Appendix L-  
6 1, page 19 of 19, there's a little -- there's an  
7 indication of what's primarily involved in each stage.  
8 And Stage 4 states engineering.

9 MR. SAVIDANT: A: I'm familiar with that, yes.

10 MR. GATHERCOLE: Q: Yes. And Mr. Elton indicated at  
11 lines 11 and 12 of page 636:

12 "There's engineering in all phases."

13 So I take it you agree with that.

14 MR. SAVIDANT: A: I agree with Mr. Elton's statement,  
15 yes.

16 MR. GATHERCOLE: Q: So if you could turn to page 10 of  
17 20, in Appendix L-2. Sorry, page 9 -- yeah, page 10  
18 of 20.

19 MR. SAVIDANT: A: Page 9 of 20?

20 MR. GATHERCOLE: Q: Page 10 of 20.

21 MR. SAVIDANT: A: 10. Oh, yes. I'm there.

22 MR. GATHERCOLE: Q: And this is under "Engineering,  
23 Stage 2 Primary Objectives". And it says:

24 "Update the engineering analysis and design  
25 of the Site C project in order to:

26 • Update the cost estimates and risks.

1           • Define the physical impacts of the  
2           project."

3           And then under "Key activity", it says:

4           "Design workplans for conducting a series of  
5           engineering studies...in two major areas..."

6           And I won't read the rest of it, but -- and then if  
7           you could turn back to page 9 of 20, and this is under  
8           "Key environmental activities for Stage 2", at the  
9           bottom of the page there, it says:

10           "For each of the five primary topic areas,  
11           develop a preliminary approach for impact  
12           assessment (to be applied in Stage 3, if  
13           approved)..."

14           And there's a similar comment on page -- at the top of  
15           page 11 of 20.

16                       And when I read that, Mr. Savidant, I  
17           wonder, is it fair to say that the Stage 2 work is to  
18           review the existing studies and to determine what work  
19           is required to update them in Stage 3 if the decision  
20           is to proceed to Stage 3?

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

22           MR. SAVIDANT:    A:    That's a component of the work that  
23           we're doing as part of the engineering and  
24           environmental studies in Stage 2.

25                       I would say that an additional part of that  
26           is initiating several of the studies, if possible in

1           Stage 2, in order to start gathering baseline  
2           information about what the -- really what's there in  
3           terms of the environmental and social characteristics  
4           of the area. So while we'll be looking to, first off,  
5           identify what studies need to be updated, we will and  
6           we have been initiating updated studies already in  
7           Stage 2.

8   MR. GATHERCOLE:   Q:   But would it be fair to say that  
9           there's substantial new engineering and environmental  
10          work will take place in Stages 3 and 4?

11   MR. SAVIDANT:    A:   I think, you know, the word  
12          "substantial", I would say yes, there would be a  
13          significant amount of engineering and environmental  
14          work in Stage 3 and Stage 4, as well as likely in the  
15          early parts of the construction as well.

16   MR. GATHERCOLE:   Q:   Would it be fair to say that the  
17          work being done in Stage 2 is what B.C. Hydro  
18          considers sufficient to justify a decision to proceed  
19          to Stage 3?

20   MR. SAVIDANT:    A:   I would say that that is fair, yes.

21   MR. GATHERCOLE:   Q:   Thank you. Now, I'd like to keep  
22          Appendix L-2 handy, but if you could turn to  
23          Transcript Volume 12, page 2309, you had a discussion  
24          with Mr. Weafer. And at the top of the page Mr.  
25          Weafer had been asking you about criteria and you  
26          said, well, if you're referring to the criteria for a

1 decision to move from Stage 2 to Stage 3 --

2 MR. SAVIDANT: A: For a recommendation to move to Stage

3 --

4 MR. GATHERCOLE: Q: For recommendation, yeah.

5 MR. SAVIDANT: A: -- 2 to Stage 3, to clarify.

6 MR. GATHERCOLE: Q: And if you look at line, starting

7 at line 13:

8 "Other criteria would be around whether or

9 not we think it's actually feasible to build

10 the project from a technical and social

11 perspective."

12 MR. SAVIDANT: A: I think there might be a word missing

13 there which is "technical, environmental and social

14 perspective."

15 MR. GATHERCOLE: Q: What I'd like to explore is, given

16 the fact that the studies you're primarily relying on

17 at this stage are the ones previously done and are

18 being reviewed, how these limited studies will really

19 help that much with that decision.

20 MR. SAVIDANT: A: Well, as I said, we are updating

21 several of the studies as part of Stage 2. So when we

22 go back -- I'll just take you back to Appendix L-2 --

23 we are -- and as you identified on page 10, we are

24 updating several of the studies here in terms of what

25 we think the potential design issues around the

26 project are. We're looking at the design. We have an

1 existing design that was originally established in  
2 1981. It was updated in the '90s. But what we're  
3 looking at today is what would the project look like  
4 if it was built today?

5 There's been significant changes to codes  
6 and standards. We have additional information around  
7 what the site characteristics are. So we would have  
8 to update that design, and we'll have that updated  
9 information at the end of Stage 2, and we'll use that  
10 to inform our recommendation on whether or not to move  
11 forward.

12 In addition to that, as part of the Stage 2  
13 program, we've had discussions with what are called  
14 technical advisory committees, which are made up of  
15 experts from the Ministry of Environment and other  
16 groups and interests. And what they would be talking  
17 about is what would actually be required in order to  
18 do the full analysis in order to do the environmental  
19 assessment, if we were to move to Stage 3. That  
20 information is also useful in terms of deciding  
21 whether or not it makes sense to actually proceed to  
22 the environmental assessment in Stage 3.

23 MR. GATHERCOLE: Q: I want to get back to the technical  
24 advisory committees later, but while we're on page 10  
25 of 20, under "Key Activity" it says,

26 "Design workplans for conducting a series of



1 activity 1, it talks about, the design studies will  
2 look at a number of topics. And there were -- looking  
3 down to the fourth and fifth bullet:

4 "• The stability of the left bank and other  
5 slopes;

6 • The impact of the project on reservoir  
7 shoreline stability and safety..."

8 What -- you know, what concerns are addressed here?

9 MR. SAVIDANT: A: Well, as with any hydro project, and  
10 really any river and valley system, there will always  
11 be issues where, you know, the movement of water  
12 create shoreline stability issues. I mean, in the  
13 Peace Valley region right now, you do get on occasion  
14 slumping and sloughing. What these studies are going  
15 to look at is they're going to look at -- they're  
16 going to study what the stability is on the existing  
17 site right now, and what the potential impacts of the  
18 reservoir and the dam site would be on those issues.

19 MR. GATHERCOLE: Q: And the next one -- next bullet,

20 "• The he location of construction  
21 materials..."

22 What does that refer to?

23 MR. SAVIDANT: A: Well, the dam is an earth-filled dam.  
24 You'd require a significant amount of gravel and  
25 aggregate materials, and you would need to source  
26 those somewhere. And that is part of the design of

1 the project, and that is what we'd be looking at.

2 MR. GATHERCOLE: Q: And the next one,

3 "• Foundation requirements for the  
4 earthfill dam and right bank structures..."

5 And as I understand it, the quality of the soil at  
6 that particular site leaves something to be desired?

7 I mean, it's not the most stable soil structure, as I  
8 understand it.

9 MR. SAVIDANT: A: I'm not a geotechnical engineer, so I  
10 can't give you a technical opinion on that, but --

11 MR. GATHERCOLE: Q: But that's why you need fill.  
12 Correct?

13 MR. SAVIDANT: A: There is -- well, there is earth-  
14 filled dams at a variety of sites around B.C. Some  
15 sites are more conducive to a concrete dam, similar to  
16 the ones we have at Revelstoke or Peace Canyon. Other  
17 sites, such as GMS and Mica, have earth-filled dams.  
18 There are site conditions that drive that, and I can't  
19 speak specifically to what would drive that in  
20 general, but at this site we've determined that the  
21 best option for us is an earth-filled dam.

22 MR. GATHERCOLE: Q: And I understand that the fill that  
23 would be required is something in the range of 500,000  
24 to 600,000 truck-loads of gravel?

25 MR. SAVIDANT: A: Subject to check. I don't know those  
26 numbers off the top of my head, but that sounds like a

1           ballpark number.

2 MR. GATHERCOLE:   Q:   Okay, if we could turn to page 11  
3           of 20, in Appendix L-2. And that deals with public  
4           consultation, community relations and communications.

5 MR. SAVIDANT:     A:   I'm there.

6 MR. GATHERCOLE:   Q:   Could you explain to me what the  
7           differences are -- what's included in public  
8           consultation, what in community relations, and  
9           communications, I would gather, is just an overall  
10          communications plan.

11 MR. SAVIDANT:     A:   Well, it might be useful for me to  
12          kind of cover what we're talking about when we talk  
13          about the consultation process.

14 MR. GATHERCOLE:   Q:   The way you deal --

15 MR. SAVIDANT:     A:   And the communications process. So,  
16          for the consultation process, we have essentially  
17          three main components of the consultation process.  
18          The one that I think most people are familiar with,  
19          and definitely your constituents are most familiar  
20          with, is the -- what we call the public consultation  
21          process. And that was where we were trying to cast a  
22          wide net, trying to talk to as many people in the  
23          region and throughout the province about the project  
24          as possible. And that had three major phases. The  
25          first phase of that was what we refer to as pre-  
26          consultation. And that's where we go out to the

1 public and we ask them two main questions. One is,  
2 "What do they actually -- what topics would they like  
3 to be consulted about?" and number two is, "How would  
4 they like to be consulted about those topics?" That  
5 allows us to actually establish what the rest of the  
6 public consultation program should look like.

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

8 After that we had two rounds of  
9 consultation. The reason for that is really to split  
10 up the topic so that it was a little bit more  
11 management. And so we had -- Round 1 was May to June  
12 2008. Round 2 was October to December 2008. And so  
13 that public consultation was province-wide. We were  
14 really trying to engage as many people as possible.  
15 So we had radio advertisements, newspaper  
16 advertisements. If you were a residential customer  
17 receiving a bill from B.C. Hydro, you would have  
18 gotten a bill insert informing about that consultation  
19 program.

20 So we conducted -- I'll have to refer to my  
21 notes here, but I think, yeah, we conducted 100  
22 stakeholders meeting as part of that consultation  
23 process, and we had about 20 open houses.

24 So that was the public consultation  
25 process, and the results from that consultation  
26 process, the notes and the reports tabulating all the

1 results from the feedback forms, are all available  
2 publicly.

3 The other two components of the  
4 consultation are First Nations and the property owners  
5 consultation. So we have a separate consultation  
6 process with First Nations. We've gone out, we've  
7 talked to First Nations in B.C., Alberta and the  
8 Northwest Territories. We've had introductory  
9 meetings and we've set up some consultation agreements  
10 with some of the more -- some of the First Nations.

11 We also have a consultation with the  
12 landowners that would be affected by the project, most  
13 directly affected by the project. And we've gone out,  
14 we've met with them on one-on-one meetings.

15 Now, both the First Nations and the  
16 property owners, we have copious notes on those, but  
17 that's not released publicly due to privacy and  
18 confidentiality issues.

19 Now, in terms of the other additional  
20 community relations activities, we've also opened an  
21 office in Hudson's Hope, and that would be one of the  
22 community relations activities, where people in the  
23 region can come in, there's displays set up with  
24 information on the project. There's also a library  
25 with historical information on the project that's  
26 available for anyone to come in and look at. There's

1 also large-scale maps showing the potential inundation  
2 area of the reservoir.

3 Also, based on a request from the people of  
4 Hudson's Hope, we did open an office there as well,  
5 partway through Stage 2.

6 We also have a public inquiries process,  
7 where people can either send us an e-mail or a --  
8 pardon me, an e-mail or we have a toll-free phone line  
9 and people can send in a request and we've committed  
10 to responding to those requests as they come in.  
11 There's also our -- we have a website that we've set  
12 up that allows people to access information on the  
13 projects, and again filing inquiries, and that's all  
14 part of our community relations and communications  
15 portion.

16 MR. GATHERCOLE: Q: Now, you said you had the pre-  
17 consultation process which was to ask people what they  
18 wanted to be consulted about, more or less, yes.

19 MR. SAVIDANT: A: That's correct.

20 MR. GATHERCOLE: Q: Was that carried out in Stage 1 or  
21 Stage 2?

22 MR. SAVIDANT: A: Stage 2.

23 MR. GATHERCOLE: Q: Now, without going through all  
24 these items that are listed on pages 12 and 13 of 20,  
25 there seems to be more of an emphasis on community and  
26 provincial benefits, particularly community benefits

1 of Site C, without what appears to be a corresponding  
2 concern about negative impacts on the community of  
3 Site C.

4 MR. SAVIDANT: A: I would disagree with that statement.  
5 I believe we've consulted on a range of topics that  
6 were identified in pre-consultation. One of those  
7 topics that was identified was the potential benefits  
8 that could flow to the community from Site C, but we  
9 also consulted -- and it's identified on page 12 and  
10 13, about issues like the reservoir impact lines,  
11 which really goes to where the potential impacts of  
12 the reservoir could be on landowners on the area. We  
13 consulted about the impacts on recreation, the  
14 relocation of the highway, potential infrastructure  
15 impacts of worker housing, potential impacts on the  
16 climate in terms of fog, impacts on fisheries,  
17 wildlife and land use in the area. Those were all  
18 topics we covered as part of our consultation process.

19 MR. MATHESON: A: And I'd add as well that they were  
20 put on very large panels at the public meetings that  
21 we held, and were very apparent and clear, so that  
22 when people attended those they could walk through  
23 both the benefits and the impacts, I think equally.

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

25 MR. GATHERCOLE: Q: But I'd like to distinguish between  
26 impacts and people who are concerned, not just with

1 the impacts of building the dam, but whether the dam  
2 should be built at all, and I think you would agree  
3 with me, Mr. Matheson and Mr. Savidant, that there is  
4 some opposition in the local community to Site C,  
5 correct?

6 MR. MATHESON: A: Certainly. There were people who  
7 attended our meetings who were opposed to proceeding  
8 with Site C, no question. But I think -- I mean, if  
9 what you are getting at is whether we talked about the  
10 other options available to B.C. Hydro in -- you know,  
11 other options available to us to proceed instead of  
12 building Site C, I think we had very comprehensive  
13 information there as well, and we printed that in  
14 public pamphlets, handed them out at meetings, went  
15 through those as well on large poster boards and made  
16 staff -- a large number of staff at those meetings  
17 available for those people to go and speak to in  
18 detail. So I think we tried to be, you know, honest  
19 and exhaustive in terms of the kind of impacts the  
20 community and the environment might feel as a result  
21 of proceeding with Site C, but also what other options  
22 does B.C. Hydro explore in the context of our long-  
23 term planning in arriving at a decision whether to go  
24 ahead or not to the different stages in the project,  
25 and ultimately whether to build the project.

26 MR. GATHERCOLE: Q: Yes, and I appreciate the fact that

1           it's a -- Site C is just a contingency reserve in this  
2           LTAP and that you are a ways away from making a final  
3           decision to proceed to construction.

4   MR. REIMANN:    A:    Just to be clear, Mr. Gathercole,  
5           we've included it as a potential future resource as  
6           well as a contingency resource option.

7   MR. GATHERCOLE:  Q:    And would that be, Mr. Reimann, a  
8           potential resource as early as 2019?

9   MR. REIMANN:    A:    That is the earliest date that we've  
10          modeled in the analysis.

11  MR. GATHERCOLE:  Q:    I appreciate that.  But when you  
12          say you would consider it as a future resource, not  
13          just a contingency resource, are you talking about  
14          considering it as a future resource as early as 2019?

15  MR. REIMANN:    A:    Potentially.

16  MR. GATHERCOLE:  Q:    Well, Mr. Matheson, I'd like you to  
17          turn with me to transcript Volume 12, page 2213, and  
18          it's a discussion you had yesterday with Mr. Quail on  
19          the concept of --

20  MR. MATHESON:   A:    Sorry, would you mind giving me the  
21          page number again?

22  MR. GATHERCOLE:  Q:    Yes.  2213.

23  MR. MATHESON:   A:    Okay.  I have that.

24  MR. GATHERCOLE:  Q:    Yeah, it's a discussion you had  
25          with Mr. Quail yesterday on the concept of social  
26          licence, and if you look at lines 20 to 26, Mr. Quail

1           says:

2                   "Yeah, social licence means essentially are  
3                   you going to hit a brick wall where the  
4                   public or the government are going to  
5                   respond and say, "No, you can't go there."  
6                   That's what social licence is, isn't it?"

7           And you said:

8                   "Generally speaking I think that's right."

9   MR. MATHESON:   A:   Yes, I see that.

10   MR. GATHERCOLE:   Q:   And you agree with that?

11   MR. MATHESON:   A:   Well, I agree with the notion that  
12                   the social licence is about conversing with the public  
13                   and trying to determine how the public in general  
14                   feels about either an operation of or the building of,  
15                   you know, an electricity producing project.   The way  
16                   he's put it by saying "You're going to hit a brick  
17                   wall where the public and the government are going to  
18                   respond", I mean, that's one element of it, I think,  
19                   you know.   And each one of these has a different  
20                   element.

21                   So generally speaking a social licence is  
22                   about trying to determine how people feel about a  
23                   project and whether, in fact, there is the social  
24                   licence or the consent to proceed on that basis, and  
25                   that's really what I was referring to when I said  
26                   "general speaking", that's correct.

1 MR. GATHERCOLE: Q: If you could turn over to the next  
2 page, page 2214 starting at line 18. And Mr. Quail  
3 says:

4 "... And my point is that that social licence  
5 appears to be a tag that's associated with  
6 Burrard, that doesn't seem to be associated  
7 with other potential resources."

8 And at line 23 you say:

9 "I would disagree with that. ..."

10 And then you go on to give other examples. And then  
11 going on, page 2215, line 8, Mr. Quail asks:

12 "So social licence is an issue, obviously,  
13 for the Site C dam. You would agree with  
14 that?"

15 And you state:

16 "I would agree with that."

17 Correct?

18 MR. MATHESON: A: Yes.

19 MR. GATHERCOLE: Q: Now, as I understand it, the  
20 evidence that has come before this Panel with respect  
21 to Burrard, and I'm not going anywhere near Burrard  
22 except to this, that my understanding is one of the  
23 reasons you say you can only use 3,000 for planning  
24 purposes rather than 6,000 is the concern with the  
25 social licence, and the social licence includes the  
26 opposition to the operation of Burrard by people

1 affected, by the community, correct?

2 MR. MATHESON: A: Well, that's not the only component  
3 of it, but that's one of the components, yes.

4 MR. GATHERCOLE: Q: That's part.

5 MR. MATHESON: A: Yes.

6 **Proceeding Time 11:26 a.m. T34**

7 MR. GATHERCOLE: Q: So would you agree that the  
8 opposition to Site C in the Peace Valley comes within  
9 the concept of social licence as defined by Mr. Quail,  
10 and accepted by you.

11 MR. MATHESON: A: Can you restate that?

12 MR. GATHERCOLE: Q: Yeah. You've said that social  
13 licence is an issue for Site C, and so I'm asking,  
14 would you agree that the opposition to Site C in the  
15 Peace Valley comes within the definition of social  
16 licence as defined by Mr. Quail and accepted by you,  
17 and as applied in the case of the Burrard thermal  
18 unit?

19 MR. MATHESON: A: Well, as I've said, I think social  
20 licence is going to be different in every case, and  
21 while I would agree that the public opinion in the  
22 region regarding the movement toward building Site C,  
23 if that's an eventual decision, you know, is important  
24 for us to gauge. And, yes, there's a social licence  
25 component and element to it. It would be silly to  
26 suggest that there isn't.

1                   In the case of Burrard, because you're  
2                   comparing them, really we're into -- Burrard is  
3                   actually built, and operating, and we're into the  
4                   element of a whole number of factors there, including  
5                   what we would perceive public opinion to be about  
6                   operating Burrard or our ability to operate Burrard to  
7                   a certain level. And that would include our  
8                   regulators, Metro Vancouver, having the ability to  
9                   change our licences, our permits. And so that's a  
10                  very different proposition than what we're into  
11                  regarding Site C, which is really about should we or  
12                  should we not move ahead to the next stage, frankly,  
13                  of moving toward Site C and an eventual decision,  
14                  which we have not reached.

15 MR. GATHERCOLE:   Q:   I realize you haven't reached the  
16                   decision, but I'm trying to gauge the extent to which  
17                   B.C. Hydro is prepared in its recommendation to  
18                   government whether or not to proceed to Stage 3, to  
19                   take into account the opposition that exists in the  
20                   area.

21 MR. MATHESON:    A:   Well, I think we are taking it into  
22                   account. I think that's why we've put a very  
23                   exhaustive and, you know, a very strong effort toward  
24                   gauging public opinion up there. That's why we've  
25                   traveled numerous times -- you've got three people  
26                   sitting on this panel today who were part of that, and

1           so we've, you know, been around the province, we've  
2           been to regional centres like Prince George, we went  
3           up numerous times to the communities up in the  
4           immediate area and have talked to them, as I said,  
5           very exhaustively. So we're -- I think we're taking  
6           it very seriously.

7 MR. SAVIDANT:    A:    And I should support Mr. Matheson in  
8           saying -- I mean, the results of the consultation  
9           process that will be provided in a report with the  
10          notes with this -- with feedback forms and tabulated  
11          results, all that will be provided to government, so  
12          they can have that information in making their  
13          decision on whether or not we should proceed to the  
14          next stage of the process as well.

15 MR. MATHESON:   A:    And during those meetings, people  
16          have made the point -- they've made points that they  
17          want to make about their opposition to the project,  
18          and have asked specifically will this be included in  
19          the record in the report that you eventually write.  
20          And we've given them assurances that their opposition  
21          will be noted.

22 MR. GATHERCOLE:  Q:    Thank you, Mr. Savidant. I  
23          neglected to ask you a question with respect to the  
24          consultation process. If you could turn to -- and  
25          it's a follow-up, actually, with what Mr. Matheson's  
26          saying. If you could turn to page 13 of 20 of

1 Appendix L-2.

2 MR. SAVIDANT: A: I'm there.

3 MR. GATHERCOLE: Q: At the bottom of the page. One of  
4 the key activities is

5 "Develop a "Consideration Memo" outlining  
6 how we incorporated the results of the two  
7 rounds of consultation into our planning for  
8 Site C."

9 And the time frame is cited winter, 2008/09. Has that  
10 consultation memo or consideration memo been  
11 completed?

12 MR. SAVIDANT: A: No, it hasn't been completed yet.

13 MR. GATHERCOLE: Q: When do you anticipate it will be  
14 completed?

15 MR. SAVIDANT: A: It will -- I don't know the exact  
16 time frame, but it will definitely be part of the  
17 Stage 2 report we issue at the end of this stage.

18 MR. GATHERCOLE: Q: So it will be probably some time  
19 after June?

20 MR. SAVIDANT: A: I don't know that off the top of my  
21 head.

22 MR. GATHERCOLE: Q: Finally, I said I would get back to  
23 the technological committees, and they're referred to  
24 at page 9 of 20, where you say one of the things to do  
25 is establish technical advisory committees in key  
26 topic areas, and set out what they're going to do.

