

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

and

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

Vancouver, B.C.
February 23, 2009

PROCEEDINGS AT HEARING

BEFORE:

A. J. Pullman,	Chairperson
B. Milbourne,	Commissioner
M. Harle,	Commissioner

VOLUME 5

APPEARANCES

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

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CAARS

VANCOUVER, B.C.

February 23, 2009

(PROCEEDINGS RESUMED AT 9:00 A.M.)

THE CHAIRPERSON: Please be seated.

ROBERT GEORGE ELTON, Resumed:

BEVERLY VAN RUYVEN, Resumed:

THE CHAIRPERSON: Good morning, everybody. Mr. Andrews is -- Mr. Godsoe, do you have any preliminary matters?

MR. GODSOE: I do not.

THE CHAIRPERSON: Very good. Mr. Andrews, please proceed.

CROSS-EXAMINATION BY MR. ANDREWS (Continued):

MR. ANDREWS: Q: Thank you, Mr. Chairman. Members of the witness panel. On Friday we were talking about the DSM plans, and just to get these acronyms and concepts back into top of mind, we went through a discussion about the cost of DSM Option A and DSM Option B, and we were talking about deliverability risk. And one of the topics that we covered was that the estimates of the amount of electricity savings from DSM A, or from DSM B, for that matter, were estimates being the mean or some expected value from within a range that could be higher or could be lower, and your evidence is on the record and I'm not going to go back through that.

1 risk has two components: the likelihood of some harm
2 happening, and the harm itself. Correct in a general
3 way?

4 MS. VAN RUYVEN: A: Yes, I'd agree with that.

5 MR. ANDREWS: Q: Okay. So the actual harm that you're
6 talking about here