1 And you've already indicated to some extent what the  
2 technological committees are established for.

3 **Proceeding Time 11:32 a.m. T35**

4 MR. SAVIDANT: A: The technical advisory committees,  
5 yes.

6 MR. GATHERCOLE: Q: And if you could turn to Exhibit B-  
7 3, PVA IR 1.3.1.

8 MR. SAVIDANT: A: I'm there.

9 MR. GATHERCOLE: Q: Yeah, and I asked you at that time  
10 if you could provide the membership of the  
11 technological committees, and the answer was, "They  
12 are currently being formed and will be initiated in  
13 September 2008." I take it they have now been formed?

14 MR. SAVIDANT: A: That's correct.

15 MR. GATHERCOLE: Q: Can you indicate how many there  
16 are, and what their areas of activity are for  
17 specialization?

18 MR. SAVIDANT: A: How many technical advisory  
19 committees?

20 MR. GATHERCOLE: Q: Yes.

21 MR. SAVIDANT: A: There are at least four. There's one  
22 on social issues, there's one on Heritage issues, and  
23 I can't remember if we combine those or not. There's  
24 one on fisheries issues and wildlife, and I believe a  
25 climate one as well. That's --

26 THE CHAIRPERSON: Sorry, what one?

1 MR. SAVIDANT: A: Climate.

2 THE CHAIRPERSON: Climate, okay.

3 MR. GATHERCOLE: Q: Is that climate with respect to  
4 climate change or climate with respect to the fog?

5 MR. SAVIDANT: A: Potential impacts on climate of the  
6 project.

7 MR. GATHERCOLE: Q: And is it your intention to  
8 continue these advisory committees through Stage 3, if  
9 the decision is made to go ahead?

10 MR. SAVIDANT: A: I don't think we've made that  
11 decision yet. If we move to Stage 3 it will be a more  
12 formal regulatory process, and I don't know if the  
13 technical advisory committees will have a role in that  
14 or not.

15 MR. GATHERCOLE: Q: So the existing committees may not  
16 last past June.

17 MR. SAVIDANT: A: They may not, but I would emphasize  
18 that the people involved in those committees would be  
19 involved in a regulatory process, if we do move to  
20 Stage 3.

21 MR. GATHERCOLE: Q: Could you then provide the  
22 membership of those committees at this time?

23 MR. GODSOE: Subject to any privacy concerns, I think we  
24 can take that undertaking.

25 MR. GATHERCOLE: Thank you very much.

26

**Information Request**

1 MR. GATHERCOLE: Thank you, panel. Those are all my  
2 questions, Mr. Chairman.

3 THE CHAIRPERSON: Thank you, Mr. Gathercole.

4 THE CHAIRPERSON: Good morning, Mr. Bertsch. We again  
5 find yourself coming up just before lunch.

6 MR. BERTSCH: I'll keep an eye on the clock.

7 THE CHAIRPERSON: Very good. We will break at about  
8 quarter to.

9 **CROSS-EXAMINATION BY MR. BERTSCH:**

10 MR. BERTSCH: Q: Good morning, panel, witness panel.  
11 My name is Ludo Bertsch and I represent ESVI, OEIA,  
12 ITO, and ROMSBC.

13 Over the last few days there's been a  
14 number of discussions around milestones and DSM  
15 performance. And so I'd like to take a look at  
16 Exhibit B-4, ESVI, IR 2.10.1. ESVI 2.10.1. And this  
17 was a request by ESVI for the semi-annual DSM reports.  
18 Could you confirm that these semi-annual DSM reports  
19 provide the DSM performance over the last six months  
20 or one year periods, and that they compare them to the  
21 milestones?

22 MR. MATHESON: A: Mr. Bertsch, when you put it that  
23 way, it sounds like you have a page number in mind,  
24 you're referring to a specific passage.

25 MR. BERTSCH: Q: I'm referring to the semi-annual  
26 reports. There's a series of them in there.

1 MR. HOBSON: A: The semi-annual reports reflect a six-  
2 month review of performance with respect to actuals  
3 back against plan.

4 MR. BERTSCH: Q: Against plan.

5 MR. HOBSON: A: Yeah.

6 MR. BERTSCH: Q: Right. Could you confirm that  
7 ultimately the success or failure for the energy  
8 savings of the proposed DSM plan will be determined by  
9 the results of those reports?

10 MR. HOBSON: A: Can you say that again please?

11 MR. BERTSCH: Q: Could you confirm that ultimately the  
12 success or failure for the energy savings of the  
13 proposed DSM plan will be determined by the results of  
14 those reports?

15 MR. HOBSON: A: I'm not sure I quite follow that. I  
16 think the success or failure will be determined by our  
17 actions and the actions of the participants within our  
18 initiatives. I think the reports are simply providing  
19 the outcomes from those actions.

20 MR. BERTSCH: Q: And those are the outcomes of the DSM  
21 savings, correct? Energy savings.

22 MR. HOBSON: A: That's correct.

23 MR. BERTSCH: Q: Have these DSM reports been used in  
24 developing of the DSM plan?

25 MR. HOBSON: A: I wouldn't say that the DSM reports  
26 themselves are used directly in developing the DSM

1 plan. I think what's used in developing the DSM plan  
2 with respect to looking at actual performance back  
3 against plan is something that we look at through a  
4 number of different views, whether it's evaluation  
5 studies that are completed, whether it's monthly  
6 tracking and understanding of what's going on within  
7 specific initiatives, and there's a variety of  
8 feedback that's used to better inform us with respect  
9 to our plans moving forward.

10 MR. BERTSCH: Q: And the latest DSM report that was  
11 available when you developed the application, I assume  
12 would have been the fiscal 2007?

13 MR. HOBSON: A: When you developed the application.

14 MR. BERTSCH: Q: In June 2008. And I can direct you to  
15 that reference.

16 MR. HOBSON: A: Yeah, I'm just thinking, you know, when  
17 we file the application versus when we develop the DSM  
18 plan that in turn feeds in the LTAP analysis, there's  
19 more time involved with that. That's my hesitation.

20 **Proceeding Time 11:38 a.m. T36**

21 MR. BERTSCH: Q: So do you have a rough idea of which  
22 DSM report you would have used in combination with  
23 developing your plan?

24 MR. HOBSON: A: Well, as I said, I don't think it's the  
25 report itself that we would have turned to. I think  
26 we look at a longer view with respect to what's going

1 on with initiatives. This report is a specific report  
2 that's requested by the Commission.

3 MR. BERTSCH: Q: Okay.

4 MR. HOBSON: A: To provide information on the  
5 Commission on a semi-annual basis.

6 MR. BERTSCH: Q: Okay, if you could take a look at  
7 attachment 2 of 2.10.1.

8 MR. HOBSON: A: I have that.

9 MR. BERTSCH: Q: Could you confirm that this is the DSM  
10 report for the 12 months ending March 31<sup>st</sup>, 2007?

11 MR. HOBSON: A: Yes.

12 MR. BERTSCH: Q: Could take a look at page 5 of 17.

13 MR. HOBSON: A: I have that.

14 MR. BERTSCH: Q: Could you confirm that the energy  
15 savings of the energy efficiency portion was 412  
16 gigawatt hours per year versus the target of 310  
17 gigawatt hours per year?

18 MR. HOBSON: A: Yes.

19 MR. BERTSCH: Q: And that the expenditures were 26  
20 million versus budgeted 39 million? Approximately?

21 MR. HOBSON: A: Approximately, yes.

22 MR. BERTSCH: Q: And that the expenditures therefore  
23 were 33 percent below target and energy savings 33  
24 percent above target.

25 MR. HOBSON: A: For those portions, yes.

26 MR. BERTSCH: Q: Yes. Would this give an indication in

1           some way that the DSM targets perhaps are too low?

2 MR. HOBSON:    A:    No, you know, I think we're taking

3           snapshots here, and I think we've also got some of the

4           issues that I spoke of earlier, in terms of nailing

5           the ramp-up with respect to specific initiatives.

6           We're going to get variation with respect to

7           performance within slices in time, and I think within

8           the planning exercise that we put forward over a long

9           term, you're almost working towards an end point, and

10          you're trying to shape that in terms of when you think

11          the savings consistent with your offer are going to

12          drive savings within a specific period of time.

13 MR. BERTSCH:   Q:    But I take it this information was

14          from over two years ago.  So it was before the new

15          initiatives?

16 MR. HOBSON:    A:    This information would be dated back to

17          the year ending March 31<sup>st</sup>, 2007, yes.

18 MR. BERTSCH:   Q:    If you could just take a look at --

19          under sector total for industrial sector, and we see

20          65 percent positive.  So that's 65 percent over

21          target.  Do you see that?

22 MR. HOBSON:    A:    No, I'm not following you.

23 MR. BERTSCH:   Q:    If you look under incremental energy

24          savings, far right column --

25 MR. HOBSON:    A:    Yes.

26 MR. BERTSCH:   Q:    65 percent.

1 MR. HOBSON: A: Yes, I see that.

2 MR. BERTSCH: Q: Do you have an idea why that's so much  
3 over target?

4 MR. HOBSON: A: Well, I think one of the things that  
5 was difficult for us with respect to that program was  
6 we were shifting, still I think, into a different  
7 world with respect to the transmission services rates  
8 and what was going on with respect to industrial  
9 customers' response to that rate structure in  
10 combination with some of the activities that we were  
11 putting forward to support them in finding energy  
12 efficiency opportunities, and the relationship between  
13 how well they would respond to that and how quickly, I  
14 think, is what you're seeing with respect to this.

15 MR. BERTSCH: Q: And when you look at the refrigerator  
16 buy-back, you see 70 percent?

17 MR. HOBSON: A: That's correct.

18 MR. BERTSCH: Q: And do you have a similar idea of  
19 what's going on there, and the light emitting diodes,  
20 why that's 400 percent over target?

21 MR. HOBSON: A: The refrigerator buy-back, I believe,  
22 may have something to do with -- yeah, I think that  
23 has to do with an extension in time. I believe there  
24 was originally a planned end date to that initiative  
25 under our previous plan, and there was an extension to  
26 the program based on the performance of it.

1 MR. BERTSCH: Q: That maybe was not taken into account  
2 in producing your plans.

3 MR. HOBSON: A: In establishing the planned target?  
4 That's, I believe, my understanding of that.

5 MR. BERTSCH: Q: And that was for the refrigerators and  
6 the LEDs? Why was 400 percent?

7 MR. HOBSON: A: For LEDs, so, with this one, this is a  
8 situation where we pick up market effects that occur,  
9 and we're subject to getting data after the fact with  
10 respect to sales within that marketplace, that we go  
11 in and we're doing a lot of activities with retailers  
12 and manufacturers, trying to transform the market, in  
13 this case, with respect to these holiday lights. And  
14 we make estimates around market effects. And in this  
15 one, I think we were just very successful with respect  
16 to what we thought we would achieve. We were too  
17 conservative with respect to the rate of change that  
18 people got over the acceptance of the product  
19 technology and the retailers started to move from a  
20 situation where they no longer even carry some of the  
21 incandescent holiday lights any longer.

22 **Proceeding Time 11:43 a.m. T37**

23 MR. BERTSCH: Q: Take a look at attachment 4 of IR  
24 2.10.1. It's the same grouping. Attachment 4, which  
25 is the DSM for the period ending March 31<sup>st</sup>, 2008.

26 MR. HOBSON: A: Yeah, I have that.

1 MR. BERTSCH: Q: If you could just take a look at page  
2 6 of 17, and this is for one year after the last one.  
3 MR. HOBSON: A: That's right.  
4 MR. BERTSCH: Q: And this report, if you could confirm,  
5 that was released October 2008.  
6 MR. HOBSON: A: I can confirm that. Well, I can  
7 confirm that it's -- yes, October 2008, yes.  
8 MR. BERTSCH: Q: And some of the same numbers that I  
9 brought up before still are appearing. The industrial  
10 sector at 112 percent?  
11 MR. HOBSON: A: That's correct.  
12 MR. BERTSCH: Q: And the refrigerator buyback at 55  
13 percent, and this over target.  
14 MR. HOBSON: A: That's right.  
15 MR. BERTSCH: Q: And 700 percent on LEDs. Now, if we  
16 look at -- this came out in response to the -- in time  
17 for the evidentiary update. Did any of this be taken  
18 into account for the evidentiary update?  
19 MR. HOBSON: A: In terms of the long-term performance  
20 of these initiatives?  
21 MR. BERTSCH: Q: Yes.  
22 MR. HOBSON: A: Yes, I think it has been taken into  
23 account. So as an example, I think we took into  
24 account the concept of the response to the advertising  
25 that's outlined as part of the explanation behind the  
26 refrigerator buy-back program and how we designed and

1 implemented that initiative within our plan.

2 MR. BERTSCH: Q: So this particular DSM report helped  
3 refine your DSM plan?

4 MR. HOBSON: A: No. Again, I don't think it is  
5 specific to this report. I think this report is an  
6 outcome of a reporting function back to the  
7 Commission, but there's a variety of different things  
8 that we would look at.

9 MR. BERTSCH: Q: But it's one of the inputs that you  
10 use.

11 MR. HOBSON: A: I wouldn't suggest it's an input. I  
12 think we are tracking a lot of this information and  
13 leading indicators that are associated with some of  
14 these initiatives beyond what you would find here as  
15 well, and it's a variety of information that we are  
16 taking into account and making the judgments within  
17 the plan we put forward.

18 MR. BERTSCH: Q: And could you confirm that the energy  
19 savings, incremental energy savings is 464 for that  
20 period?

21 MR. HOBSON: A: Yes.

22 MR. BERTSCH: Q: And that the plan was 271.

23 MR. HOBSON: A: Yes.

24 MR. BERTSCH: Q: You're 71 percent over target.

25 MR. HOBSON: A: Yeah, and I'd note the bulk of that  
26 comes in the industrial sector with PowerSmart

1 Partners. So of the 193 increment, 184 of it is tied  
2 to that one area.

3 MR. BERTSCH: I note the time.

4 THE CHAIRPERSON: Thank you, Mr. Bertsch, we will break  
5 for lunch. Back at 1:15.

6 **(PROCEEDINGS ADJOURNED AT 11:46 P.M.)**

7 **(PROCEEDINGS RESUMED AT 1:13 P.M.)**

**T38**

8 THE CHAIRPERSON: Please be seated.

9 Mr. Godsoe?

10 MR. GODSOE: Mr. Chairman, I just have one preliminary.  
11 Mr. Bois has helpfully pointed out that Exhibit B-41,  
12 the units are incorrect, and so we will correct that  
13 in an amended version. Dependable capacity is in  
14 gigawatt hours, and you and I know that should be in  
15 megawatts, so --

16 THE CHAIRPERSON: Right.

17 MR. GODSOE: We will file an amended version of that.

18 THE CHAIRPERSON: Very good. Mr. Bertsch.

19 **CROSS-EXAMINATION BY MR. BERTSCH (CONTINUED):**

20 MR. BERTSCH: Q: Thank you. Before the break, we were  
21 taking a look at the DSM reports for fiscal 2007 and  
22 2008. And I think it was clear that, for both of  
23 those reports, the savings that are actually obtained  
24 versus planned and the expenditures -- the savings  
25 were more than planned, the actuals, and I think as  
26 well the savings -- the expenditures were lower than

1 planned.

2 It would seem that, similar to Mr. Weafer's  
3 request earlier this morning, we're wondering if, as  
4 an undertaking, you could provide the last 10 years of  
5 DSM planned savings and compared to actuals.

6 MR. GODSOE: We'll take that undertaking.

7 MR. BERTSCH: Thank you.

8 **Information Request**

9 MR. BERTSCH: Q: If you could pull out Exhibit B1-1,  
10 Appendix K, page 99 of 213.

11 MR. HOBSON: A: I have that.

12 MR. BERTSCH: Q: Could you confirm that those are the  
13 targets for the \$418 million order that's being sought  
14 for the DSM plan?

15 MR. GODSOE: Sorry, Mr. Bertsch, could I get that page  
16 reference again?

17 MR. BERTSCH: Q: Yes. That's page -- Appendix K, page  
18 99 of 213.

19 MR. HOBSON: A: Mr. Bertsch, I'm just looking at the  
20 gigawatt hour totals back to the time period on the  
21 chart, and I think I'd have to confirm whether or not  
22 that is indeed the correct representation of the time  
23 period. I was looking back across to --

24 MR. BERTSCH: Q: Yes, if you look at 101, is that the  
25 other page you're looking at?

26 MR. HOBSON: A: That is where I went to.

1 MR. BERTSCH: Q: Yes. And that was my next question,  
2 was does it appear in the three-year total. And I'm  
3 trying to link those two.

4 MR. HOBSON: A: Yes, I'm just finding it now. So, 299.  
5 So, yes, I note if I look on page 101 I see  
6 1,052 at the bottom for total programs, 1,052 at the  
7 bottom of page 99 of 213 as well. And I would expect  
8 there'll be some differences with respect to --

9 **Proceeding Time 1:19 p.m. T34**

10 MR. BERTSCH: Q: Subject to a rounding error.

11 MR. HOBSON: A: -- rounding, yes.

12 MR. BERTSCH: Q: Thank you. So both of those basically  
13 line up, and that is the targets that you're aiming  
14 for for the order.

15 MR. HOBSON: A: It would appear to be, yes.

16 MR. BERTSCH: Q: Thank you. And that is reflected in  
17 column 5 on page 101?

18 MR. HOBSON: A: Now, by column 5 are we referring to  
19 the three-year total?

20 MR. BERTSCH: Q: Yes. That's column 5.

21 MR. HOBSON: A: That's reflected there, yes.

22 MR. BERTSCH: Q: Thank you. And that the year-by-years  
23 appear in columns 2, 3 and 4.

24 MR. HOBSON: A: I don't have column numbers on mine but  
25 they would appear in fiscal '09, fiscal '10 and fiscal  
26 '11.

1 MR. BERTSCH: Q: Thank you.

2 MR. HOBSON: A: Which would sum to the three-year  
3 total.

4 MR. BERTSCH: Q: If you could take a look back at  
5 Attachment 2, B-4, ESVI IR 2.10.1, Attachment 2. We  
6 were looking at that previously, which is the fiscal  
7 2007 DSM report. And if you keep Table 1 on your desk  
8 there, Mr. Hobson.

9 MR. HOBSON: A: You'll have to give me the reference  
10 again, please.

11 MR. BERTSCH: Q: 2.10.1, Attachment 2, Exhibit B-4.  
12 Exhibit B-4.

13 MR. HOBSON: A: Yes, I have that.

14 MR. BERTSCH: Q: Yeah. And if we could go back to the  
15 page that we're at before, which was page 5 of 17.

16 MR. HOBSON: A: I have that.

17 MR. BERTSCH: Q: And we were looking before at the  
18 number of 412 gigawatt hours per year. Is that the  
19 actual savings again for fiscal 2007?

20 MR. HOBSON: A: I see that, yes.

21 MR. BERTSCH: Q: Now, if we could go to Table 1, page  
22 101, and put those both on your desk there. And do I  
23 read this correctly that the 412, the actual for 2007  
24 is actually higher than the plan for fiscal 2008 at  
25 286?

26 MR. HOBSON: A: That's correct.

1 MR. BERTSCH: Q: Can you explain that?

2 MR. HOBSON: A: We're going to have differences year  
3 over year and sometimes it's going to depend on a  
4 forecast of specific projects or savings that we  
5 anticipate to move through in a given period of time.  
6 So for the industrial sector you may have  
7 significantly larger projects in a given year that  
8 you've got a view on. We do move through, through our  
9 relationship with industrial customers and have what  
10 we have characterized as a sales funnel. So we do  
11 have a view with respect to projects that we  
12 anticipate to move through. And sometimes that will  
13 create spikes within given years that won't appear  
14 every year.

15 Within the residential sector, we may get  
16 significant changes with respect to market effects  
17 coming through as a result of the sales of a certain  
18 product as it moves or breaks into the marketplace,  
19 that's certainly not going to be something that's  
20 sustained over time. So there can be a variety of  
21 reasons.

22 **Proceeding Time 1:21 p.m. T40**

23 MR. BERTSCH: Q: If you take a look at the plan for the  
24 DSM report at -- and the plan was 310 gigawatt hours  
25 per year in the DSM report. Is that correct?

26 MR. HOBSON: A: That's correct.

1 MR. BERTSCH: Q: Why is the plan higher than fiscal  
2 2000 --

3 MR. HOBSON: A: It would be for the same reason. So,  
4 as we're casting these plans, we're utilizing the best  
5 information we have to try to get a view on the  
6 savings over a period of time, as well as within the  
7 near term. And year over year, there are going to be  
8 differences for the reasons that I outlined.

9 MR. BERTSCH: Q: But if this is going to be an  
10 aggressive program, and this was done a year or two  
11 ago, that the actuals -- a decrease is -- can you  
12 explain why there's a decrease from what's supposed to  
13 be an aggressive plan?

14 MR. HOBSON: A: Well, it's reflecting fiscal 2008, the  
15 first year within that column. After that, we're  
16 jumping up to 573, and we're moving up, with respect  
17 to cumulative savings, to a much higher level than  
18 what we would have forecast in previous plans. So,  
19 the original ten-year plan that we brought forward had  
20 a target of approximately 3600 gigawatt hours over a  
21 ten-year period. This plan has established a level of  
22 savings that's 10,600 gigawatt hours over just a  
23 slightly longer period. So, that's why I would  
24 characterize it as being more aggressive.

25 MR. BERTSCH: Q: Okay. If we could look at attachment  
26 4 of Exhibit B-4, 2.10.1, the 2008 DSM report. Now,

1 we're comparing a DSM of 2008 actual to now the same  
2 column, physical 2008. And I note that the  
3 residential is at 32 in the plan, in the DSM plan, yet  
4 it appears as 42 in Appendix K. Can you explain why  
5 there's the difference when those are both supposed to  
6 be the same year?

7 MR. HOBSON: A: Yeah, and when we put -- the plan  
8 values will be different because they'll represent  
9 different points in time and different plans. So at  
10 the point that we are putting the DSM plan together  
11 that was filed as part of this LTAP, we were utilizing  
12 new information as a result of where we were within  
13 the process of fiscal 2008. So it was drawing upon a  
14 forecast of what we believed that we would be  
15 achieving at a point in time partway through that  
16 period.

17 MR. BERTSCH: Q: Okay.

18 MR. HOBSON: A: As opposed to just adopting the  
19 previous plan values straight into this exercise.

20 MR. BERTSCH: Q: Could you confirm again that the  
21 totals for actuals for fiscal 2008 is 464 gigawatt-  
22 hours per year in Attachment 4?

23 MR. HOBSON: A: I can confirm that that's the number,  
24 yes.

25 MR. BERTSCH: Q: And now we're comparing year-to-year.  
26 Can you explain why 364 is larger than the 268?

1 MR. HOBSON: A: Sorry, 364?

2 MR. BERTSCH: Q: The -- sorry, the 464 in Attachment 4  
3 for actuals is so much higher than the plan --

4 MR. HOBSON: A: Of 286.

5 MR. BERTSCH: Q: -- of 286 in Appendix K.

6 MR. HOBSON: A: As I mentioned just before the break, I  
7 mean, a big portion of that difference is -- you know,  
8 193 gigawatt hours. A big portion of that difference  
9 is 184, tied to one initiative. And so it would be  
10 that one initiative that has, I think, some unique  
11 considerations for us at that time period with respect  
12 to the transmission services rates that resulted in  
13 additional savings, that we wouldn't have had a clear  
14 view at the point that we were putting this planning  
15 material together.

16 MR. BERTSCH: Q: Okay, thank you. As we move forward  
17 on Table 1 in Appendix K, the energy savings are  
18 cumulative, is that correct?

19 MR. HOBSON: A: They're cumulative savings, yes.

20 MR. BERTSCH: Q: And the numbers that appear in the DSM  
21 reports are incremental, year by year, is that  
22 correct?

23 MR. HOBSON: A: I think generally that's correct. I  
24 think there are some cumulative values in different  
25 places within the report. So --

26 MR. BERTSCH: Q: But if we look at page 6, and a

1 similar page that will appear in other reports, that's  
2 incremental, is that correct?

3 MR. HOBSON: A: That is incremental on page 6, but you  
4 know, we do have in other tables where we show our  
5 progression towards our target.

6 MR. BERTSCH: Q: Sure.

7 MR. HOBSON: A: So one of the things we focused on now  
8 is a very near term that gets re-cast each period that  
9 we go out. So each time we take a look at our past  
10 performance, we re-cast the near term again. But  
11 we've got our eye on where we're headed, which is  
12 approximately the 3600 gigawatt hours in the 2012  
13 period. And that's where you can see some cumulative  
14 values, where we're tracking about 75 percent of that  
15 goal in the 2008 period.

16 **Proceeding Time 1:21 p.m. T41**

17 MR. BERTSCH: Q: Thank you. If we look at it on a  
18 year-by-year basis, to calculate the incremental DSM  
19 savings, do you subtract the cumulative savings from  
20 the year before to get incremental?

21 MR. HOBSON: A: It depends on the view that you're  
22 looking for, and the one thing that you need to  
23 understand that's also within those changes would be  
24 the persistence of savings and so the drop-off of past  
25 savings. So if you think about it in terms of the  
26 cumulative savings are showing your end point at a

1 given year, and what's happening is you're getting  
2 additional new savings from new participation but  
3 you're also getting, within the change, you're also  
4 getting some drop-off of historical savings.

5 So if you just do the math to get the  
6 result of what the change from year to year is, you've  
7 got both of those factors occurring.

8 MR. BERTSCH: Q: And one of those factors is  
9 incremental lining in from the DSM reports, to -- if  
10 we wanted to compare the DSM reports to Table K, we'd  
11 have to do the incremental to see how it matches.

12 MR. HOBSON: A: That's right. If you're taking from  
13 the tables that have the incremental savings and  
14 trying to compare here, yes.

15 MR. BERTSCH: Q: That's right.

16 I'd like to enter another exhibit, and what  
17 this is is Table 1 where I have done, with pencil, the  
18 incrementals for some of the rows. So I realize this  
19 is the first time you saw it, but the calculations are  
20 simple and we can check them as we go through.

21 Basically what I have done is I've added  
22 incrementals to rate structures, energy efficiency  
23 programs, and the portfolio totals. Would you say,  
24 subject to check, this shows incremental plus  
25 cumulative savings for your plan?

26 MR. HOBSON: A: Subject to check, with respect to the

1 additions that you made.

2 MR. BERTSCH: Q: Thank you. Is there such a chart in  
3 the LTAP that includes the rows that I have added  
4 here?

5 MR. HOBSON: A: I'm not sure that there's a chart  
6 similar to this, no.

7 MR. BERTSCH: Q: Has B.C. Hydro looked at the DSM plan  
8 from this point of view in looking at it from an  
9 incremental point of view?

10 MR. HOBSON: A: We would understand the incremental  
11 changes that are occurring year to year.

12 MR. BERTSCH: Q: Let me just take a look at the chart  
13 on a first glance. I'd just like to point to a few  
14 trends and just get your feedback. The first thing I  
15 notice at the bottom on the portfolio total, again the  
16 incremental, basically the trend is it to year-by-year  
17 go up to fiscal 2012 to 1206, a slight drop, another  
18 peak at 1156, and then trail off in the years at the  
19 end?

20 MR. HOBSON: A: That's the outcome. You know, there's  
21 a number of factors that are driving those changes.

22 MR. BERTSCH: Q: Okay.

23 MR. HOBSON: A: You know, if take a look at rate  
24 structures, there's assumptions in terms of when rate  
25 structures begin. They'll also be within the  
26 modelling different assumptions with respect to the

1 level of rate change and how that factors into the  
2 model and in turns drives savings that would influence  
3 the levels being driven out by rates. Code changes  
4 tend to come in blocks. So as you get an  
5 introduction, especially on a shorter-term technology  
6 like lighting, as you get an introduction of lighting  
7 in 2012 you're going to start to get a greater ramp-up  
8 of savings that's going to be an additional boost.

9 MR. BERTSCH: Q: So that explains the ramp-up in 2012?

10 MR. HOBSON: A: It would be part of it, I would  
11 suspect.

12 MR. BERTSCH: Q: Okay.

13 MR. HOBSON: A: I mean you can --

14 MR. BERTSCH: Q: And the drop after that, do you have  
15 an idea what might be causing that?

16 MR. HOBSON: A: To fall out? I would expect that  
17 you've got some shorter-term persistence that may be  
18 occurring, but I couldn't say in terms of what the  
19 drop in in that specific year is. On an incremental  
20 basis?

21 MR. BERTSCH: Q: Yes.

22 MR. HOBSON: A: You know, you don't have a replacement  
23 code that's materializing, that's giving you a boost  
24 of savings in 2012, I suppose, would be the easy  
25 explanation.

26 MR. BERTSCH: Q: And also it's obvious as we get to the

1 end of the plan it's trailing off to numbers like 236  
2 and 241. If you could maybe explain what that means.

3 **Proceeding Time 1:31 p.m. T42**

4 MR. HOBSON: A: That would be as we go further out into  
5 the plan, we've maintained a certain level of  
6 activity, but we're starting to come under the  
7 phenomenon of the persistence starting to decay and  
8 fall off. So, that's what's occurring there.

9 MR. BERTSCH: Q: Under rate structures, for fiscal  
10 2013, can you explain the negative 58?

11 MR. HOBSON: A: I couldn't directly, other than -- or  
12 precisely, but generally speaking it would be an  
13 outcome from the model that would be subject to the  
14 various assumptions with respect to when rates are  
15 starting. The tier level -- or the tiers that were  
16 established in the structure, the rate levels that are  
17 being applied, and the resulting amount of load that's  
18 being -- that's seeing those rate levels, and keep in  
19 mind the portion that's getting applied to the DSM  
20 plan is going to be the delta between the overall  
21 elasticity applied to the rate levels and that rate  
22 structure, less the rate levels being applied to an  
23 elasticity at the current rates.

24 MR. BERTSCH: Q: And how long is the persistence for  
25 rate structures?

26 MR. HOBSON: A: The persistence for rate structures,

1           because we will have ongoing increases, I believe the  
2           persistence would maintain itself over the period.

3 MR. BERTSCH:    Q:    So why would we have a negative 58  
4           then?

5 MR. HOBSON:    A:    Presumably --

6 MR. BERTSCH:    Q:    For just the rate structures.

7 MR. HOBSON:    A:    Again, I just outlined, I guess, the  
8           reasons. I'm not sure how much further I can expand  
9           in detail beyond that.

10 MR. BERTSCH:    Q:    Okay. And similar for the minus  
11           numbers for rate structures in 2019, 2022 and 2023?

12 MR. HOBSON:    A:    It would be a function of that same  
13           modeling outcome.

14 MR. BERTSCH:    Q:    Okay. On energy efficiency programs,  
15           I see a general rise from 20 -- 2008 -- from 2008 up  
16           to 453 in 2012. And then a peak at 2014 of one year,  
17           and the rest of it basically around 400. Can you  
18           explain that particular peak?

19 MR. HOBSON:    A:    No different than the explanation I've  
20           provided you so far. You're going to have different  
21           levels of savings coming in different years, and some  
22           of that's going to be driven by individual programs.

23 MR. BERTSCH:    Q:    That all line up in one year.

24 MR. HOBSON:    A:    Yes, and then how they're performing in  
25           that given year, and you're going to be subject to  
26           persistence, it's going to be occurring and decaying

1           some of that incremental growth.

2 MR. BERTSCH:    Q:    Go back to Attachment 4, IR 2.10.1.

3           We have an actual value of 464 gigawatt hours --

4 MR. FULTON:    Mr. Chairman, before we move on, we should  
5           mark the witness aid as C23-9.

6 MR. BERTSCH:    Oh, sorry. C23-9. Thank you.

7 THE HEARING OFFICER:   C23-9.

8           (TABLE ENTITLED "TABLE 1. CUMULATIVE ENERGY SAVINGS AT  
9           CUSTOMER METER (GWH/YR)", WITH HANDWRITTEN NOTATIONS  
10          MARKED EXHIBIT C23-9)

11 MR. BERTSCH:    Q:    If we look at the actual for last year  
12          at 464 gigawatt hours per year.

13 MR. HOBSON:    A:    Yes.

14 MR. BERTSCH:    Q:    If this is an aggressive program, how  
15          can you -- can you explain how that value is larger  
16          than every other value other than fiscal 2014?

17 MR. HOBSON:    A:    I think we've received an influx of  
18          savings under the TSR with PowerSmart Partners. That  
19          if you took, you know, essentially 200 gigawatt hours  
20          out of this plan, you would find that number would be  
21          quite a bit less. And I don't think we can anticipate  
22          that we're going to continue to get on an incremental  
23          basis that kind of growth coming off that Tier 2 rate  
24          in that industrial sector, coupled with our enabling  
25          activities as a sustainable practice.

26 MR. BERTSCH:    Q:    Okay. If you could take a look at B-

1 4, ESVI IR 2.10.3.

2 MR. HOBSON: A: Can you give me the reference again,  
3 please?

4 MR. BERTSCH: Q: B-4, ESVI IR 2.10.3. Oh, sorry, and  
5 before we go to that, I'm sorry, there's one last  
6 point. On the DSM reports on the capital  
7 expenditures, could you tell me which table that would  
8 link to in Appendix K?

9 MR. HOBSON: A: Sorry, say that again?

10 MR. BERTSCH: Q: We've been linking the energy savings  
11 to Appendix K from the DSM reports. What is the link  
12 between the capital expenditures in the DSM report to  
13 Appendix K. Which table does it line up with?

14 **Proceeding Time 1:35 p.m. T43**

15 MR. HOBSON: A: Well, the B.C. Hydro expenditures, if  
16 what you're asking me where do you find that in  
17 Appendix K, that would be in Table 5.

18 MR. BERTSCH: Q: At the back here we have -- so it  
19 doesn't appear at the back of the tables?

20 MR. HOBSON: A: Table 5.

21 MR. BERTSCH: Q: Table 5, okay, I'll look at that,  
22 thank you.

23 If you could go to 2.10.3, and this is  
24 dealing with B.C. Hydro's proposal to switch to an  
25 annual DSM report.

26 MR. HOBSON: A: I have that.

1 MR. BERTSCH: Q: Would you take a quick look at -- hold  
2 that handy. Well, actually let's go through that  
3 first.

4 Given that the annual reports, one of the  
5 orders that B.C. Hydro is looking for is to move to an  
6 annual basis. If we did do that, the report that we  
7 have right now, that would be the only report we would  
8 have for the next six months, is that correct?

9 MR. HOBSON: A: Sorry, you're asking me if you move to  
10 an annual report?

11 MR. BERTSCH: Q: If we did go along with the annual  
12 report, the report that we're looking at right now  
13 would be the only report we would have till October.  
14 Is that correct? Because otherwise there'd be a new  
15 one coming up this spring.

16 MR. HOBSON: A: Within six months. I that -- that's  
17 right, yes.

18 MR. BERTSCH: Q: So at that time, today it's March  
19 2009, and the latest DSM report covers the period --  
20 so therefore we would be looking at data two and a  
21 half years to one and a half years old at that time.

22 MR. HOBSON: A: Sorry, you'll have to repeat that for  
23 me.

24 MR. BERTSCH: Q: In fall --

25 MR. HOBSON: A: Okay.

26 MR. BERTSCH: Q: In fall, we would be at that time,

1 let's say September before the report is out, we would  
2 be relying on data that's one and a half years to two  
3 and a half years old, because it would be going --

4 MR. HOBSON: A: I'm not following your logic with that.

5 MR. HOBSON: A: Okay.

6 MR. GODSOE: But we're still under an obligation to  
7 final semi-annual reports, so maybe I can clarify  
8 that.

9 MR. BERTSCH: Q: Okay. Okay, that's fine. That's  
10 clarified, so thank you.

11 Okay, if we could go to two -- now, dealing  
12 with the reporting, in order to get these reports, I  
13 filed an information request and it was provided. How  
14 does B.C. Hydro release the semi-annual reports? Is  
15 it sent to BCUC and up to intervenors to request that  
16 information, or how is it available? Does it go up on  
17 your website or --

18 MR. HOBSON: A: I don't believe it goes on our website  
19 but we do file it with the Commission. I'm not sure,  
20 to be honest with you, what the distribution is beyond  
21 the Commission, but I assume at the point that they're  
22 filed with the Commission that they're available. But  
23 I can't help you beyond that.

24 MR. BERTSCH: Q: Could you confirm that it does -- or  
25 maybe --

26 MR. GODSOE: I can confirm it's on our website as well.

1 MR. BERTSCH: Q: And what is the timeframe from the  
2 release of -- and maybe you can answer this; from the  
3 release of the report to appearing on the website.  
4 MR. GODSOE: That I'm afraid I cannot answer.  
5 MR. BERTSCH: Thank you.  
6 MR. BERTSCH: Q: Okay. If you'd take a look at  
7 Appendix -- Exhibit B-1-1, Appendix K, Sub-appendix J.  
8 MR. HOBSON: A: I have that.  
9 MR. BERTSCH: Q: This is a list of rejected programs,  
10 codes and standards?  
11 MR. HOBSON: A: That's correct.  
12 MR. BERTSCH: Q: What warrants -- sorry, it's page 206  
13 of 213 in Appendix K.  
14 What warrants programs to end up on this  
15 list?  
16 MR. HOBSON: A: I think we've put the rationale in the  
17 column.  
18 MR. BERTSCH: Q: But why would one program get on here  
19 and not another as a rejected one?  
20 MR. HOBSON: A: Again, I think we've put the response  
21 in the column. I'm not sure what I can help you with  
22 beyond that, but maybe you could direct.  
23 MR. BERTSCH: Q: Sure. The question I'm asking is, is  
24 yet a third category, being a number of DSM programs  
25 that are neither rejected, nor a program designed but  
26 not considered. So how do you move it from this not

1 considered to being listed in this table?

2 **Proceeding Time 1:40 p.m. T44**

3 MR. HOBSON: A: I'm sorry, I'm still --

4 MR. BERTSCH: Q: How do you decide what should be  
5 rejected?

6 MR. HOBSON: A: Okay, can you give me a specific  
7 example? I mean, I'm thinking we were fairly clear in  
8 terms of the rationale that we laid out, and I'm not  
9 sure what your question really is.

10 MR. BERTSCH: Q: Okay, let's say there was a program to  
11 supply energy efficient swimming pool heaters. Okay?  
12 As an example. And it's not in this list.

13 MR. HOBSON: A: Oh, I see.

14 MR. BERTSCH: Q: Why would it not be on that list, but  
15 something else?

16 MR. HOBSON: A: So, you're referring to a program that  
17 we never did any work on.

18 MR. BERTSCH: Q: Could be.

19 MR. HOBSON: A: That was never developed or conceived  
20 of, and doesn't make it onto this list?

21 MR. BERTSCH: Q: Right.

22 MR. HOBSON: A: I think the starting point is, we would  
23 have had to start down a path of developing a concept  
24 around a program. So if we had never developed a  
25 concept for an initiative, there would be nothing to  
26 have rejected.

1 MR. BERTSCH: Q: Okay, so these are programs that  
2 you've had familiarity with?

3 MR. HOBSON: A: No, these are concepts that we started  
4 to develop, and as we developed them, they were not  
5 able to be developed to the stage that we thought were  
6 appropriate to include within our DSM plan options,  
7 for the reasons that we've outlined here.

8 MR. BERTSCH: Q: Okay. If you take a look at Exhibit  
9 B-4, ESVI IR 2.8.1. This is an IR from ESVI  
10 requesting information about the previous PowerSmart  
11 program, and the answer from B.C. Hydro was:

12 "Literature for the B.C. Hydro loan offered  
13 under this program dates back to the mid- to  
14 late 1990s and B.C. Hydro could not find any  
15 copies of this program literature."

16 Have you since found any information?

17 MR. HOBSON: A: No, and to be honest with you, I'm not  
18 sure we spent a lot of time looking for the literature  
19 beyond what we did when we were trying to respond to  
20 this request.

21 MR. BERTSCH: Q: Now, I understand from transcript 12,  
22 page 2232, on page -- on line 14, that discussion came  
23 up with your --

24 MR. HOBSON: A: I'm sorry, Mr. Bertsch, can you give me  
25 the page reference?

26 MR. BERTSCH: Q: Line -- sorry, the page is 2232 and

1 line 14. And the discussion was about previous  
2 PowerSmart programs.

3 MR. HOBSON: A: Right.

4 MR. BERTSCH: Q: And specifically "I can speak to the  
5 period in the early 1990s."

6 MR. HOBSON: A: Yes.

7 MR. BERTSCH: Q: And then on line 23:

8 "... And comparing our current plan back to  
9 that plan, I think we're moving forward with  
10 a much more aggressive plan today and a much  
11 more comprehensive plan that we had back at  
12 that point."

13 But by "the plan", do you mean DSM -- the DSM plan now  
14 or the one in the LTAP?

15 MR. HOBSON: A: The DSM -- well, I consider them  
16 essentially to be one and the same when I'm referring  
17 to it that way, but the DSM plan in the LTAP is really  
18 what I'm referring to.

19 MR. BERTSCH: Q: Okay. Could you explain your  
20 understanding of the B.C. Hydro home improvements  
21 program in the 1990s? You touched upon it, but if you  
22 could maybe go through a little bit more of the detail  
23 of it as you understand.

24 MR. HOBSON: A: I could. Do I need the transcript  
25 reference any more?

26 MR. BERTSCH: Q: No, no, you can put that away.

1 MR. HOBSON: A: B.C. Hydro offered a range of programs  
2 in the 1990s, including one called the Home  
3 Improvements Program, which was structured as both an  
4 audit program along with contractor services. So at  
5 the time, some of the issues that were being looked  
6 at, and this is specifically around insulation of  
7 windows, was trying to get retrofit activity happening  
8 within the home, and there were not a lot of good  
9 practices within the marketplace in terms of  
10 contractors available and products, for that matter,  
11 available for these types of energy efficiency  
12 upgrades. And so a practice taken by utilities at  
13 that point was to offer audit services, where they  
14 would go into a home, similar to what's offered today.

15 **Proceeding Time 1:45 p.m. T45**

16 They would do an assessment of the home, including  
17 what's called a blower door test, which would try to  
18 measure what the air leakage within the home was, and  
19 they would provide recommended steps that consumers  
20 could take to make their home more energy efficient.

21 The next obstacle that consumers faced was  
22 where do they turn? Now that they've got that  
23 information, where do they turn to actually get the  
24 work done? And so B.C. Hydro worked to establish a  
25 network of contractors in different portions of the  
26 province, given that that industry around retrofits

1 for energy efficiency was really not well developed in  
2 B.C., and worked with training and certification of  
3 those contractors, and provided some financial loans  
4 through the B.C. Hydro Bill as part of that offering  
5 to customers.

6 MR. BERTSCH: Q: Do you know approximately how many  
7 homes were done?

8 MR. HOBSON: A: Off the top of my head, I'm sorry, I  
9 can't help you with the number.

10 MR. BERTSCH: Q: Is it possible to -- is that number  
11 available somewhere?

12 MR. GODSOE: Well, it might be, but I'm questioning the  
13 relevance of providing that number.

14 MR. HOBSON: A: What I might be able to with too, to  
15 give some time scale to this, is this would be a  
16 program that would have operated with a loan component  
17 until probably around the mid to late portion of the  
18 1990s, and then the loan portion would have been  
19 scaled down. And our direct attachment to the  
20 contractors was also severed at that point as the  
21 industry, I don't think, required B.C. Hydro to prop  
22 it up at that stage. And I think that's similar to  
23 the loan component to have it. I think we were seeing  
24 that, you know, we were a utility providing financing  
25 in a world that no longer required our assistance in  
26 that area, that there were a number of entities,

1 including some of the contractors that had made their  
2 own arrangements for financing provisions that they  
3 could offer customers at the same time the service was  
4 being offered.

5 MR. BERTSCH: Q: I'd like to enter another exhibit,  
6 which is the literature that we've been able to find  
7 and to confirm that that is the proper literature of  
8 what you just described.

9 MR. HOBSON: A: How good a job did I do?

10 MR. BERTSCH: Q: I think you did pretty good.  
11 C23-10.

12 THE HEARING OFFICER: Marked Exhibit C23-10.  
13 (DOCUMENT ENTITLED "Q: HOW CAN B.C. HYDRO HELP YOU PUT  
14 SUMMER INTO YOUR HOME THIS WINTER", MARKED AS EXHIBIT  
15 C23-10)

16 THE CHAIRPERSON: You and Mr. Austin I think should be  
17 commended for your delving into B.C. Hydro's archives.

18 MR. BERTSCH: We have our ways.

19 MR. GODSOE: Although this one isn't nearly as  
20 entertaining. There's no big hair --

21 MR. BERTSCH: Yeah, sorry, I haven't got those good -- and  
22 you note that I did number the pages.

23 MR. HOBSON: A: Thank you.

24 MR. BERTSCH: Q: Subject to check, is this some  
25 literature referring to the program that you just  
26 described?

1 MR. HOBSON: A: Subject to check, but this looks  
2 familiar, yes.

3 MR. BERTSCH: Q: Now, if we could go through the last  
4 page, are there basically two programs, Mr. Hobson?  
5 One, the Home Improvements Program, and then the Free  
6 and Easy which is a part of it? Are you familiar with  
7 that?

8 MR. HOBSON: A: The Free and Easy may go back -- I'm  
9 just looking for a date. May go back further in time.  
10 I'm not as familiar with that, and I'm thinking that  
11 might be one of the initial pilots or offerings, but  
12 I'm not certain.

13 MR. BERTSCH: Q: Okay. If you could check that,  
14 please?

15 MR. HOBSON: A: I will try.

16 **Information Request**

17 MR. BERTSCH: Q: Thank you.

18 MR. HOBSON: A: Our information has that it is part of  
19 it.

20 MR. BERTSCH: Q: Is part of the Home Improvements  
21 Program itself?

22 MR. HOBSON: A: Yes.

23 MR. BERTSCH: Q: If we look at the Free and Easy kit,  
24 there's a few items there that I'd like to check if  
25 they're in the -- in your plan in the 2008 LTAP. Do  
26 you have insulating blankets for hot water tanks?

1 MR. HOBSON: A: No.

2 MR. BERTSCH: Q: Water pipe insulation?

3 MR. HOBSON: A: It might be useful for me to explain  
4 why.

5 MR. BERTSCH: Q: Sure.

6 MR. HOBSON: A: The efficiency levels of water tanks  
7 has changed drastically since the time of this  
8 program, and we offered actually a number of water  
9 heater programs for electric water heaters through the  
10 same period of time that ended in changes to  
11 regulation within British Columbia, and changed the  
12 standards essentially, the minimum standards for  
13 electric hot water heaters. So essentially instead of  
14 putting the blanket on the outside of the tank after  
15 the fact, you've got it manufactured with better  
16 insulation within the tank to start with.

17 **Proceeding Time 1:49 p.m. T46**

18 MR. BERTSCH: Q: So this particular item, in a way, is  
19 it in the rejected category or not considered? Where  
20 would you put it?

21 MR. HOBSON: A: It would not have been considered.

22 MR. BERTSCH: Q: Okay. Water pipe insulation?

23 MR. HOBSON: A: Water pipe insulation directly as a  
24 program would not have been considered. I don't  
25 imagine that the savings would be enough on their own,  
26 given the efficiency of the tanks today to warrant a

1 program.

2 MR. BERTSCH: Q: Okay. And if you could just go  
3 through the bottom one, fireplace flue damp stopper?

4 MR. HOBSON: A: Sorry, we're skipping over showerheads  
5 and aerators?

6 MR. BERTSCH: Q: Well, we'll go -- sorry, showerhead?

7 MR. HOBSON: A: Showerheads are -- also have changed  
8 considerably, as have faucet aerators. And so the  
9 standard that you would be buying today would include  
10 a lot of that as a result of some of the earlier  
11 efforts.

12 MR. BERTSCH: Q: And the fireplace draft stopper.

13 MR. HOBSON: A: That I would not expect that that is  
14 part of a program, and again, I would expect that it  
15 may be something that's pointed out to customers  
16 through initiatives like the renovation rebate  
17 program, and audit and information. But I don't think  
18 we would have something where we would be specifically  
19 going into someone's home to do that.

20 MR. BERTSCH: Q: And of course compact fluorescent has  
21 its own --

22 MR. HOBSON: A: That's correct.

23 MR. BERTSCH: Q: It's in there.

24 THE CHAIRPERSON: What date do you think these -- this  
25 document --

26 MR. BERTSCH: This -- our information has, is from the

1 90s.

2 MR. HOBSON: A: Yeah, it could be from the early 90s,  
3 and it may have been something that was a component  
4 that was delivered as a sort of a channel through  
5 those same home improvement contractors, or it could  
6 have been something broader than that. I'm not  
7 certain.

8 MR. BERTSCH: Q: To what degree has B.C. Hydro  
9 considered in its plans insulated blinds?

10 MR. HOBSON: A: Insulated blinds I don't think are  
11 something that we specifically looked at.

12 MR. BERTSCH: Q: Has B.C. Hydro looked at cooperating  
13 with other agencies, like the financial or insurance  
14 agencies?

15 MR. HOBSON: A: Like --

16 MR. BERTSCH: Q: I know -- yeah?

17 MR. HOBSON: A: I know that there have been some  
18 discussions with groups like VanCity over the years.  
19 For potential areas where we can do -- find some  
20 common ground. Where they've got a business and  
21 they're looking for opportunities, and we're trying to  
22 help homeowners or businesses find the financing  
23 that's within the marketplace. So there would be some  
24 limited activity, I think, along those lines. But I'm  
25 not sure of anything that's really been formalized out  
26 of that.

1 MR. BERTSCH: Q: Are you familiar that hot water  
2 heaters are -- now have to be strapped down because of  
3 seismic issues?

4 MR. HOBSON: A: I would expect that that's probably  
5 part of code, and it would maybe even differ depending  
6 on municipalities, but I'm not certain.

7 MR. BERTSCH: Q: Has there been any investigations when  
8 doing that, that you might be able to do some  
9 efficiency upgrades on the hot water heaters?

10 MR. HOBSON: A: Again, I think efficiency upgrades on  
11 hot water heaters are fairly limited when it comes to  
12 electric, compared to what they would have been in the  
13 nineties.

14 MR. BERTSCH: Q: You take a look at Exhibit B-3, ESVI  
15 IR 1.8.6.

16 MR. HOBSON: A: Sorry, what was the reference again,  
17 Mr. Bertsch?

18 MR. BERTSCH: Q: It's B-3, ESVI IR 1.8.6. Do you have  
19 that?

20 MR. HOBSON: A: I do have that, yes.

21 MR. BERTSCH: Q: That's a question from ESVI in regards  
22 to loan programs.

23 MR. HOBSON: A: Mm-hmm.

24 MR. BERTSCH: Q: Maybe if you could explain a little  
25 bit about the loan program from Manitoba Hydro?

26 MR. HOBSON: A: I'm not sure I could offer much more

1 than what's already included in the response.

2 MR. BERTSCH: Q: So do you confirm that in Manitoba  
3 Hydro that customers can borrow 7,500 with no down  
4 payment?

5 MR. HOBSON: A: Again, I think my ability to help you  
6 here is going to be somewhat limited to the response,  
7 and that's how I would read the response as well.

8 MR. BERTSCH: Q: Okay.

9 MR. HOBSON: A: So if you're looking for me to confirm  
10 that the response is accurate --

11 MR. BERTSCH: Q: Any more than that --

12 MR. HOBSON: A: -- I can do that for you, but beyond  
13 that I'm not sure I can help you directly.

14 MR. BERTSCH: Q: Yeah. Okay, that's fine. If you  
15 could confirm going back to C23-9, the --

16 **Proceeding Time 1:54 p.m. T47**

17 MR. HOBSON: A: This guy?

18 MR. BERTSCH: Q: That one. And you mentioned it before  
19 but if you look at page 3 at the top.

20 MR. HOBSON: A: Yes.

21 MR. BERTSCH: Q: And you might know more information  
22 about this. If you could maybe expand a little bit on  
23 the financing program that B.C. Hydro had.

24 MR. HOBSON: A: It really did change over the years, so  
25 it took different shapes. And so I know initially,  
26 and this is probably dating back to the earlier time

1 of the sort of continuum of that program, if you will,  
2 that we moved from having a financing package as  
3 outlined here with a grant as part of that, to removal  
4 of the grant and using it more as a financing tool,  
5 offering promotions over the years where we would buy  
6 down some of the financing as part of the incentive.  
7 You know, but essentially I think where we got to is  
8 we were kind of moving in that period of time with  
9 demand-side management. Once we got to about 1996-97  
10 we were starting to wind down our demand-side  
11 management plans. The utility industry in B.C. looked  
12 very different at that time, and a lot of our efforts  
13 at that time started to shift gears away from demand-  
14 side management and energy savings, and at that time  
15 more around a retail strategy around customer  
16 retention.

17 And so programs like this, I think had  
18 started to make a change in that way as well at that  
19 point. When we looked to financing offers at that  
20 stage, you know, I think the financing offers were not  
21 seen as being the key tool to overcome barriers within  
22 the market any longer, because I think the financing  
23 available for small loans like that, on a common  
24 basis, were much more available in the market, and the  
25 contractors had become much sophisticated at that  
26 point in starting to tie that into part of their

1 business practices.

2 So the benefit of B.C. Hydro operating in  
3 this area I think became quite a bit less and we  
4 started to move more away from that financing package  
5 as the key piece, and we started to focus a lot more  
6 on the up-front awareness, certification and  
7 credibility that came with our involvement behind the  
8 contractors.

9 MR. BERTSCH: Q: When the program did have a grant, or  
10 a loan and grant program, could you confirm that it  
11 was a \$1,000 grant and a \$4,000 loan?

12 MR. HOBSON: A: I could confirm it as much as it's part  
13 of this literature.

14 MR. BERTSCH: Q: Thank you.

15 If you'd take a look at Exhibit B-3, ESVI  
16 1.8.5, in this IR ESVI -- B.C. Hydro notes that many  
17 consumers don't believe that energy efficiency  
18 upgrades are worth the incremental effort or costs,  
19 and therefore ESVI asked about loans. B.C. Hydro  
20 indicated "it does not plan to provide loans under the  
21 renovation rebate program." Is that correct?

22 MR. HOBSON: A: I think our response probably states  
23 that, but if I can expand on it --

24 MR. BERTSCH: Q: Sure.

25 MR. HOBSON: A: I think what we're trying to address  
26 here is I don't think the issue or the constraint

1           that's being felt by homeowners is one of lack of  
2           access to the financing. I think it's more of a cost  
3           issue with respect to how much they invest within the  
4           measures themselves. And for that reason, and I  
5           think, you know, when we were looking at this response  
6           as well and talking to the residential program staff  
7           that are involved in this area, you know, one of the  
8           things that they fed back to us is that this is  
9           something that they're not seeing as much in other  
10          jurisdictions as well, and it's I think a common story  
11          you'd find across DSM jurisdictions, that there's more  
12          of a focus on the incentive component today than you  
13          may have seen back in the '90s when the industry  
14          itself was a little less mature in terms of the  
15          contractors.

16 MR. BERTSCH:   Q:    Could you confirm that your response  
17                   was written in August 2008?

18 MR. HOBSON:    A:    Thereabouts I would expect, given that  
19                   we filed on August 21<sup>st</sup>.

20 MR. BERTSCH:   Q:    Does the renovation rebate program  
21                   rely on customers first going out to spend money on  
22                   upgrades?

23 MR. HOBSON:    A:    Can you say that again?

24 MR. BERTSCH:   Q:    Does the renovation rebate program  
25                   rely on customers first going out to spend money on  
26                   upgrades?

1 MR. HOBSON: A: Customers would have to spend money,  
2 yes, to do the upgrades.

3 MR. BERTSCH: Q: Does the latest financial situation  
4 since August create some concerns for B.C. Hydro in  
5 being able to meet its targets if it requires its  
6 customers to put money into the programs?

7 **Proceeding Time 1:59 p.m. T48**

8 MR. HOBSON: A: Not at this point. You know, I think  
9 we're still going to be in a situation where we would  
10 expect customers to be investing some money for some  
11 of the programs that we've outlined. And if your  
12 question is more around whether or not we see a  
13 barrier emerging as a result of the current economic  
14 conditions with respect to people accessing financing,  
15 I think we'll have to wait and see if that  
16 materializes. I think we would have to understand and  
17 be careful that if we started getting into financing  
18 purely for that reason, that we're also taking on some  
19 additional risk in helping customers through that, and  
20 that there may be other institutions that are better  
21 at providing financial loans to consumers and  
22 understanding those risks, compared to B.C. Hydro's  
23 ability to do that. So, I'm not sure that we would be  
24 in a better position to provide that financing to  
25 customers than the marketplace that already exists for  
26 it.

1 MR. BERTSCH: Q: Has B.C. Hydro revisited this topic in  
2 this answer since writing it? Or --

3 MR. HOBSON: A: Not that I'm aware of. It could very  
4 well be the case that the program staff involved in  
5 these specific initiatives could be looking at that  
6 and, as they monitor the performance of the programs  
7 and in particular with renovation rebate and tied in  
8 with LiveSmart, discussions that they would be having  
9 with the Ministry of Energy who is also a partner  
10 within that. They could be having some other  
11 discussions along those lines that I wouldn't be aware  
12 of, but to my knowledge I don't think anything has  
13 transpired.

14 MR. BERTSCH: Q: Okay, and I assume the same answer for  
15 whether or not B.C. Hydro is doing any innovative  
16 relationships with financial organizations, given that  
17 --

18 MR. HOBSON: A: In detail, beyond what I outlined  
19 earlier, I don't have any knowledge of that, no.

20 MR. BERTSCH: Q: I assume the loan assistance program  
21 part of it is another one of these not considered  
22 looking back at the --

23 MR. HOBSON: A: No, I think you're mixing different  
24 things now. So, you know, I think when we took a look  
25 at a program for renovation rebate, as an example, we  
26 took a look at what do we think the issues are within

1           that marketplace, what are the barriers and what is  
2           the offer that is the appropriate offer for us to put  
3           forward? And in coming up with that concept around  
4           that offer, there would have been a variety of  
5           different things that could have been considered by  
6           the program staff involved, and it may well have been  
7           in a loan concept that would have been one of the  
8           things considered. But I wouldn't consider that as a  
9           separate program. I would consider it almost a  
10          component within a program, if you like.

11 MR. BERTSCH:   Q:   So a part of your decision process of  
12          defining that program --

13 MR. HOBSON:   A:   Right.

14 MR. BERTSCH:   Q:   -- you decided not to do this, is that  
15          right ?

16 MR. HOBSON:   A:   And it may or may not have been  
17          explicit.

18 MR. BERTSCH:   Q:   Sure.

19 MR. HOBSON:   A:   So, similarly to a CFL, you know, I'm  
20          not sure that we would have considered a loan program  
21          for our CFL offer. But they would have taken a look  
22          at the affordability issue and the other barriers with  
23          CFL. And they would have made decisions in terms of  
24          what they thought the appropriate offer should be.

25 MR. BERTSCH:   Q:   Thank you. What is progress of B.C.  
26          Hydro upgrading its own buildings for energy

1 efficiency and leading by example?

2 MR. HOBSON: A: I don't know specifics around that, but  
3 there is an increased effort in that area. We've  
4 taken that fairly seriously, and that's come from our  
5 CEO down. That I think his expectations of B.C. Hydro  
6 is for B.C. Hydro to kind of walk the talk, and follow  
7 through with energy efficiency practices within its  
8 own facility. So more is happening there.

9 MR. BERTSCH: Q: But you don't have anything concrete.

10 MR. HOBSON: A: But the specifics, I don't have off the  
11 top of my head, no.

12 MR. BERTSCH: Q: Can you take a look at Exhibit B-1,  
13 page 6-10? And this is one of the Orders sought.  
14 Section 6.2.2, Exhibit B-1, page 6-10. Could you  
15 confirm that one of the Orders sought by B.C. Hydro is  
16 for a capacity-focused DSM project? As outlined in  
17 Section 6.2.2?

18 MR. HOBSON: A: I would confirm that, lines 15 to 17.

19 MR. BERTSCH: Q: Thank you. Could you describe what  
20 the capacity-focused DSM project is? Why you are  
21 doing it? And why you have not done it already in  
22 this LTAP?

23 MR. HOBSON: A: Well, I think this is a newer area.  
24 Traditionally for B.C. Hydro the focus on demand-side  
25 management has been around energy and not capacity.  
26 Now, when we go forward with the demand-side

1 management plan of the scale that we've got, and you  
2 get energy savings, you get associated capacity with  
3 those. What this Order is seeking is funding that's  
4 looking at capacity-focused demand-side management,  
5 which has not traditionally been something in B.C.  
6 Hydro's service territory that we've had any real  
7 efforts towards. And that's quite different than  
8 other jurisdictions, and that's for reasons with  
9 respect to the challenges faced in those  
10 jurisdictions.

11 MR. BERTSCH: Q: So why is it important now for B.C.  
12 Hydro when it hasn't been in the past?

13 MR. HOBSON: A: Well, I think it's important in the  
14 sense that we're following a direction that we're  
15 trying to take a look at being aggressive in the area  
16 of demand-side management, and to the degree that  
17 we're integrating demand-side management I think more  
18 thoroughly within our integrated resource plans, to  
19 the degree that there are opportunities around  
20 capacity-focused demand-side management, then I think  
21 we have a responsibility to take a look and understand  
22 what those opportunities are.

23 **Proceeding Time 2:04 p.m. T49**

24 MR. BERTSCH: Q: So do you see particular capacity  
25 areas that lead you to initiating the project? Are  
26 there certain areas in the province that lend itself

1 to that?

2 MR. HOBSON: A: There are going to be certain areas  
3 that are going to be more capacity constrained, but I  
4 think that's what leading us to this is more the  
5 general opportunities that may exist around capacity,  
6 and whether that's at a system level or a regional or  
7 a distribution level. I think those will all be areas  
8 that we'll try to explore as we go through the  
9 process.

10 MR. BERTSCH: Q: If you could take a look at Exhibit B-  
11 3, ESVI 1.19.1, and this is a question that ESVI had  
12 in regards to that program, and there's a list of five  
13 options.

14 MR. HOBSON: A: I see that.

15 MR. BERTSCH: Q: Now, I understand the project itself  
16 is to define the project. Maybe if you could tell us  
17 what the capacity-focused DSM project is as far as is  
18 it implementation, is it definition? What phase are  
19 you looking for first of all?

20 MR. HOBSON: A: Well, maybe I could take you back. If  
21 you turn to page 6-10.

22 MR. BERTSCH: Q: Yes.

23 MR. HOBSON: A: And you look at the order sought and  
24 you look at lines 15 to 19, I think we clearly  
25 identify there that it's definition phased work.

26 MR. BERTSCH: Q: Definition.

1 MR. HOBSON: A: Yeah.

2 MR. BERTSCH: Q: So this list in this IR of these five  
3 items, could you confirm that each of those options  
4 listed will appear? I assume there's going to be a  
5 final report at the end of --

6 MR. HOBSON: A: Yes, this would be a similar process to  
7 what came out of the last IEP. So when we went  
8 forward in the last IEP, we were looking for  
9 definition phased funding around going forward and  
10 developing a more aggressive demand-side management  
11 plan around the energy savings. And we received  
12 approval for funding. We went forward and developed  
13 that plan, and that plan is what you now see before  
14 you in this application. And this is a similar  
15 process. We're looking for some definition-phase  
16 funding to go and investigate what it would look like  
17 for us to put together a demand-side management plan  
18 around capacity. And to the degree that we find  
19 opportunities, then those would transpire to a process  
20 like this where we may bring forward an implementation  
21 plan similar to what we've done here.

22 MR. BERTSCH: Q: So would the output be similar to what  
23 we're talking before, if you take these five options,  
24 that there'll be some report? And I realize that you  
25 still have to investigate whether they're appropriate  
26 or not, but would they end up in the same kind of

1 buckets as what we mentioned before, either rejected  
2 or a plan developed around it? Is that kind of what  
3 you're --

4 MR. HOBSON: A: I think that's a fair characterization.  
5 And we shouldn't go too far with what's listed here.  
6 I think the response here is trying to respond to the  
7 question in providing some of the things that we would  
8 be aware of now. But I think what we would be looking  
9 back on is information consistent with the approach  
10 that you would take with a conservation potential  
11 review, and in this case we'd be looking at the  
12 capacity components of that and looking at expanding  
13 our knowledge of that conservation potential review  
14 and other information we may gather to understand what  
15 are our opportunities and what could we put in place  
16 to try to capture a cost-effective capacity out of  
17 those.

18 MR. BERTSCH: Q: So looking at those five specific  
19 options, again, would each one of those appear either  
20 in the rejected column or the accepted column?

21 MR. HOBSON: A: I think it's fair to say that these are  
22 taking a look at end uses and whether or not we  
23 organize them -- my hesitation is whether or not we  
24 organize, you know, the initiatives that we reject or  
25 accept as end use programs or more general programs  
26 that include a number of technologies aimed at end

1 uses. I'm not sure that you would see it quite as  
2 transparently as this.

3 MR. BERTSCH: Q: Maybe not as transparent, but we  
4 should be able to go to the report and find --

5 MR. HOBSON: A: Yeah.

6 MR. BERTSCH: Q: -- thermostat has been rejected, or a  
7 program. That's what I'm looking for.

8 MR. HOBSON: A: I think what you would see is we would  
9 have an investigation of this, and if what you're  
10 asking for is would we please try to make it clear  
11 that you can see these within it?

12 MR. BERTSCH: Q: Exactly.

13 MR. HOBSON: A: Is that what you're asking?

14 MR. BERTSCH: Q: Yes.

15 MR. HOBSON: A: Yeah, I think that would be a fair  
16 assumption.

17 MR. BERTSCH: Q: What prompted B.C. Hydro to list those  
18 particular options? Was it some studies? Was it B.C.  
19 Hydro data? What was it that drove those five to be  
20 on the list?

21 MR. HOBSON: A: I'm going by memory here, but I think  
22 it's likely drawn from the Conservation Potential  
23 Review Capacity Reports, and we're providing some of  
24 the lists of options that are drawn from that. But I  
25 could be wrong. It could be drawn from a broader  
26 source than just the CPR.

1 **Proceeding Time 2:09 p.m. T50**

2 MR. BERTSCH: Q: And I think you already answered this  
3 question. Are there any other options beyond those  
4 that you can think of?

5 MR. HOBSON: A: That I can think of? You know, not off  
6 the top of my head. But I think what we'll find is  
7 that you're going to have a fairly broad range of  
8 options that go beyond this, that would be at least  
9 looked at as a starting point. Whether or not there's  
10 enough potential to really take them much further, I  
11 think we're a ways away from knowing that.

12 MR. BERTSCH: Q: Okay. If you could take a look at  
13 Exhibit B-3, ESVI 1.19.2. And ESVI had a question  
14 about the shareholder -- stakeholder feedback. And  
15 B.C. Hydro responded that it intends to do  
16 solicitation of stakeholder feedback -- up above. I  
17 assume the stakeholder -- maybe one of the other terms  
18 lately that we've been looking is will you be doing  
19 meaningful stakeholder engagement in this project?

20 MR. HOBSON: A: I think the stakeholder engagement  
21 we're talking about here would be more similar to what  
22 we went through in putting the demand-side management  
23 plan together. So, we would have an advisory group  
24 presumably still in place through our efficiency and  
25 conservation advisory group. That would be a form of  
26 stakeholder engagement. But I think what we're also

1 referring to is, you know, workshops that we would  
2 draw upon with trade allies and other utilities, where  
3 we would try to draw additional information to better  
4 understand what types of initiatives we could move  
5 forward with. This is an area that's not developed  
6 yet, as we've outlined in the response, so I'm not  
7 sure I can speak too much further to it at this point  
8 in time.

9 MR. BERTSCH: Q: Okay, that gives us an idea, thank  
10 you.

11 If you could take a look at ESVI -- Exhibit  
12 B-3, ESVI 1.18.3. In this response, we included an  
13 attachment of Vancouver Island's study, and B.C. Hydro  
14 responded by saying that it will be considering this  
15 report in that initiative. Will you be going through  
16 the entire report and putting them in either category  
17 of rejected or make a program around it?

18 MR. HOBSON: A: I'm not certain.

19 MR. BERTSCH: Q: Or how will you use that report?

20 MR. HOBSON: A: I'm not certain at this point.

21 MR. BERTSCH: Q: Okay.

22 MR. HOBSON: A: I was involved in that workshop back at  
23 that point in time, and I can't recall within the  
24 specific report if it's organized into specific  
25 program concepts. I think it's in large part a  
26 general discussion around some very broad ideas, and--

1 MR. BERTSCH: Q: Maybe if I could just point you to it,  
2 it will make it a little easier.

3 MR. HOBSON: A: Just let me finish my response.

4 MR. BERTSCH: Q: Okay.

5 MR. HOBSON: A: To the degree that it draws down into  
6 useable concepts that we could use, then I would  
7 envision that, to the degree that we think that those  
8 have merit and we investigate those further, to the  
9 point that we would put them into the categories as  
10 you say in terms of reject or accept, then you would  
11 see them there.

12 MR. BERTSCH: Q: Okay. Could you take a look at that  
13 report? It's a little hard to find. It's in Exhibit  
14 B-3, and there's a list of ESVI's original IRs, and  
15 it's one of the attachments that we included, so it's  
16 a few pages after that.

17 MR. HOBSON: A: Sorry, you're going to have to help  
18 beyond that.

19 MR. BERTSCH: Q: Okay, if you look at Exhibit B-3 for  
20 ESVI's IRs, the original IRs.

21 MR. HOBSON: A: Original -- okay.

22 MR. BERTSCH: Q: Okay? And then go to the back of the  
23 IRs, of our original IRs, not your responses, the  
24 original IRs. Maybe Mr. Godsoe can find it for you.

25 THE CHAIRPERSON: It's the attachment to C23-2.

26 MR. BERTSCH: Q: It's our -- that's a good way of

1 looking at it.

2 THE CHAIRPERSON: Before you start answering the  
3 questions, it's what ESVI tacked on at the back of its  
4 list of interrogatories.

5 MR. BERTSCH: Q: Thank you.

6 MR. HOBSON: A: No, I don't think that is.

7 MR. BERTSCH: Q: It's labeled "Exploring Vancouver  
8 Island's Energy Future".

9 MR. HOBSON: A: I have that now.

10 MR. BERTSCH: Q: Is this the report that you'll be  
11 considering for the capacity-focused DSM project?

12 MR. HOBSON: A: This would be a report that we would  
13 consider, yes.

14 MR. BERTSCH: Q: Can you confirm that this report was  
15 done by B.C. Hydro by Rocky Mountain Institute?

16 MR. HOBSON: A: I think I'm pretty safe in confirming  
17 it, and I'm just going to -- yes.

18 MR. BERTSCH: Q: Would you consider Rocky Mountain  
19 Institute a reputable company in the industry? Is it  
20 known in the industry?

21 MR. GODSOE: Mr. Chairman, I've been quite lenient in  
22 this cross-examination, but I think we're getting to  
23 the point where there is minimal utility in this  
24 question, and I'm going to object to it.

25 THE CHAIRPERSON: Well, it's fairly obviously -- if B.C.  
26 Hydro let Rocky Mountain Institute put both their

1 names on the front of it, I mean --

2 MR. BERTSCH: Sure.

3 THE CHAIRPERSON: -- that's as far as you're going to go  
4 with that one.

5 MR. BERTSCH: That's fine.

6 MR. BERTSCH: Q: If you look at page 7, there's a list  
7 of attendees, and as you mentioned, Mr. Hobson, you  
8 were there, as well as Larry Bell and Bev Van Ruyven.  
9 Is that correct? You were at the workshop?

10 MR. HOBSON: A: I think I already stated that, yes.

11 MR. BERTSCH: Q: Yes, thank you. The workshop was  
12 prompted by particular issues on Vancouver Island. Do  
13 you think it's still relevant in this hearing?

14 **Proceeding Time 2:15 p.m. T51**

15 MR. HOBSON: A: Is the workshop still relevant?

16 MR. BERTSCH: Q: This document relevant to this  
17 particular proceeding.

18 MR. HOBSON: A: It's relevant to the extent that  
19 capacity I suppose is relevant to --

20 MR. BERTSCH: Q: So it's relevant in regards to the  
21 capacity-focused DSM.

22 MR. HOBSON: A: I think that's what we'll better  
23 determine as we go through the definition phase.

24 MR. BERTSCH: Q: Sure.

25 MR. HOBSON: A: So it's -- I'm not completely sure  
26 where you're headed with this, but if I turn --

1 MR. BERTSCH: Q: Well, I'll ask you the question.

2 MR. HOBSON: A: Well, just wait.

3 MR. BERTSCH: Q: Go ahead, yeah.

4 MR. HOBSON: A: So if I look at the report it's back in  
5 2003, and I think there was a number of specific  
6 options being looked at for Vancouver Island at that  
7 time, and I think some of those options have moved  
8 ahead and some have fallen off. And as I recall, that  
9 was a big driver with respect to looking at this issue  
10 at that point.

11 So to the degree that the result of some of  
12 those options moving forward and some moving forward  
13 have changed the circumstances, could change the  
14 relevance of some of the findings and discussion  
15 within the report.

16 MR. BERTSCH: Q: Absolutely.

17 MR. HOBSON: A: And I think what we're trying to tell  
18 you is that as we go through the definition phase, we  
19 would consider a range of different information. We  
20 would consider the conservation potential review and  
21 the capacity findings from that. We would look at  
22 various studies potentially coming from other  
23 utilities and discussions that we would have with  
24 other utilities and try to draw upon the information  
25 and history and leanings that they have in this area.  
26 And we would also look at other literature including

1           this, in trying to better understand how we should  
2           best move forward.

3 MR. BERTSCH:   Q:   Thank you.  In the response to 1.18.3  
4           in regards to this study, your response is:

5                    "Yes, it is to be considered because it  
6                    discusses several capacity-focused DSM  
7                    initiatives."

8           Could you list some of those capacity-focused DSM  
9           initiatives that are in the study that you referred to  
10          in your response?

11 MR. HOBSON:   A:   No, not off the top of my head.  I  
12          think what we were trying to indicate in the response  
13          is that this workshop was put in place, and the report  
14          itself was a recording of that workshop, and to the  
15          degree that it's looked at capacity-focused DSM  
16          initiatives and they're included in this, it would be  
17          relevant for our definition phase work to the degree  
18          that the initiatives themselves, as I've outlined, are  
19          still relevant to the issue.

20 MR. BERTSCH:   Q:   Okay, thank you.

21                    On page 22 it says:

22                    "B.C. Hydro faces a uniquely challenging  
23                    problem: shaping peak daily loads on  
24                    Vancouver Island."

25          Sorry, page 22, second paragraph.

26 MR. HOBSON:   A:   I see that.

1 MR. BERTSCH: Q: And then

2 "The challenge is to install load management  
3 measures that can shift both in morning and  
4 evening peak cost effectively."

5 MR. HOBSON: A: Right.

6 MR. BERTSCH: Q: Are these the type of issues -- and  
7 I'm trying to nail down more definition of what this  
8 capacity-focused DSM program is going to be. Is that  
9 the type of thing that you would be looking at within  
10 the capacity-focused DSM project?

11 MR. HOBSON: A: Right. So if you remember earlier, I  
12 think you asked me a question along these lines and I  
13 answered it with respect to capacity would be an issue  
14 that we would consider at the system, as well as the  
15 local level.

16 MR. BERTSCH: Q: Exactly.

17 MR. HOBSON: A: So I think to the degree that that fits  
18 within a pretty broad range, this example would be one  
19 of those things, yes.

20 MR. BERTSCH: Q: Okay. If you take a look at page 37  
21 on tidal power, might that be an appropriate one that  
22 you would look at?

23 MR. HOBSON: A: I don't know at this stage because we  
24 haven't started the work.

25 MR. BERTSCH: Q: And if you could look at page 20,  
26 there's a list of four strategies for DSM. If you



1 MR. BERTSCH: Q: And this was a question asked about  
2 the timing.

3 MR. HOBSON: A: Right.

4 MR. BERTSCH: Q: If for some reason the DSM plan put  
5 forward in this LTAP is rejected and resubmitted after  
6 June 1<sup>st</sup>, 2009, do you believe that B.C. Hydro would  
7 then need to submit a rental DSM program?

8 MR. GODSOE: That's a legal issue, and I can confirm that  
9 that would be the case.

10 THE CHAIRPERSON: Thank you, Mr. Godsoe.

11 MR. BERTSCH: Thank you.

12 MR. BERTSCH: Q: If you could take a look at B-12, the  
13 one before that, ESVI IR 3.6.1.

14 MR. HOBSON: A: I have that.

15 MR. BERTSCH: Q: The second-last paragraph talks about  
16 DSM plans filed on a stand-alone basis. Could you  
17 describe under what circumstances DSM programs would  
18 be filed on a stand-alone basis?

19 MR. HOBSON: A: I'm not sure that I could. I think we  
20 would envision that our DSM plans would go forward  
21 with the LTAP. I think this is likely more referring  
22 to the section that's referenced, and that it provides  
23 the ability for us to do --

24 MR. BERTSCH: Q: So you may --

25 MR. HOBSON: A: -- DSM plans under both of those  
26 circumstances.

1 MR. BERTSCH: Q: So is that response saying that a  
2 rental DSM program could be filed on a stand-alone  
3 basis? I'm just trying to understand the words that  
4 were put on the page.

5 MR. HOBSON: A: I suppose it could be down as narrow as  
6 a rental program, or it could be as a part of a  
7 broader DSM plan.

8 MR. BERTSCH: Q: Okay. Could DSM plans be filed on a  
9 stand-alone basis and be introduced to the market  
10 without any input from intervenors or stakeholders?

11 MR. HOBSON: A: Can you say that again, please?

12 MR. BERTSCH: Q: Could DSM plans be filed on a stand-  
13 alone basis and be introduced to the market without  
14 any input from intervenors or stakeholders?

15 MR. GODSOE: So, I can answer that. If there is  
16 expenditures attached to under Section 44.2, we need  
17 blessings from this Commission before we can put them  
18 into rates. So it's a pretty safe assumption that, if  
19 we bring a DSM plan through the LTAP or a stand-alone  
20 with expenditures, we will put that in front of the  
21 Commission, because there is a direct link to our cost  
22 recovery.

23 THE CHAIRPERSON: Is there a requirement for the  
24 Commission to hold a hearing and approve it? Or can  
25 the Commission just accept it?

26 MR. GODSOE: I think you can just accept it. You're

1 masters of your own domain as far as process goes.

2 THE CHAIRPERSON: I think Mr. Bertsch has his answer,  
3 then.

4 Mr. Bertsch, how are you doing for time?

5 MR. BERTSCH: Almost finished.

6 THE CHAIRPERSON: Okay. We'll --

7 MR. BERTSCH: I think.

8 THE CHAIRPERSON: You'll take us to the break, then.

9 MR. BERTSCH: Q: If any DSM plan is submitted after  
10 June 1<sup>st</sup>, will it be required to include a rental DSM  
11 program?

12 MR. GODSOE: I think I already answered that. Which is,  
13 yes.

14 MR. BERTSCH: If -- okay. If any DSM plan is introduced  
15 -- I'm not saying --

16 MR. GODSOE: Yes, because then the adequacy provision set  
17 out in the DSM regulation would be applicable.

18 MR. BERTSCH: Thank you.

19 MR. BERTSCH: Q: If you could refer to Exhibit B-12,  
20 ESVI IR 3.6.4. I'll see if this has been answered.

21 A related question. As it sits, is there  
22 any reassurances that stakeholders can have that a  
23 program will not be introduced without their  
24 involvement? What reassurances can stakeholders or  
25 intervenors have that a program will not be  
26 introduced?

1 MR. HOBSON: A: To be honest, at this stage, with the  
2 development of a rental program, we're just moving  
3 into starting to take a look at that now. So I'm not  
4 sure what process or what path we would take in terms  
5 of the development of that rental program and the  
6 timing at this point.

7 MR. BERTSCH: Q: No matter which way it goes, can B.C.  
8 Hydro commit to meaningful stakeholder consultation  
9 before introducing its rental DSM program?

10 **Proceeding Time 2:26 p.m. T53**

11 MR. HOBSON: A: Well, I think we would move forward  
12 with stakeholder consultation, and we could commit to  
13 that. To the degree that we take it forward within a  
14 regulatory process, I don't think that's close to  
15 being determined. And I guess it would depend on that  
16 process, to determine what level of intervenor  
17 involvement through our regulatory setting would be  
18 required.

19 MR. BERTSCH: Q: So using the words "meaningful  
20 stakeholder consultation", if you just restrict it to  
21 those three words, would it be a qualifier or --

22 MR. HOBSON: A: I think that's a relative term. So, I  
23 think we would move forward with what we would  
24 consider to be the type of engagement we would need to  
25 best understand the type of program we would move  
26 forward with, and you know, low income might be a good

1 example of that, where, you know, we did a fair bit of  
2 consultation with different groups in the development  
3 of that particular initiative.

4 MR. BERTSCH: Q: Thank you. The second paragraph  
5 starts with:

6 "B.C. Hydro intends to file its next DSM  
7 plan as part of the LTAP to be filed in  
8 2011, and that DSM plan must include such a  
9 measure."

10 So is this saying that B.C. Hydro will have a rental  
11 DSM plan by at least 2012?

12 MR. HOBSON: A: I think it's saying that by the time  
13 that we file our next DSM plan we have to have a  
14 rental program. If that plan is being filed after --  
15 what was it, June 1<sup>st</sup>, 2009? And so to the extent that  
16 our next DSM plan would be filed as part of an LTAP in  
17 2011, it would have to contain a rental program by at  
18 least that date.

19 MR. BERTSCH: Yes?

20 MR. GODSOE: Right, but I can clarify your question. The  
21 regulation doesn't say it has to be in place, it just  
22 says that your plan has to contain that program. So I  
23 wanted to be clear on that.

24 MR. BERTSCH: Thank you. Thank you.

25 MR. BERTSCH: Q: Is the intent of that plan to further  
26 energy savings? Due to DSM?

1 MR. HOBSON: A: Sorry, say that again?

2 MR. BERTSCH: Q: Does that program intend to further --  
3 increase the energy savings due to DSM?

4 MR. HOBSON: A: You'll have to rephrase that for me.  
5 I'm missing something about your question.

6 MR. BERTSCH: Q: Okay, I'll try. Does a rental DSM  
7 program increase the energy savings?

8 MR. HOBSON: A: I think we might have responded to that  
9 in one of your series of --

10 MR. BERTSCH: Q: Okay.

11 MR. HOBSON: A: -- IRs in this area. I think in  
12 general the stage that we're at now is we know that  
13 through the variety of programs we do offer, we offer  
14 a number of programs and those programs are accessible  
15 for rental accommodations, and so to the degree that  
16 we're already driving some savings through those  
17 accommodations, it's kind of a cross-section of our  
18 various programs. So we've got a ways to go to better  
19 understand what we're already delivering upon, and  
20 whether or not it's a repackaging of what we've put  
21 forward, or whether it's a completely new initiative.  
22 And until we better understand that, I'm not sure I  
23 can answer your question --

24 MR. BERTSCH: Q: Sure.

25 MR. HOBSON: A: -- with respect to whether there will  
26 be additional savings, or a repackaging of some of the

1 existing savings.

2 MR. BERTSCH: Q: I only have about two more. I'll try  
3 to go through them quickly.

4 This -- if you could look at transcript  
5 Volume 10, page 1876, line 16, this was a question I  
6 asked on Panel 3 and re-directed to this panel.

7 Transcript Volume 10, page 1876, line 16. I was  
8 asking about an Exhibit B-1, page 5-58, on line 16.

9 And line 12 through 17 on the next page, it was  
10 redirected to this panel, and Mr. --

11 MR. SCOURAS: A: Scouras. You're off the hook.

12 MR. GODSOE: I'm off the hook?

13 MR. SCOURAS: A: No, Mr. Hobson is.

14 THE CHAIRPERSON: Do you want to put the question --

15 MR. BERTSCH: Q: I'll pose the question. Exhibit B-1,  
16 page 5-5, says:

17 "The DSM resource options avoid a number of  
18 supply risks such as First Nations. Would  
19 B.C. Hydro agree that the latest court cases  
20 with Alcan and ILM further enhances the DSM  
21 resource options because it avoids the First  
22 Nations risks? And those risks have become  
23 greater because of the court cases."

24 MR. REIMANN: A: Sorry, the reference again?

25 MR. MATHESON: A: I think we answered this to the  
26 degree that we can already. We're studying those

1 decisions right now. They're very recent, and we  
2 don't have anything definitive for you at this point  
3 related to them.

4 MR. BERTSCH: Q: That's your answer?

5 MR. MATHESON: A: That's our answer.

6 MR. BERTSCH: Q: One last question. B-3, ESVI IR  
7 1.2.3. It's a question about --

8 MR. HOBSON: A: Can you give me the reference again,  
9 please, Mr. Bertsch?

10 MR. BERTSCH: Q: B-3, ESVI 1.2.3. It's a question  
11 about additional savings that can be had beyond the  
12 CPR. 1.2.3.

13 **Proceeding Time 2:31 p.m. T54**

14 MR. HOBSON: A: This is the one on step changes?

15 MR. BERTSCH: Q: That's right.

16 MR. HOBSON: A: I have it.

17 MR. BERTSCH: Q: And one of the possible step changes  
18 is solar photovoltaic.

19 MR. HOBSON: A: That's right.

20 MR. BERTSCH: Q: And if you could then go to B-4, ESVI  
21 2.2.4, there was a follow-on question that we had.  
22 2.2.4, and the answer from B.C. Hydro is:

23 "Solar PV technology would be most cost-  
24 effective in the Okanagan region because it  
25 has the highest solar insulation rates in  
26 the province."

1           Our question is, will B.C. Hydro be considering to  
2           develop DSM programs that may be appropriate in  
3           certain regions, but not appropriate in other regions,  
4           or overall in the province?

5 MR. HOBSON:    A:    Potentially.  But you know, I think  
6           this is similar if we take a look at a situation like  
7           Vancouver Island, and if you look at the penetration  
8           of, say, electric water heaters, traditionally.  There  
9           was a much higher rate of electric water heaters on  
10          Vancouver Island than other parts of the province, and  
11          we would offer a water heater program, and we wouldn't  
12          exclude other regions, but we would target more  
13          heavily within Vancouver Island, because that's where  
14          the market was for that.  So I think we would look at  
15          something like this similarly, where you may end up  
16          with a broader offering with more of a targeted effort  
17          in areas where you think you are going to get -- where  
18          you have more market.  So I think it would depend on  
19          the opportunity.

20 MR. BERTSCH:   Q:    Okay.  So you may be looking at  
21          particular regions and if, in that region, it makes  
22          sense to have a particular DSM program, you could do  
23          it, even though from an overall provincial point of  
24          view, it may or may not make sense.

25 MR. HOBSON:    A:    I think that's fair.  Now, with that  
26          said, I'm not sure that I've -- I can recall a time

1       where we've had specific programs that have been  
2       completely isolated, other than pilot initiatives, on  
3       a regional basis, that we tend to try to offer  
4       programs that are available unless there's a good  
5       reason to excuse --

6 MR. BERTSCH:   Q:   Right.  But the initiation of it may  
7       be to deal with a local or regional solution but not  
8       exclude it.  But --

9 MR. HOBSON:    A:   Yeah.  Now, I think in that --

10 MR. BERTSCH:   Q:   The trigger could be, if that's the  
11       question.

12 MR. HOBSON:    A:   In that case, I think you're moving  
13       more back into the capacity --

14 MR. BERTSCH:   Q:   Right.

15 MR. HOBSON:    A:   -- definition phase work, where you  
16       would have regional differences.  When I'm referring  
17       to this, and in the context of, I think, your question  
18       and the plan that we've put forward, it's more around  
19       the energy savings.  And as I look at it from that  
20       perspective, I wouldn't see regional differences in  
21       terms of constraints within the system.  I think we  
22       would look at it more on the basis of the province as  
23       a whole, and where the opportunities were, and to the  
24       degree that we put an offer in place that's a cost-  
25       effective offer, I'm not sure we would look to  
26       intentionally go and exclude certain parts of the

1 province from it.

2 In terms of implementing it or rolling out  
3 -- starting geographic areas, as you roll out a  
4 program, it's quite common for us to roll it out in  
5 areas where it's going to gain more traction early on,  
6 and in that case this might be a good example of that.

7 MR. BERTSCH: Q: Very good. Thank you, panel. Thank  
8 you.

9 THE CHAIRPERSON: Okay, Mr. Bertsch. We'll break for 15  
10 minutes.

11 **(PROCEEDINGS ADJOURNED AT 2:35 P.M.)**

12 **(PROCEEDINGS RESUMED AT 2:49 P.M.)** **T55**

13 THE CHAIRPERSON: Please be seated.

14 Mr. Fulton.

15 MR. FULTON: Yes, thank you, Mr. Chairman. As happens  
16 with hearings from time to time, there are ebbs and  
17 flows, and today has been one of those flow days. And  
18 so in terms of where we are with cross-examiners, Mr.  
19 Oulton is next on behalf of COPE 378. He will be  
20 followed by Mr. Bois for the NaiKun Wind, and then  
21 tomorrow morning we will have Mr. Fletcher for the  
22 Texada Action Now Community Association, followed by  
23 me. But obviously we'll be probably the whole day  
24 tomorrow in terms of hearing.

25 THE CHAIRPERSON: That's fine, Mr. Fulton. My plane  
26 leaves at 6:30, so I have plenty of time.

1 MR. FULTON: Thank you.

2 THE CHAIRPERSON: Mr. Oulton.

3 MR. OULTON: Good afternoon, Mr. Chairman, Commissioners.

4 **CROSS-EXAMINATION BY MR. OULTON:**

5 MR. OULTON: Q: Good afternoon, panel. For those of  
6 you that weren't on prior witness panels, as Mr.  
7 Fulton noted, my name is Mark Oulton and I'm counsel  
8 on behalf of COPE. I expect to be brief this  
9 afternoon.

10 Much of what I have is cleanup from other  
11 panels, and in that regard I'd like to begin with some  
12 follow-up on some questions that I posed to Panel 2  
13 that were put over to you, and the reference is the  
14 evidentiary update. And I'd like to start with Table  
15 2-10, which is at page 29 of Exhibit B-10.

16 MR. SCOURAS: A: We have that.

17 MR. OULTON: Q: And I only take you here for context,  
18 and it's just simply I had asked Panel 2 about some  
19 questions regarding the deficit that is shown in the  
20 2013 and 2014 years. And if you turn to -- which is  
21 reflected in the table, correct? There's a small  
22 deficit in those two years.

23 MR. SCOURAS: A: Yes.

24 MR. OULTON: Q: And if you turn to page 33 of the  
25 update, the text of Exhibit B-10 sets out three action  
26 items that B.C. Hydro intends to undertake to deal

1 with any potential shortfall that's realized in those  
2 years, and it's the first that I'm interested in, and  
3 it begins:

4 "Where appropriate, enter into discussions  
5 with IPPs that have bid into the Clean Power  
6 Call to assess the potential for these  
7 projects to advance their ISDs..."

8 Or their in-service dates. In a sense, move them up  
9 so you can get power in that period. Is that correct?

10 MR. SCOURAS: A: That appears to be correct.

11 MR. OULTON: Q: And my question is -- I don't know if  
12 it's a simple one or not, but it's does B.C. Hydro  
13 have any criteria that it intends to apply in  
14 determining where it's appropriate to do that?

15 MR. SCOURAS: A: And thank you, I was prepared for this  
16 question from the previous panel. We don't have any  
17 established criteria, such this is something that I  
18 think we would try to do based on if there was a need  
19 to do it. The three criteria that I think that we  
20 would look to apply is first of all, was the project  
21 cost-effective overall? Second of all, is there an  
22 opportunity to advance it? And looking at both of  
23 those, how do those two things fit relative to other  
24 options that might be available to B.C. Hydro? So I  
25 know those are quite high level but those are what I  
26 can give you right now.

1 MR. OULTON: Q: It's fair to say if there are other  
2 cost-effective options available to you, B.C. Hydro  
3 will explore those rather than moving up the IPP.

4 MR. SCOURAS: A: Yes, that's correct.

5 MR. OULTON: Q: It turned out to be a fairly simple  
6 question, I think.

7 I'd like to turn now to another matter that  
8 was referred here by prior panel, this one from Panel  
9 3. And Mr. Reimann, you may recall I was asking you  
10 some questions about the \$10 per megawatt figure that  
11 was used for the wind integration costs, and in a  
12 context of that discussion, the reference for which  
13 it's Transcript Volume 9, the specific point that I'm  
14 raising is at page 1474, but the discussion that I was  
15 having with you, Mr. Reimann, stands prior to that.

16 The question that was referred to this  
17 panel is whether or not it's B.C. Hydro's intention to  
18 apply the \$10 per megawatt hour cost in its evaluation  
19 of bids received from wind producers in the Clean Call  
20 or otherwise.

21 MR. SCOURAS: A: Do you mind if I take a look at the  
22 transcript?

23 **Proceeding Time 2:54 p.m. T56**

24 MR. OULTON: Q: Certainly. The specific question that  
25 I'm putting to you , and I believe it is to you, Mr.  
26 Scouras, is page 1474, Volume 9. The question starts

1 at line 9 and runs through line 12 and it's  
2 essentially what I just --

3 MR. SCOURAS: A: Yes, we will be applying that \$10  
4 evaluation adjuster as per the description and rules  
5 that we put in the Clean Power Call RFP.

6 MR. OULTON: Q: All right.

7 Next I'd like to turn to another matter  
8 that was referred to this panel by Panel 3, and the  
9 reference to that is COPE IR 2.5.2 which is part of  
10 Exhibit B-4. Do you have that, panel?

11 MR. REIMANN: A: We do.

12 MR. SCOURAS: A: Yes, we do.

13 MR. OULTON: Q: All right. This was a request for the  
14 estimate of the impact if the Clean Call -- or the net  
15 system cost if the clean call were deferred. And  
16 there was a two-part question. One is if it was  
17 deferred for two years, and the second was until the  
18 latest possible date. And I canvassed the first part  
19 of this with Panel 3, that relating the present value  
20 of a two-year deferral. I'd like to raise the second  
21 part of the answer given with this panel, based on the  
22 fact that my questions regarding it were referred  
23 here.

24 And the second part deals with B.C. -- or  
25 the part that I'm interested in deals with B.C.  
26 Hydro's statement in the second paragraph of the

1 response, that B.C. Hydro views a two-year deferral as  
2 being a high-risk proposition. Do you see that?

3 MR. SCOURAS: A: Yes, I do.

4 MR. OULTON: Q: Right. And I take it from the fact  
5 that you're answering, Mr. Scouras, that the questions  
6 regarding that are to be directed to you?

7 MR. SCOURAS: A: I think we'll see how the questions  
8 unfold.

9 MR. OULTON: Q: All right.

10 Now, as I read the response -- and if you  
11 need a moment to read it, please take that. The  
12 principal risk that I understand B.C. Hydro is  
13 concerned with there is the risk of being able to meet  
14 the self-sufficiency requirement in 2016, is that  
15 correct?

16 MR. SCOURAS: A: Yes. Sorry, yes.

17 MR. OULTON: Q: There's no real risk in the short term,  
18 or short to mid-term prior to 2016 of B.C. Hydro not  
19 having sufficient supply to meet its options. Is that  
20 correct?

21 MR. MATHESON: A: Well, I don't think that is correct,  
22 Mr. Oulton. I think you can see on Table 2-10 in the  
23 middle, supply deficit figure that in fiscal 2015  
24 there's only a 600 gigawatt hour surplus, and that  
25 does ramp up to 1700. But, you know, the Clean Power  
26 Call energy is needed in those years in order that we

1 don't run chronic deficits.

2 MR. OULTON: Q: But if you took the Clean Power Call  
3 out of, for example, 2015, it would be a relatively  
4 modest deficit and B.C. Hydro has other options  
5 available to it, much like you've identified with  
6 respect to the modest deficit in the two years prior  
7 to that, for meeting that need. B.C. Hydro is not  
8 concerned that without the Clean Power Call in 2015  
9 it's not going to be able to find the power somewhere  
10 to keep the lights on. Is that fair to say? Much  
11 like you're not -- I mean, similar to the way that  
12 you've dealt with the first -- the 2013 and 2014  
13 deficits.

14 MR. MATHESON: A: Well, like I said, you know, I really  
15 wouldn't put it that way. You know, we generally try  
16 not to show deficits in those columns. So, you know,  
17 our argument is that we need the Clean Power Call.

18 **Proceeding Time 2:59 p.m. T57**

19 MR. OULTON: Q: Would you agree with me that there may  
20 well be more cost-effective options for meeting the  
21 needs in those particular years, similar to what Mr.  
22 Scouras said earlier? There may be other cost-  
23 effective options for meeting the deficits, rather  
24 than moving forward the IPP.

25 MR. MATHESON: A: Well, there are always, in the short  
26 term, we always have other options to look to that we

1           could turn to. But we're talking about a planning  
2           document here, where we're trying to set out a  
3           reasonable way in which, over the long term, we can  
4           take supply acquisition and demand-side management  
5           programs and meet the needs of our customers. I don't  
6           think we'd really feel comfortable saying, "Well, we  
7           can defer this Call," and then showing a series of  
8           deficits right across those years. I don't really  
9           think that's something that we should be doing.

10                         Now, we found ourselves with some short-  
11           term deficits in the years fiscal '13 and fiscal '14,  
12           and there -- and those are recent developments related  
13           to the increased attrition on the '06 Call. But that,  
14           even that doesn't leave us particularly comfortable.  
15           And yes, we have options that we can turn to in the  
16           short term to fill those, and we believe we'll be  
17           fine, and particularly the one in fiscal '13 which is  
18           fairly small. But that isn't to say that we're  
19           comfortable just saying, "Well, let's defer the Clean  
20           Power Call and show a series of deficits running right  
21           across the board for a number of years longer."  
22           That's not something that we feel is the right thing  
23           to do.

24   MR. OULTON:    Q:   All right. When giving the response  
25                   that's set out in the response to COPE IR 2.5.2, did  
26                   B.C. Hydro undertake any formal risk analysis? Or was

1           it just simply looking at the numbers and saying,  
2           "Well, there might be a risk that we're not going to  
3           meet self-sufficiency."

4 MR. GODSOE:    It might be of assistance to turn to Exhibit  
5           B-12, the response to BCUC panel IR 1.28.1. I think  
6           it does address this issue.

7 MR. MATHESON:   A:    Before you get there, what I will say  
8           contextually is the portfolio analysis we've done in  
9           the entire LTAP is essentially an exercise in risk  
10          assessment. And so we feel we've done that already.  
11          We didn't need to re-do it again when we considered  
12          this question. Largely for the reasons that I've  
13          already stated.

14 MR. REIMANN:    A:    And I might add to what Mr. Matheson's  
15          saying, that I think the comments that Mr. Scouras was  
16          giving about fiscal '13 and '14, and we addressed that  
17          a little more fully in BCUC IR 1.270.1, these again  
18          are actions that we would consider undertaking in the  
19          short term to the extent that a deficit showed up for  
20          a couple of years. We hold our reliability criteria  
21          as -- it's a serious criteria, and we plan to ensure  
22          that we don't have a deficit in the long run, as Mr.  
23          Matheson is saying. So we wouldn't use the same  
24          short-term reliances that Mr. Scouras was discussing  
25          for long-term planning purposes.

26 MR. OULTON:     Q:    No, I appreciate that, Mr. Reimann. We

1           may be speaking at cross-purposes a bit. Maybe I can  
2           come at this a different way.

3                       I appreciate your comment, Mr. Matheson,  
4           that the portfolio analysis has inherent in it some  
5           form of risk analysis. I'm asking, with respect to  
6           analyzing the deferral, because the response I was  
7           looking at, 2.5.2, and I apologize, I don't have a  
8           copy of the IR my friend referred to with me, so I  
9           can't comment on whether it's responsive to this; but  
10          with respect to the question of the deferral, I'm  
11          wondering whether any formal risk analysis was  
12          undertaken, or if it was simply just "well, we may not  
13          have enough power", versus the risk of, "well, if we  
14          keep the Clean Call in we may have too much", an issue  
15          that I know this panel talked about, I believe, with  
16          Mr. Quail and again with Mr. Weafer, and I don't  
17          intend to go there.

18                       Was it that type of analysis that led to  
19          the statement that this was a high-risk proposition?  
20          Or was there something more to it?

21 MR. SCOURAS:    A:    So maybe -- would it be helpful if I  
22                       characterized what we placed in the IR, or did you  
23                       want to get a copy of it? Because I can help. I  
24                       think this helps -- we tried to look at it from two  
25                       perspectives. So I'd like to help you out if -- is  
26                       that helpful?

1 MR. OULTON: Q: That's what I'm looking for.

2 MR. SCOURAS: A: Okay.

3 MR. OULTON: Q: I'm asking the question because I'm  
4 looking for some assistance.

5 MR. SCOURAS: A: Okay, sure. Okay. I just didn't know  
6 if I'm supposed to wait for you to get a copy, or if  
7 it's okay if I just speak to it.

8 MR. OULTON: Q: Yeah. I don't actually have a hard  
9 copy of Exhibit 12 with me=, so

10 MR. SCOURAS: A: Okay.

11 **Proceeding Time 3:04 p.m. T58**

12 MR. OULTON: Thank you, Mr. Godsoe.

13 MR. SCOURAS: A: So we're looking at BCUC Panel IR  
14 128.1?

15 MR. OULTON: Q: Yes, right.

16 MR. SCOURAS: A: So what I would do is I would draw  
17 your attention to page 2 of 3, starting there. Page 1  
18 speaks more to the financial aspects of this. But  
19 what we tried to look at, what are the implications if  
20 we deferred the call? We looked at it from two  
21 angles. What are things that we could do, and what's  
22 the call designed to do?

23 Essentially this call, back to the original  
24 LTAP filing, was designed to attract larger projects  
25 that have larger -- longer in-service dates. For the  
26 calls that B.C. Hydro has done, this is the longest

1 period of time between asking for submissions to the  
2 COD, which is out into 2016. So that's what this Call  
3 was designed to do, to try to attract larger projects  
4 and hopefully some economics of scale.

5 When we looked at deferring that, what we  
6 looked at is if we deferred that, what would be the  
7 implication on people actually looking to develop  
8 their projects? And what we looked at when we thought  
9 about and looked at a sort of a trajectory, we felt  
10 that deferring it put us at higher risk for people to  
11 go through all the different steps that they need to  
12 to build their project. And what you'll find is we've  
13 itemized some different steps that you can kind of go  
14 through here, but we tried to lay out an example. You  
15 know, permitting takes three to four years,  
16 procurement materials takes two to three years,  
17 construction takes two to three years. We're talking  
18 about a larger project. We felt sincerely that there  
19 was a lot of risk. If we deferred this, people would  
20 not get their projects built on time.

21 The second aspect we looked at, and this is  
22 given our experience, for example, in the 2006 Call,  
23 where CODs for projects have -- on average, I believe,  
24 they slipped by about nine months. So what this gave  
25 us the ability to do, we felt, was if we did award  
26 contracts now, and people started running into delays

1 of a few months here, a few months there, it gave us  
2 the ability to work with those proponents but still  
3 get them on line by the 2016 date. So that was to  
4 manage the risk of what's the trajectory people have  
5 to get there?

6 The last item about this, we felt that by  
7 deferring the Call, we ran a higher risk of losing a  
8 big portion of the bidder pool. Deferring the Call  
9 when there's a lot of other opportunities in other  
10 parts of Canada, other parts of North America, we felt  
11 there was opportunity that a lot of the folks that we  
12 want to bid on this would not be advancing their  
13 projects.

14 So the three risk elements or the risks we  
15 looked at how long does it take someone who's looking  
16 to build a large project to get it in on time? For  
17 those folks that didn't need at all that time, then  
18 maybe there's a little more room for us to work with  
19 them. And lastly, how do we maintain as broad a  
20 competitive pool as possible to try to deliver cost-  
21 effective resources.

22 So that's in a nutshell how we tried to  
23 look at it.

24 MR. OULTON: Q: If I understand the answer you just --  
25 or the response you just gave, Mr. Scouras, most of  
26 your consideration dealt with the particular

1           implications of a deferral on the proponents bidding  
2           into that Call. Would they have enough time to bring  
3           their projects on board? Would they go elsewhere if  
4           they didn't have an opportunity to lock in right now?  
5           Those are the two things that I -- the two main things  
6           that I took. There was a third as well.

7 MR. SCOURAS:    A:   Ultimately we're trying to get a  
8           competitive pool, run a process that's effective to  
9           get people to build good projects. And we felt by  
10          deferring this we'd put those principles at risk.

11 MR. OULTON:    Q:   Did B.C. Hydro give any consideration  
12          to what I'll call the quasi-option value of a  
13          deferral? In other words, the potential benefits that  
14          B.C. Hydro would receive by new information coming to  
15          light over the period of the deferral? And for  
16          example, you'll agree with me that we're in fairly  
17          uncertain economic times right now, and that's had  
18          some impact on what you project your load to be, at  
19          least in the short to mid-term. That's reflected in  
20          the evidentiary update, correct?

21 MR. SCOURAS:    A:   Right, and with my discussion with Mr.  
22          Quail yesterday, I think that was well canvassed in  
23          Panel 1.

24                    But if you could take me back to the first  
25          part of that question -- sorry, I think there was two  
26          parts you were asking me there. Before you asked me a

1 comment on the current economic conditions, there's a  
2 part before that and I missed that.

3 MR. OULTON: Q: The quasi option value?

4 MR. SCOURAS: A: Yeah, quasi option.

5 MR. OULTON: Q: I'm wondering if B.C. Hydro has  
6 undertaken any -- given any consideration to what I'm  
7 calling the quasi option value of a deferral, which is  
8 namely the benefit to B.C. Hydro of further  
9 information coming to light over the course of the  
10 deferral which would give further clarity as to B.C.  
11 Hydro's actual needs and how that would impact the  
12 Call?

13 **Proceeding Time 3:08 p.m. T59**

14 MR. MATHESON: A: And can I ask what further  
15 information are you thinking about when you say that?

16 MR. OULTON: Q: Well, there's a couple of things. I  
17 think it's been relatively well-canvassed in this  
18 proceeding. There's some uncertainty as to how  
19 effective the DSM options are going to be, and you're  
20 going to be bringing those into effect, and two years  
21 from now you may have a better idea as to how  
22 effective they're going to be -- whether or not you're  
23 going to be able to achieve better results than you're  
24 currently forecasting, or worse; the economy, and the  
25 implications, the long-term -- how long the current  
26 economic situation is going to last, because I think

1       you gave evidence, Mr. Matheson, about how the current  
2       economic situation has slowed load growth. You expect  
3       it to pick back up and continue along its trajectory,  
4       but I believe you gave evidence that, at least at  
5       present, that growth is deferred for a year or --

6       MR. MATHESON:    A:   Well, it is. And the years in  
7       question here are fiscal sort of '15 and fiscal '16,  
8       in there, and my evidence was quite clear that we are  
9       seeing a two-year hiatus in our load forecast. And  
10      you know, but -- because of the current economic  
11      conditions, but then we're seeing a recovery on the  
12      same trajectory as we had anticipated previously. So  
13      that by the time we're into those years, we should be  
14      well through this. And so I don't necessarily think  
15      that there's necessarily an application to those  
16      years.

17                    And your point about the DSM deliverability  
18      risk strikes me as being a poor reason to run a  
19      deficit in those years. So I'm not sure I follow your  
20      logic there.

21      MR. OULTON:    Q:   Well, my logic, I think, is relatively  
22      straightforward. I'm asking whether B.C. Hydro  
23      considered the benefit of having additional  
24      information about DSM, about the current economic  
25      situation. Another example is, about whether or not  
26      and how much extra power there's going to be from the

1 fact that the modernization project that Alcan's  
2 embarked on is at least on hold right now. It's going  
3 to proceed, but there is a delay. Is that correct?

4 MR. SCOURAS: A: So, there's -- well, there's three  
5 questions I think that I've -- that just came out.  
6 There was one question about whether we considered  
7 deferring the Call, and I think you just also added a  
8 question about Alcan modernization. So if we can park  
9 that one for a minute, is that okay?

10 MR. OULTON: Q: Absolutely. I'll come back to that. I  
11 just -- Mr. Matheson had asked me for examples, and I  
12 was simply --

13 MR. SCOURAS: A: Right.

14 MR. OULTON: Q: -- trying to put those out there. I  
15 wasn't asking specific questions about them, I was  
16 putting examples to provide context so that you can  
17 respond to my earlier question.

18 MR. SCOURAS: A: Right. Fair enough. I'm just trying  
19 to keep it straight.

20 So, we did consider what were the  
21 opportunities or risks with deferring the Call or  
22 reducing the Call. And to me, that strikes at the  
23 heart of the evidentiary update. We looked at the  
24 situation. The folks that do the planning discussed  
25 with us that do the acquisition, said, what are the  
26 different options that are out there, and at the end

1 of the day, we felt that right out of the IR that I  
2 just discussed that deferring the Call was a high-risk  
3 probability. We also felt that continuing with the  
4 Call at 3,000 gigawatt-hours was sufficient size to  
5 attract large projects, and the kind that we had hoped  
6 to attract. So we felt that it struck the right  
7 balance.

8 MR. MATHESON: A: It might be helpful for me to talk a  
9 little bit about what we try to do with our long-term  
10 plans. We -- you know, we certainly don't set out to  
11 achieve deficits. We try to find the right level of  
12 load resource balance in all the years across the  
13 planning horizon that respond to, you know,  
14 considerable unknown factors, many of which you've  
15 just outlined. And I'd submit, or point out, that  
16 those factors are -- they are -- they're still  
17 unknowns. The Alcan contract is still an unknown to  
18 us.

19 And so, we'd rather not get into the habit  
20 of putting deficit positions into our long-term plans,  
21 because we've got unknown factors that are out on the  
22 horizon. We always have those. Those are always  
23 there, and the degree to which we can try and  
24 articulate them, and format them into a risk-based  
25 framework or a scenario, which is what we try to do  
26 with our portfolio analysis in this LTAP, is the

1 degree to which we think we've got a sound plan. And  
2 this one's no different than that. And so we -- while  
3 we find ourselves, like I said, with a couple of small  
4 short-term deficits that came very late in the day to  
5 us, using those as a pretext for continuing them on in  
6 the future beyond them is just something that we don't  
7 think is a very smart thing to do.

8 MR. SCOURAS: A: Could I add something as well, Mr.  
9 Oulton?

10 MR. OULTON: Q: Certainly, and then I'll follow up with  
11 some questions.

12 MR. SCOURAS: A: I just also wanted to draw your  
13 attention to the fact that -- I didn't want to leave  
14 you with the impression that there's no further  
15 oversight, or that this Call is just carried on with  
16 no more review. When we make the awards, and we  
17 ultimately make our Section 71 filing.

18 **Proceeding Time 3:14 p.m. T60**

19 That will be done, taking into account all  
20 the things that have changed from now until then. And  
21 I believe it's BCUC IR 3.270.1 addressed to Alcan, and  
22 a variety of other options that may be available.  
23 When we make our awards and we make our filing to this  
24 Commission, we will address all the things that have  
25 changed between now and then, and why we still feel  
26 what we're doing is prudent.

1                   So I didn't want to leave you with the  
2                   impression that there isn't, you know, more analysis  
3                   or more review that will occur as time goes on.

4 MR. OULTON:    Q:    In that regard though, I probably  
5                   should know the answer to this already, but what's the  
6                   timetable for when you anticipate -- I know you're in  
7                   the negotiation phase, I just don't recall right now  
8                   what the timetable is for when you anticipate putting  
9                   forward what you propose to the Commission.

10 MR. SCOURAS:   A:    We anticipate making awards after the  
11                   decision made by the Commission on this LTAP, and then  
12                   some short of period of time after we'd file a Section  
13                   71 report. And Mr. Godsoe is in a better position,  
14                   probably, to tell me what kind of timing that would  
15                   be.

16 THE CHAIRPERSON:  I think this panel probably has to do  
17                   the first thing.

18 MR. OULTON:    No, I would agree.

19 MR. OULTON:    Q:    You'll agree with me, Mr. Scouras, that  
20                   once the contracts are actually awarded, and if this  
21                   Commission accepts them under Section 71, there's  
22                   limited flexibility to defer the power arrivals after  
23                   the fact. Once they're in place they're take or pay,  
24                   is that fair to say?

25 MR. SCOURAS:   A:    I would agree with that. I also think  
26                   that Mr. Quail and I believe yesterday had a good

1 conversation covering a lot of that ground. Or Mr.  
2 Weafer, I can't remember.

3 THE CHAIRPERSON: I think it was Mr. Weafer.

4 MR. SCOURAS: A: I think it was, yes.

5 MR. OULTON: Q: Going back to my original question on  
6 the quasi option value of a deferral, it's a slightly  
7 different question, in my view, and I may be taking  
8 too narrow a view of this, but it's a different  
9 question than simply whether B.C. Hydro considered a  
10 deferral. I appreciate -- you've given some evidence  
11 on that, I believe, Mr. Van Ruyven did as well.

12 I'm just wondering consideration there was  
13 given, and I accept Mr. Matheson's point that there is  
14 always some uncertainty. But I'm going to ask you if  
15 you agree with this, that this particular LTAP is  
16 coming in a period of considerable uncertainty,  
17 promulgated in large part by the extreme economic  
18 situation that we find ourselves in. Would you agree  
19 with that?

20 MR. MATHESON: A: That we're in uncertain times right  
21 now?

22 MR. OULTON: Q: Particularly uncertain times. It's  
23 more -- the circumstances surrounding this particular  
24 LTAP, I am putting to you, are more uncertain than  
25 they were in the 2006 IEP. The economy is different.  
26 That has implications for construction of these new

1 projects, that has implications for your load, all of  
2 that.

3 MR. MATHESON: A: Well, I mean, I think that's been  
4 well documented through the proceeding that yes, we're  
5 in an unusual economic circumstance at the moment.  
6 That's why we filed an evidentiary update and tried to  
7 be responsive to it. I think that frankly says to me  
8 all the more reason that we should try to look out  
9 into the future, ask ourselves where we think we'll  
10 be, and try to lock down and secure resources for our  
11 customers.

12 MR. OULTON: Q: Maybe I'm mis-recalling your evidence  
13 when I asked you about certain options available in  
14 the future to address the short-term deficit. But I  
15 believe, Mr. Matheson, you gave evidence that B.C.  
16 Hydro was taking a wait and see approach to deal with  
17 those.

18 MR. MATHESON: A: Because there's a difference. The  
19 short-term deficits are in the near term. And here  
20 we're talking about a large Call process that we have  
21 in good faith asked the independent power community to  
22 bid into for energy to serve our customers on a long-  
23 term basis. Those are quite different things. And  
24 while in the short term, as I said before, I'll say it  
25 again, we're not particularly pleased about the fact  
26 that we've got some small deficits in the short term.



1           -- occur. We try and forecast them as best we can,  
2           but we have to deal with them on a regular basis, and  
3           this really is no different from that.

4 MR. OULTON:   Q:   First, I just want to assure you, Mr.  
5           Matheson, I'm not suggesting that you be loose with  
6           anything here. I'm just trying to probe B.C. Hydro's  
7           position and evidence.

8 MR. MATHESON:   A:   Well, sure, and I appreciate that,  
9           but I -- it's important for us to make the point that  
10          in our long-term plans, we try to plan on having the  
11          right amount of energy and capacity to serve our  
12          customers. And so, the idea that we would  
13          intentionally go out and not actually do that is  
14          frankly something I need to be fairly strong about.  
15          And that's what I'm trying to do.

16 MR. OULTON:   Q:   You'll agree with me that a principal  
17          risk of deferring the Clean Call is that you'll end up  
18          buying -- acquiring less power than is ultimately  
19          required to meet B.C. Hydro's long-term needs. Is  
20          that what I'm taking from what you're saying?

21 MR. MATHESON:   A:   Can you restate that?

22 MR. OULTON:   Q:   That a principal risk of deferring the  
23          Clean Call is that B.C. Hydro will acquire less power  
24          over the next couple of years to meet its long-term  
25          needs. That's what I'm taking from what you're  
26          saying.

1 MR. MATHESON: A: Well, that and I'd make the point as  
2 well that we're attempting here to develop a plan that  
3 gets us to self-sufficiency in fiscal '17, and we take  
4 that very seriously, and we certainly would be  
5 jeopardizing that if we were to defer this Call.

6 MR. OULTON: Q: Right. This goes back to the point  
7 that Mr. Scouras made earlier. The principal risk in  
8 a deferral, from B.C. Hydro's perspective, is you're  
9 wary that you won't be in a position to meet self-  
10 sufficiency by 2016.

11 MR. MATHESON: A: Well, that and the reliability  
12 criteria that I've been talking about.

13 MR. OULTON: Q: And by that, you're referring to your  
14 reluctance to show a deficit in given years.

15 MR. MATHESON: A: That's correct.

16 MR. OULTON: Q: All right. Now, I mentioned Alcan  
17 earlier, and I should -- we did park it, Mr. Scouras,  
18 so I probably should come back to it for a moment.  
19 And I just simply -- my recollection is, Ms. Van  
20 Ruyven indicated that there are some discussions going  
21 on right now, and we're not -- B.C. Hydro's not at  
22 liberty to reveal the specifics of those. Is that  
23 correct?

24 MR. SCOURAS: A: That's correct.

25 MR. OULTON: Q: I just want to make sure that I'm clear  
26 on this. Those discussions are relating to acquiring

1 more firm power from Alcan, resulting from the  
2 deferral of -- or the delays in the modernization  
3 project. Is that correct?

4 MR. GODSOE: We really can't confirm that. The  
5 confidentiality agreement's very specific. All we can  
6 disclose is the existence of negotiations. So, I'm  
7 afraid we can't answer that.

8 All I can point to is in Exhibit B-12, the  
9 response to BCUC IR 3.270.1, we've laid out a  
10 scenario, Year 1, 2 and 3 of the effect of a delay on  
11 the modernization, but that's as far as we can go in  
12 terms of disclosing what's happening with Alcan.

13 MR. SCOURAS: A: And maybe I could add to that, Mr.  
14 Oulton, that the current contract we have with Alcan  
15 gives us the right for all power that's not required  
16 for the smelter load. So, that's the --

17 MR. OULTON: Q: That was going to be my next question.

18 MR. SCOURAS: A: -- base element to the contract, and  
19 there's scenarios presented in the IR that Mr. Godsoe  
20 has quoted, gives you a good snapshot of some possible  
21 options -- opportunities out in the world.

22 MR. OULTON: Q: Yeah. If I understand what you're  
23 saying, the 2007 Alcan EPA gives B.C. Hydro the right  
24 to acquire any surplus power that's available as a  
25 result of a delay in the modernization project.

26 MR. SCOURAS: A: Anything that's surplus to the smelter

1 load.

2 MR. OULTON: Q: And the IR response that sets that out  
3 in broad-brush strokes, I believe, 3.270.1, that's  
4 firm power that they're talking about there? Is that  
5 correct?

6 MR. SCOURAS: A: Subject to double-checking, I believe  
7 that is Tier 1 energy.

8 MR. OULTON: Q: All right. I just -- I see --

9 MR. SCOURAS: A: Well, if that's not correct we'll get  
10 back to you on that.

11 MR. OULTON: Q: Thank you. And you'll agree with me  
12 that the modernization project has at least been  
13 slowed somewhat. I believe there was an announcement  
14 recently by Alcan. Are you aware of that?

15 MR. SCOURAS: A: I'm not aware of any recent  
16 announcements around that.

17 MR. GODSOE: So my friend's question gets answered, are  
18 you talking about what's currently in the LTAP  
19 pursuant to the Alcan EPA? Or -- I was unclear on  
20 your question about Tier 1 versus Tier 2.

21 MR. OULTON: Q: My question is, the extra power that's  
22 set out in 3.270.1, it's on page 3 of 4, there's a  
23 table showing out the -- showing the incremental  
24 energy that would be available as a result of a 1-, 2-  
25 and 3-year delay, and my question is simply, is that  
26 firm Tier 1 energy or is it Tier 2?

1 **Proceeding Time 3:24 p.m. T62**

2 MR. GODSOE: So I guess in argument I can address this  
3 more fully, but all the energy comes at Tier 2 prices,  
4 but it has the effect of being firm energy, I believe  
5 is the answer, but I am also happy to address that in  
6 argument. Perhaps we should file, in fact, the 2007  
7 Alcan EPA so that everybody sees the provisions. If  
8 that's of assistance to my friend.

9 MR. OULTON: Q: As I understand it, the distinction  
10 between firm and non-firm is firm gets treated as  
11 capability for planning purposes. Non-firm is what's  
12 available to you to make operational decisions on  
13 what's most cost-effective. Is that fair to say?

14 MR. REIMANN: A: Yes.

15 MR. OULTON: Q: I've got that right.

16 MR. REIMANN: A: Yes.

17 MR. OULTON: Q: All right.

18 MR. SCOURAS: A: The situation that each different  
19 contract, though, treats that a bit differently. So  
20 while that's right in principle, each of the different  
21 contracts -- or a lot of the different contracts treat  
22 firm versus non-firm differently and have different  
23 aspects to how the product is delivered.

24 MR. OULTON: Q: If B.C. Hydro was to get the power  
25 that's set out in the table at the top of page 3 of 4  
26 of the response to 3.270.1, would B.C. Hydro be

1           treating that as firm energy or non-firm energy?

2 MR. MATHESON:   A:   Sorry, what page did you refer to

3           that?

4 MR. OULTON:    Q:    It's page 3 of 4 of the response to

5           BCUC IR 3.270.1.   It's the table setting out the

6           incremental energy that would be available as a result

7           of a delay in the modernization project.

8 MR. REIMANN:   A:    Subject to check, I believe we would

9           be treating it as firm.

10 MR. OULTON:    Q:    Thank you.  And you'll agree with me

11           that the availability of that power is something that

12           will become more clear in the immediate future.  Is

13           that fair to say?  Whether it's going to become

14           available should become clear to B.C. Hydro in the

15           next year, I would say.

16 MR. SCOURAS:   A:    -- will become clear.

17 MR. OULTON:    Q:    I'd like to turn to another topic now

18           and I just want to confirm a couple of matters from

19           two IRs that I believe fall within the purview of this

20           panel.  The first is the response given to COPE IR

21           1.5.3, which is in Exhibit B-3.

22 MR. SCOURAS:   A:    Yes, I've got it in front of me.

23 MR. OULTON:    Q:    All right.  And what this was was a

24           request for whether B.C. Hydro is going to use --

25           provide any credit or adjustment for bidders who offer

26           long-term contracts and B.C. Hydro's answer is no.

1 MR. SCOURAS: A: Right.

2 MR. OULTON: Q: And I just want to make sure I'm clear  
3 in understanding that. In determining the unit energy  
4 cost for any particular bid, there's no adjustment  
5 made for the longer term or not. Is that correct?  
6 Other than I know there's some things built into the  
7 call that deal with that.

8 MR. SCOURAS: A: Well, there's a present value  
9 calculation done, because people that bid in have a  
10 series of different terms and different aspects. So  
11 there is mathematical calculations that are done to  
12 bring them all back to a common point in time. Those  
13 are the adjustments that occur. I think what this IR  
14 is trying to get at is someone that's got a project  
15 that they are amortizing over 20 years or someone who  
16 has got a project they are amortizing over 40 years,  
17 that conceivably the person who is paying it off over  
18 a longer period of time will have a lower starting bid  
19 price.

20 MR. OULTON: Q: I think that's probably a fair  
21 characterization of the IR. But the response is  
22 simply there is no specific adjustment made for the  
23 term.

24 MR. SCOURAS: A: No. No, there's three adjustments  
25 that are made. One for firm energy. There is an  
26 adjustment, potentially a credit for that. There's an

1 adjustment for wind integration, and then there's  
2 other adjustments that are made for network upgrades  
3 and different pieces on the transmission system. But  
4 there is no actual bid price adjustment that's made  
5 for the length of term. We feel that's captured in  
6 the mathematical calculation at the front end.

7 MR. OULTON: Q: All right. I take it from your answer  
8 then that there's no specific adjustment made for any  
9 residual rights for ownership that may transfer to  
10 B.C. Hydro at the conclusion of a contract.

11 **Proceeding Time 3:29 p.m. T63**

12 MR. SCOURAS: A: Are we done with that?

13 MR. OULTON: Q: We are done with 1.5.3.

14 MR. SCOURAS: A: So residual rights, there's no  
15 specific mathematical calculation or other adjuster  
16 that's identified in the RFP, but it is one of the  
17 other attributes, other factors that are identified as  
18 something that B.C. Hydro has the discretion to take  
19 into account when evaluating the submissions.

20 MR. OULTON: Q: And that goes to there's some  
21 flexibility in the Call for bidding parties to give  
22 options to B.C. Hydro for the acquisition of residual  
23 rights, is that correct?

24 MR. SCOURAS: A: That's correct. That's one of the  
25 items that folks were able to provide different  
26 proposals to B.C. Hydro on, if they wanted to do that.

1 MR. OULTON: Q: And you'll agree with me that ownership  
2 or residual rights at the end of an IPP contract  
3 vesting in B.C. Hydro is something that is of some  
4 potential value to B.C. Hydro.

5 MR. SCOURAS: A: Well, I think it may be of some  
6 potential value, but it depends on the circumstances.  
7 And so I think that's why, if people had the option to  
8 provide different possible scenarios to B.C. Hydro if  
9 they felt like doing that.

10 MR. OULTON: Thank you, panel, those are my questions.

11 THE CHAIRPERSON: Thank you, Mr. Oulton.

12 MR. BOIS: Mr. Chair Panel Members.

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

14 MR. BOIS: Q: Panel members, thanks. My name is  
15 Charles Bois, and I know some of you and some of you  
16 I've never met. So I act for Wind Energy Corporation  
17 and/or NaiKun Wind Energy Corporation, and I just  
18 thought I'd introduce myself and get things rolling  
19 with that.

20 Mr. Matheson, you've helped me a lot with  
21 the cross-examination that you just went through, and  
22 so a lot of my questions have been dealt and, and I  
23 think that that's very helpful for everyone.

24 I do want to clarify something though, in  
25 some of the responses that you've given, and I'm not  
26 -- I'm just going to be dealing with about three or

1 four different IR responses, not just to NaiKun but to  
2 others as well. And I wanted to refer you to B.C.  
3 Hydro's response to BCUC IR 3.262.1, and that's in  
4 Exhibit B-12.

5 MR. MATHESON: A: Yes, I have that.

6 MR. BOIS: Q: Now, there's been a lot of number  
7 spinning around and a lot of plans and a lot of  
8 discussion about various ways that B.C. Hydro can meet  
9 its long-term plan. And at the bottom of the page, of  
10 page 1 of 2, B.C. Hydro states, and this will be in  
11 the paragraph, it submits that it's

12 "...capable of meeting self-sufficiency  
13 through 2008, through the 2008 LTAP as  
14 amended by Exhibit B-10."

15 And you'd still say that?

16 MR. MATHESON: A: Yes.

17 MR. BOIS: Q: After everything that we've gone through,  
18 and you'd still be consistent with that, right?

19 MR. MATHESON: A: Yes.

20 MR. BOIS: Q: Okay. Now, on Table 2-10, it forecasts  
21 an energy surplus of 300 gigawatt hours in F2017,  
22 based on the mid-load forecast. Now, just on that  
23 point and in terms of the plan and just so I can get  
24 all of these various plans in order, would you agree  
25 with me that that's premised on B.C. Hydro obtaining  
26 the DSM targets that are set out in the plan?

1 MR. MATHESON: A: Yes.

2 MR. BOIS: Q: Okay, and would you agree that it's  
3 premised on obtaining all of the energy that it  
4 expects to get under the F2006 call and previous calls  
5 that are still under construction? Previous projects  
6 that are still under construction?

7 MR. MATHESON: A: Well, post-attrition, that's correct,  
8 yes.

9 MR. BOIS: Q: Right. Well, and that's the expected  
10 energy would be the post-attrition figure, right?

11 MR. MATHESON: A: Yes.

12 MR. BOIS: Q: Okay. And then obtaining the 2100  
13 gigawatt hours under the current Call. Do you agree  
14 with that?

15 MR. MATHESON: A: Yes.

16 MR. BOIS: Q: Okay, great. That's all I wanted to  
17 confirm, because like I said, there was different  
18 things swimming around in my head.

19 Now, if you could turn to B.C. Hydro's  
20 response to IPPBC IR 3.2.2 and it's at Exhibit B-12.  
21 So it's IPP request 2.2.2 and it's in Exhibit B-12.

22 Okay, Mr. Scouras, I see you've got the  
23 binder so I'll address my question to you.

24 Now, the table that's here is an updated  
25 table of the Table 2.5 in the original LTAP  
26 application, as I understand this. So, and you've



1       just to get a copy of the spreadsheet that will --  
2       rolled up to this number?

3 MR. SCOURAS:    A:    What -- maybe -- depending on the  
4       level of detail that you're looking for.

5 MR. BOIS:       Q:    I'm not looking for a lot of details,  
6       just --

7 MR. SCOURAS:    A:    And maybe just one item that you're  
8       looking for.

9 MR. BOIS:       Q:    Well, I'm looking to try and understand  
10       when those projects came on-line --

11 MR. SCOURAS:    A:    Mm-hmm.

12 MR. BOIS:       Q:    -- to be quite honest with you, and  
13       whether it's really relevant to include them in this  
14       table, given current situation and current Calls.

15 MR. SCOURAS:    A:    Oh, okay. So --

16 MR. BOIS:       Q:    You keep looking at Mr. Godsoe.

17 MR. SCOURAS:    A:    No, I'm sorry, I'm trying to think  
18       about -- so can you state that again?

19 MR. BOIS:       Q:    Well --

20 MR. SCOURAS:    A:    So you're trying to have that --

21 MR. BOIS:       Q:    -- you have this big number, right?

22 MR. SCOURAS:    A:    Right.

23 MR. BOIS:       Q:    And you've thrown it into the mix. And  
24       --

25 MR. SCOURAS:    A:    Oh, I see what you're getting at.

26 MR. BOIS:       Q:    Yeah. You see what I'm getting at?

1 MR. SCOURAS: A: Right.

2 MR. BOIS: Q: And it's sort of -- nothing's attrited to  
3 it, nothing is there for it, and it's probably at a  
4 different time and a different era where the risks  
5 attached to those projects, where there's risk  
6 attached to IPPs today --

7 MR. SCOURAS: A: Right.

8 MR. BOIS: Q: -- were different, right?

9 MR. SCOURAS: A: I would say it's more challenging to  
10 compare development of projects from those calls than  
11 to today's. The process were different, a lot of  
12 things were different at those times. So I think it's  
13 a fair comment to say that was a very different world  
14 when those contracts were awarded and those projects  
15 were built.

16 MR. BOIS: Q: Right. And one of the significant  
17 differences was -- and correct me if I'm wrong, was  
18 that B.C. Hydro approached projects that were pretty  
19 much done development, and you know, you could sort of  
20 say, "Okay, we're here." As opposed to the practice  
21 today of having the IPP market sign a contract and  
22 then start developing. Because you're not getting a  
23 fully ready -- shelf-ready project to go with these  
24 current Calls in the 2006 Call, correct?

25 MR. SCOURAS: A: Well, to be honest, the pre-2000 EPAs  
26 are again before my time. I can speak probably more

1 fulsomely to the projects post-2000. I can't speak  
2 very comprehensively to the different processes. I  
3 know there was quite complex processes that led to  
4 some of these, and there's some other Calls. So I  
5 don't think I can probably provide good value on  
6 commentary on those Calls.

7 MR. BOIS: Q: Okay. Anybody else be able to offer  
8 anything at all? Insight into these?

9 Okay, that's fine. But it -- but would you  
10 be able to say whether this 6.7 terawatt hours was  
11 actually obtained through an open Call process?

12 MR. SCOURAS: A: I believe --

13 MR. BOIS: Q: Any of it?

14 MR. SCOURAS: A: There was one part of it that was.  
15 There was a Call for some smaller projects that  
16 occurred in the late 90s. As I recall.

17 THE CHAIRPERSON: I can maybe help you a little bit.

18 MR. BOIS: Oh, please do.

19 THE CHAIRPERSON: I imagine -- I don't want to give  
20 evidence. I imagine one of them is the Island  
21 Cogeneration project.

22 MR. SCOURAS: A: Yes. Yes.

23 THE CHAIRPERSON: Which was in 1995, was -- went to  
24 public tender of some kind. And another one would  
25 have been the McMann Cogeneration project.

26 MR. SCOURAS: A: Right, and then there was Purcell, and

1 --

2 THE CHAIRPERSON: Which was also, I think, a Call for  
3 tender in 1990 -- 1990.

4 MR. BOIS: Q: Okay. But we were -- we would agree that  
5 those are different than the current kinds of Calls  
6 that you're doing now?

7 MR. SCOURAS: A: They were competitive Calls for power.  
8 There are different players involved, yes, but they  
9 were still competitive. They had different levels of  
10 oversight, and there was individual projects for some  
11 of the larger ones, and there was also a Call for a  
12 batch of small hydro-type projects.

13 So, I don't think the processes probably  
14 were all that dissimilar from today.

15 MR. BOIS: Q: But in terms of risk allocation, they  
16 were quite a bit -- they are quite a bit different.

17 MR. SCOURAS: A: I believe the contracts are fairly  
18 different from the contracts that we have today.

19 MR. BOIS: Q: Thank you. Now, I just want to ask you  
20 another question. In some of those projects, I guess  
21 -- and with all due respect to the Commission, I mean  
22 no disrespect at all; a lot of those projects were  
23 issued at a time when B.C. Hydro was exempted from  
24 regulation?

25 MR. GODSOE: That's a legal issue, and I can speak to  
26 that. It's true that Section 71 has changed.

1 MR. BOIS: Well, I don't really see it's a legal issue,  
2 because -- I mean, if there's a time frame when B.C.  
3 Hydro wasn't -- was exempted, then it's not a legal  
4 issue. I'm just asking them to confirm if that's --  
5 those projects were done in that time frame.

6 **Proceeding Time 3:40 p.m. T65**

7 MR. SCOURAS: A: Are you speaking to the pre-2008  
8 period?

9 MR. BOIS: Q: Yes.

10 MR. GODSOE: Well, the term "exempt", with all due  
11 respect, is a legal issue, Mr. Chairman. So I think  
12 my friend has got to be a bit more precise on what he  
13 means by "exemption from regulation."

14 MR. BOIS: Q: Well, let's put it this way then. When  
15 the Liberals came into power in the first term, they  
16 brought B.C. Hydro back under the regulatory scrutiny  
17 of the BCUC. So prior to that time, B.C. Hydro didn't  
18 have to come to this Commission for regulatory  
19 oversight. How many of those projects were issued  
20 during that timeframe?

21 MR. REIMANN: A: I'm not sure if that's entirely true.  
22 It strikes me in the '90s period there was a time when  
23 Hydro's rates were frozen and that meant that Hydro  
24 didn't necessarily need to come back in and get its  
25 revenue requirements reviewed. I don't think that's  
26 necessarily the same thing as getting an approval for

1 a contract to build an IPP. And I don't know that if  
2 anybody on this panel can speak to whether or not we  
3 have to follow the Commission approval procedures for  
4 those IPPs at that time.

5 MR. BOIS: Q: Okay.

6 MR. MATHESON: A: And there was a period prior to that  
7 when B.C. Hydro was fully regulated. So when you say  
8 "timeframe", you're not specific and --

9 MR. BOIS: Q: Well, I realize that there was a period  
10 where you were fully regulated and then there was a  
11 period where you were, perhaps I'll use "exempted" in  
12 a quotation mark to satisfy Mr. Godsoe in terms of the  
13 legal requirement or the legal element. And then  
14 there's a period again where you are under full  
15 regulation. Would you agree with that, Mr. Matheson?

16 MR. MATHESON: A: Well, I think so but again, it's  
17 relatively vague, Mr. Bois. I mean, you say "a  
18 timeframe", that to me is vague. I think if you were  
19 to ask a question about specific years and do it on  
20 that basis we'd be able to help you. But you know, "a  
21 timeframe" is a relatively nebulous --

22 MR. BOIS: Q: Well, we'll just leave it at that.  
23 That's fine. I wasn't really trying to break down  
24 into really big detail, I just wanted to get a general  
25 consensus or a general idea. But that's fine.

26 Now, going back to this table again, I

1 wanted to just do a couple of things. And I noticed  
2 that VIGP wasn't included in this table, but it was  
3 included in the first table, and I'm not really going  
4 to ask you explain why VIGP isn't on this table, but I  
5 want you to assume that VIGP is on this table, and  
6 looking at the numbers. And I want you to also  
7 assume that the pre-2000 EPAs are not included on the  
8 table.

9 Now, my math skills are not great, and I  
10 think we've learned others in this room's skills are  
11 not great. So subject to you checking these numbers,  
12 would you agree with me that if you factor out the  
13 6722 pre-2000 EPA value, and you add in the VIGP value  
14 of 1800 gigawatt hours, and then you treat the VIGP  
15 project as being attrited, that you would wind up with  
16 an attrition factor since 2001 of 67 percent?

17 MR. SCOURAS: A: Subject to checking, I'll accept that.

18 MR. BOIS: Q: Okay. And if we take VIGP out of the  
19 equation, you wind up with an attrition factor since  
20 2001 of 61 percent. Subject to check.

21 MR. SCOURAS: A: Yes.

22 **Proceeding Time 3:43 p.m. T66**

23 MR. BOIS: Q: Thank you. So would you not agree then,  
24 subject to check, that the attrition rate amongst  
25 these past Calls, including the evidentiary update --  
26 F06 attrition, is around 60 percent each time? Or

1 overall? And you can do the calculation subject to  
2 check if you want.

3 MR. SCOURAS: A: So could you state that again please?  
4 There's a lot of numbers and assumptions, so I'm  
5 trying to --

6 MR. BOIS: Q: So what we basic -- I think subject to  
7 check you've agreed that VIGP and the pre-2000 Calls  
8 are EPAs out, you get attrition of 67 percent. And  
9 then if you just take out VIGP again, you get  
10 attrition of 61 percent.

11 MR. SCOURAS: A: Okay.

12 MR. BOIS: Q: So that would take you down to the bottom  
13 right-hand side. The total would be around 61  
14 percent, I think, if you do the calculations. Between  
15 61 and 67 percent.

16 MR. SCOURAS: A: And is that with the Vancouver Island  
17 call for tenders included or not included?

18 MR. BOIS: Q: Well, there's one -- it'll be 67 percent  
19 with Vancouver Island in, and 61 percent with it out.  
20 And I think if you just said that.

21 MR. SCOURAS: A: Okay.

22 MR. BOIS: Q: Okay?

23 MR. SCOURAS: A: Okay.

24 MR. BOIS: Q: Thanks. But what I was really struck by  
25 was that that's more than double the proposed  
26 attrition rate that you've got in the LTAP

1 application, 30 percent.

2 MR. SCOURAS: A: Well, I think that may be -- I don't  
3 know if misleading -- that's a straightforward  
4 mathematical calculation.

5 MR. BOIS: Q: Right.

6 MR. SCOURAS: A: I think when you look at the actual  
7 volumes of the energy that has been purchased over  
8 that time, using those assumptions that you used,  
9 we've discussed that in the 2006 Call. We've  
10 experienced a very significant high -- significant  
11 attrition in coal biomass projects --

12 MR. BOIS: Q: Right.

13 MR. SCOURAS: A: -- due to change in legislation and  
14 changing operating conditions in the forest industry.  
15 So that takes out almost a couple thousand right  
16 there.

17 The 2003 Call, we awarded very high -- we  
18 did experience high attrition rate, but that Call also  
19 had a fixed ceiling price that we have provided, and  
20 there was quite a cost run up between the award of the  
21 contracts and the CODs. So if you look at those two  
22 calls, that's where a lot of the energy in this total  
23 you're looking is at. So I don't think it's fair to  
24 say that the average for every Call is 61 percent. I  
25 think it's more fair to say that we've had higher  
26 attrition in the '03 Call and the 2006 Call.

1 MR. BOIS: Q: Well, would you agree with the general  
2 consensus, then, that the attrition rate, based on  
3 those, is increasing as the years go along?

4 MR. SCOURAS: A: I would say that the last two calls  
5 have had higher attrition than the ones starting  
6 between 2000 and 2003.

7 MR. BOIS: Q: Well, you've gone back to an attrition  
8 rate of 20 percent used in 2001, and 30 percent used  
9 in the 2002 Call. So since then, the attrition rates  
10 have been much higher than those.

11 MR. SCOURAS: A: We've experienced higher attrition in  
12 those two calls as per this table.

13 **Proceeding Time 3:46 p.m. T67**

14 MR. BOIS: Q: Okay. Now, I'd like you to turn to the  
15 California Energy Commission study which I understand  
16 was filed under BCUC -- or sorry, IPPBC 3.2.3 in  
17 Exhibit B-12. Do you have that?

18 MR. SCOURAS: A: Yes.

19 MR. BOIS: Q: And I'd also like you to have handy the  
20 response to BCUC IR 3.266.1 in Exhibit B-12.

21 MR. SCOURAS: A: Okay.

22 MR. BOIS: Q: Okay? Have you read this report?

23 MR. SCOURAS: A: Yes, I have.

24 MR. BOIS: Q: And right through, or just the abstract?

25 MR. SCOURAS: A: No, I read it.

26 MR. BOIS: Q: Okay. Did anyone else read it at the

1 table? No? Okay.

2 Now, I'm just looking at the last sentence  
3 on page 1 and I'll go over into page 2, so -- on the  
4 information response. And it says:

5 "The CEC report covered a sample size of  
6 21,000 megawatts of renewable energy  
7 projects in North America."

8 Do you have that?

9 MR. SCOURAS: A: Sorry, are you reading page 1 of the--

10 MR. BOIS: Q: No, I'm reading page 1 of the IR, yes.

11 MR. SCOURAS: A: Yes, okay, sorry, I was looking at the  
12 report. Okay, sorry.

13 MR. BOIS: Q: Do you have it?

14 MR. SCOURAS: A: Yeah.

15 MR. BOIS: Q: Okay. So just at the bottom of page 1.

16 MR. SCOURAS: A: Yes.

17 MR. BOIS: Q: "The CEC report covered a sample size  
18 of 21,000 megawatts of renewable energy  
19 projects in North American and is applicable  
20 to B.C. for the following reasons..."

21 MR. SCOURAS: A: Yes.

22 MR. BOIS: Q: And to summarize those reasons, the  
23 projects reviewed matched the characteristics of the  
24 projects eligible in the current call?

25 MR. SCOURAS: A: Except for exclusion of bio-energy,  
26 yes.

1 MR. BOIS: Q: Except for the exclusion, okay. And the  
2 extrition experienced in the CEC project -- or report,  
3 included jurisdictions that have similar market  
4 drivers to B.C. such as a strong demand for renewable  
5 energy and increasing equipment and I'd say  
6 construction costs, and finally the increasing public  
7 scrutiny that we are facing on some of these projects.  
8 Would you agree with that?

9 MR. SCOURAS: A: Yes.

10 MR. BOIS: Q: And you hold the view that the report is  
11 still applicable to B.C., right?

12 MR. SCOURAS: A: I think the report is one touch point  
13 for us to compare what we are observing and what this  
14 report observes, sorry.

15 MR. BOIS: Q: So it's one touch point.

16 MR. SCOURAS: A: Mm-hmm.

17 MR. BOIS: Q: Okay. I just find that an interesting  
18 turn of words, because you are relying on this report  
19 to substantiate your 30 percent attrition rate.

20 MR. SCOURAS: A: No, sorry, Mr. Bois, I wouldn't  
21 characterize that that way. I think what we are  
22 trying to do in this IR is lay out a threat of logic  
23 that we've got experience in our own jurisdiction, and  
24 we -- based on what we've observed, we feel that  
25 excluding in the most recent calls the coal biomass  
26 situation, that we are looking at composite attrition

1 for renewal projects in around the 40 percent range.  
2 MR. BOIS: Q: Well, I'm not sure I -- I mean, I can  
3 understand why you'd want to exclude the coal perhaps,  
4 because of the government policy -- I mean, that's an  
5 automatic exclusion. But I mean, you'd agree with me  
6 that government policy could lead to any project being  
7 excluded from a Call, right? Like, if the government  
8 decided that it didn't want to burn natural gas any  
9 more and gave a policy to that effect, you'd agree  
10 that that would affect your Call.

11 **Proceeding Time 3:50 p.m. T68**

12 MR. SCOURAS: A: Not the Clean Power Call.

13 MR. BOIS: Q: Well --

14 MR. SCOURAS: A: Another example may be a better one.

15 MR. BOIS: Q: It would affect your future Calls. You  
16 would agree that it would knock those kinds of  
17 projects out of contention.

18 MR. SCOURAS: A: I'd agree with you that changes in  
19 government policy or legislation can have effect on  
20 projects after they've signed a contract.

21 MR. BOIS: Q: Now, when I read the CEC report, it also  
22 included biomass projects. So I'm wondering why  
23 you're excluding biomass projects from the attrition  
24 rate?

25 MR. SCOURAS: A: Well, we're trying to draw -- there's  
26 a variety of different projects. Maybe taking a step

1 back. The Clean Power Call excluded bio-energy. So  
2 you're asking me how come --

3 MR. BOIS: Q: But you also had a bio-energy Call.

4 MR. SCOURAS: A: Oh, okay. I think the reason that we  
5 would do that now is because those contracts that we  
6 signed are almost a different paradigm in the forest  
7 industry. So, I think we feel that there's been a  
8 very significant shift in that, so going forward in a  
9 bio-energy Call, we've -- we're more contemporary in  
10 terms of what's happening. But we felt like there was  
11 a significant enough shift and we're comparing it to  
12 the Clean Power Call, that we felt it was a reasonable  
13 thing to pull them out and put them aside with the  
14 coal biomass, because some of the biomass were also  
15 coal/biomass projects. So we put them in one basket  
16 together.

17 MR. BOIS: Q: But then by doing that, you effectively  
18 remove the biomass projects that aren't related to  
19 coal that may attrit out. Is that right?

20 MR. SCOURAS: A: In getting the 40 percent has been the  
21 renewable -- the remaining renewables out of the 2006  
22 Call, that's correct.

23 MR. BOIS: Q: Okay. Now, just as a matter of  
24 terminology and before I refer you to the IR again,  
25 would you agree with me that the use of the term --  
26 and I'm not asking for a legal opinion here, the term

1 "contract failure rate" in the report, and B.C.  
2 Hydro's -- and our bandying about of attrition are the  
3 same -- have essentially the same meaning?  
4 MR. SCOURAS: A: You know, I think they might be subtly  
5 different.  
6 MR. BOIS: Q: How so?  
7 MR. SCOURAS: A: As I recall, they spoke about in delay  
8 here. We -- you know, I'll have to check that. I  
9 can't remember for sure if they're exactly the same,  
10 because what we do is we forecast for projects that  
11 have actually been terminated, and then projects that  
12 have -- then we do a probabilistic assessment of each  
13 project, what the likelihood is of them showing up.  
14 MR. BOIS: Q: Right.  
15 MR. SCOURAS: A: So you get a quantum of energy. I  
16 think there are places in this report where they also  
17 just spoke about projects being delayed.  
18 MR. BOIS: Q: Oh, they did speak about delayed  
19 projects.  
20 MR. SCOURAS: A: We don't speak about that as  
21 attrition, and I just -- it was a little while ago  
22 that I read the report. I can't give you exact  
23 confirmation that they're identical.  
24 MR. BOIS: Q: Well, I think they spoke about projects  
25 being delayed, and in the context, and you can check  
26 this, if you will, of the contract failure. So the

1 delay caused the contract to essentially be  
2 terminated. So I think we would probably be on the  
3 same page, but subject to your check, you can --

4 **Proceeding Time 3:53 p.m. T69**

5 MR. SCOURAS: A: Well, maybe to be clear, what I can  
6 say is for us, we're defining attrition as being  
7 projects that have terminated, or probabilistic  
8 assessment from us of whether they're going to show up  
9 and how much energy we can rely on. So that's what I  
10 do know.

11 MR. BOIS: Q: Okay.

12 Now, early on in the hearing, I'll recall,  
13 and I'll give you the transcript reference for this.  
14 It's transcript reference Volume 6, pages 846, line 4,  
15 right through to page 850, line 26. And you can look  
16 at those pages if you want and have them handy. It's  
17 a discussion between the Chairman and Ms. Van Ruyven  
18 and Mr. Elton. And really what I'm going to get to  
19 here is there was a bit of a discussion about the  
20 order that was being sought and the endorsements in  
21 the order, and I think the discussion really focused  
22 on whether or not B.C. Hydro was asking the Commission  
23 to endorse the 30 percent attrition rate. Have I  
24 characterized that correctly, Mr. Chair?

25 THE CHAIRPERSON: I think you may have done, yes.

26 MR. BOIS: Q: And Mr. Elton and Ms. Van Ruyven said,

1 well, it sort of came down to the end that they were  
2 looking for the 2100 gigawatt hours, but I don't  
3 actually think they said, "No, we're not asking for  
4 that endorsement."

5 What I'd like to put to you is, can you  
6 confirm that B.C. Hydro is not asking the Commission  
7 to endorse the attrition rate of 30 percent?

8 MR. SCOURAS: A: I'll have to go back to the actual  
9 filing where we lay our --

10 MR. GODSOE: -- order pretty expressly, clear -- laid out  
11 in Exhibit B-1-1, and I think you'll see that we're  
12 not seeking a specific endorsement of the 30 percent  
13 attrition.

14 MR. BOIS: Okay, that's fine, that's all we need, so  
15 thank you.

16 MR. BOIS: Q: Now, I also go back to the CEC report,  
17 and I'd like you to just turn to page 46 of 43, and  
18 this is really the conclusion. I'm sorry?

19 THE CHAIRPERSON: That's an interesting number.

20 MR. BOIS: Page 46 of 53? What did I say?

21 THE CHAIRPERSON: 43.

22 MR. BOIS: Oh, I apologize. Because right above it it  
23 says page 42, so that's even better.

24 MR. SCOURAS: A: Mine's just a table.

25 MR. BOIS: Q: Well, it might actually be -- it's page  
26 46 of the IR response but it might be page 42 of the

1 actual report.

2 MR. SCOURAS: A: Right.

3 MR. BOIS: Q: Okay. I'd like to turn your attention to  
4 the second full paragraph and it says:

5 "There is considerable variation among  
6 utilities with contract failure, and data  
7 limitations prevent robust conclusions. The  
8 experience presented in this report  
9 suggested an overall failure rate of 20 to  
10 30 percent should likely be considered the  
11 minimum...

12 And the authors emphasize "minimum",

13 **Proceeding Time 3:56 p.m. T70**

14 "...level of expected failure for large RFOs  
15 conducted over multiple years..."

16 And then they parenthetically say:

17 "Any individual RFO may be able to beat  
18 these failure rates."

19 You'd agree with that so far?

20 MR. SCOURAS: A: I'd agree that that's what the  
21 statement says.

22 MR. BOIS: Q: Okay. And then they go on to say:

23 "In fact, failure rates much higher than  
24 these levels, (50 percent or even greater in  
25 some cases) are supported by the historical  
26 experience, especially for projects that use

1 pre-commercial technologies."

2 And I know that we are not talking pre-commercial  
3 technologies in the current proceedings and I think  
4 you've also made that clear in your IR responses. But  
5 what I was struck by was:

6 "...or that (like many projects in California)  
7 are likely to face siting, permitting,  
8 resource supply, transmission or other  
9 barriers to development. Somewhat supportive  
10 of failure rates at these or higher levels  
11 is recent experience with renewable energy  
12 contracting by California IOUs, which shows  
13 what appears to be a healthy degree of  
14 contract failure. We have no reason to  
15 believe that this will not continue in  
16 future RFO cycles especially as the States'  
17 utilities dig deeper into the pool of  
18 possible projects."

19 Now, you've already agreed with me that the  
20 report is applicable to B.C. because of the siting  
21 issues. Now, would you agree with me that many of the  
22 projects that are in the current Call and that are  
23 being developed now face these similar barriers,  
24 siting issues, permitting issues, length of times,  
25 concerns that are expressed in this paragraph?

26 MR. SCOURAS: A: I think what I would characterize it,

1 I think this is a broad report that identifies a bunch  
2 of information and if I could -- if you bear with me  
3 for a few minutes I'd like to provide you my  
4 perspective on this.

5 MR. BOIS: Q: Sure.

6 MR. SCOURAS: A: I think what this report clearly lays  
7 out is that if someone is procuring power, you have a  
8 balance that you are trying to strike. You can have  
9 very low attrition but also have a very small  
10 competitive pool, have a great deal of certainty. You  
11 can have a broad competitive pool and higher attrition  
12 and less certainty of delivery. And that's the  
13 tension of each of the different jurisdictions that  
14 are trying to procure power, that's the balance they  
15 are trying to strike.

16 In our jurisdiction, I would agree with you  
17 that there's different elements that I noted here from  
18 this report that are similar. That projects that fail  
19 often fail because siting and permitting, capital cost  
20 increases, financing troubles as well as transmission  
21 interconnection issues. So those are things that I  
22 would say are similar to our jurisdiction. This  
23 report also says that there's a number of things that  
24 procurement authorities can try to help to address  
25 those.

26 MR. BOIS: Q: Right.

1 MR. SCOURAS: A: And what I'd respectfully submit to  
2 you is that we have looked at those, and we feel that  
3 we've got a good package together in terms of sticking  
4 with what we believe is a 30 percent attrition factor.  
5 We've looked at our pre-Clean Power Call RFP failures,  
6 as you've taken me through on the table, we've looked  
7 at the factors that were identified in this report,  
8 and we've also made refinements in this Call. Some of  
9 the refinements that we've made in this Call is we've  
10 increased fees in some of the different securities, to  
11 help bidders understand if this is the right Call for  
12 them.

13 **Proceeding Time 3:59 p.m. T71**

14 We've also made refinements in the risk  
15 assessment process, and I will draw your attention to  
16 this report, does in a number of occasions identify  
17 that the level of due diligence that the buying  
18 authority does, does help instruct where the attrition  
19 ultimately lands. Some of the refinements that we've  
20 made this time in the Call process is to have a much  
21 more comprehensive assessment done of permitting risk  
22 on different projects, as well as assessing the  
23 different natural resource data. For projects that  
24 are going to be wind developed, or water developed,  
25 we've asked them to provide us comprehensive data  
26 sets. And we've analyzed those to understand the

1 strength of that data.

2 So taking those into account, we feel that  
3 we are on the right trajectory with a 30 percent  
4 attrition factor as a planning element in this call.  
5 If, when we go through this process which does include  
6 negotiations and discussions -- easy for me to say --  
7 it does have a discussion piece. If we end up going  
8 through that and the other due diligence aspects, we  
9 feel we need to vary that number, we will do that.

10 And a good example of that is in the bio-  
11 energy Call. As you'll look in the original LTAP  
12 filing, we had assumed a 30 percent attrition rate.  
13 In the current filing that we've made, we've reduced  
14 that down to 10 percent.

15 So what I would say to you, Mr. Bois, is  
16 that this provides some good information. We've  
17 looked at it seriously in terms of how we've tried to  
18 design our Call, and we've planned to come with a good  
19 structured rationale for whatever we bring forward to  
20 this Commission.

21 MR. BOIS: Q: Well, I appreciate all of that, and I'm  
22 sure you've done all of that, and I have no doubt that  
23 you've done that. In terms of rationalizing why you  
24 wanted your 30 -- why you have the 30 percent, but I  
25 submit to you that experience doesn't bear that out.  
26 In fact, we just went through the table and the Call

1 -- the attrition rate is significantly higher than  
2 that. And --

3 MR. SCOURAS: A: I would say, respectfully, that that  
4 would be true if we didn't make any refinements.

5 MR. BOIS: Q: Well --

6 MR. SCOURAS: A: We feel like we've made changes. We  
7 feel like we're -- we've -- understand some of the  
8 things that may have occurred. I don't want to  
9 underestimate the fact that the -- looking at natural  
10 resource data as well as permitting, and the fact that  
11 these are negotiated elements, we've found tremendous  
12 value in the bio-energy Call. We could sit down with  
13 people and say, "Tell us about your project." As we  
14 understood that, I would say a good portion of those  
15 discussions were not about the price. They were about  
16 the project. And those helped us really understand  
17 who those folks are and what their project is.

18 MR. BOIS: Q: Well, and I think that that's a fair  
19 comment to make when you're talking about larger  
20 projects, because you've made the -- you've indicated  
21 that a lot of your potential target bidders here are  
22 larger developers who have opportunities elsewhere.  
23 So, would you also agree with me, though, that the  
24 conditions and requirements and things that you're  
25 doing to what I would call mitigate your Call by  
26 shifting risks and putting fees in, would you agree

1 with me that that also may be a disincentive to some  
2 of these bidders?

3 MR. SCOURAS: A: Could you clarify -- disincentive to  
4 --

5 MR. BOIS: Q: To bidding. Or to going forward. If  
6 financial -- for example, if a bidder can't secure its  
7 financing, it doesn't really -- if it can't secure  
8 financing for \$300 million, a fee of \$2 million is  
9 really insignificant. Would you agree?

10 MR. SCOURAS: A: It's the structure -- I think the  
11 structure we put in place between the securities, the  
12 fees, penalties of mark to market liquidated damages,  
13 all of those are designed to send a strong signal, an  
14 accurate signal, to bidders, is this the right call  
15 for them? Are they ready to participate?

16 **Proceeding Time 4:03 p.m. T72**

17 MR. BOIS: Q: And when they've gone through of that,  
18 and they've made their commitment to participate,  
19 you're now saying that we're changing the rules by  
20 saying, "Well, we're going to reduce the Call, or  
21 potentially not give you any call. We have that  
22 discretion." And I know that those rules are there,  
23 but when you say that you're going to establish that  
24 kind of criteria, it sends a mixed message, wouldn't  
25 you agree?

26 MR. SCOURAS: A: Are you speaking to the change in the

1 Call target and the evidentiary --

2 MR. BOIS: Q: Well, the change in the Call target and  
3 the discussion that we've had in the past few days  
4 about your discretion to potentially not award  
5 anything.

6 MR. SCOURAS: A: The proviso not to award anything is  
7 standard in all of our RFPs.

8 MR. BOIS: Q: Oh, I understand that.

9 MR. SCOURAS: A: To give ourselves protection, that --  
10 issuing an RFP doesn't mean we blindly just award  
11 contracts, that we try to make the best business  
12 decision we can. We also have one of our other  
13 factors in a non-price criteria that's in our  
14 evaluation up front lays out that awards we made on  
15 information, including changes in load supply/demand  
16 balance. So we feel very strongly that the changes  
17 that have been made and the submissions made to the  
18 Commission are firmly and clearly aligned with the  
19 rules as we've laid them out in the RFP, and reflect  
20 B.C. Hydro exercising discretion, prudent discretion  
21 in moving the Call forward.

22 I would like to draw your attention to the  
23 fact that we do purchase power for the express reason  
24 to serve domestic load. So those are the kind of  
25 factors and discretion we need to have when we design  
26 those calls.

1 MR. BOIS: Q: Oh, and I wasn't going to go anywhere  
2 there. Pardon me?

3 THE CHAIRPERSON: I note the time. Is this a convenient  
4 time to break?

5 MR. BOIS: Sure, this would be a convenient time to  
6 break. Thank you, Mr. Chair.

7 THE CHAIRPERSON: We will. Mr. Austin -- hang on, Mr.  
8 Austin is approaching the microphone.

9 MR. AUSTIN: I'm just wondering if we could deal with the  
10 scheduling matter in terms of Dr. Shaffer and Mr.  
11 Chris Ball.

12 THE CHAIRPERSON: Certainly.

13 MR. AUSTIN: And as originally set out, Mr. Ball was  
14 supposed to appear on Tuesday, March the 10<sup>th</sup>, and we  
15 thought we would still be in the throes of the hearing  
16 by then but obviously we're not. And taking into  
17 account your comments yesterday, I think what you were  
18 indicating was it wouldn't be very helpful to have Mr.  
19 Ball on the 10<sup>th</sup> for a very brief period, and then Mr.  
20 Shaffer on the 11<sup>th</sup> for a very brief period.

21 I've been in discussions with Mr. Ball.  
22 For the purposes of the 11<sup>th</sup>, the best he can do is get  
23 on a plane in Toronto at 1:00 p.m. on the 11<sup>th</sup>, and  
24 hopefully arrive here in the hearing room by 4:00 p.m.  
25 The other thing he could -- and that's not my  
26 preferred option, by the way.

1                   The other thing is that Mr. Ball can be  
2                   here for Thursday the 12<sup>th</sup>. I've checked with counsel  
3                   for COPE, and Mr. Shaffer can be here for Thursday the  
4                   12<sup>th</sup>. The only question is whether that would be  
5                   acceptable to the Commission. It would seem that we  
6                   would be able to deal with both of those witnesses on  
7                   the morning of the 12<sup>th</sup> and we'd be all finished.

8 THE CHAIRPERSON:   Do I hear any objections then to  
9                   standing down Monday, Tuesday, Wednesday and getting  
10                  back together for Thursday morning?

11 MR. GODSOE:        I have no objection. I think we're the  
12                  party most affected because we're cross-examining  
13                  both, but I have no objection to that whatsoever.

14 THE CHAIRPERSON:   Then we shall do that. Thank you,  
15                  gentlemen.

16                                To 8:30 tomorrow morning.

17                   **(PROCEEDINGS ADJOURNED AT 4:03 P.M.)**

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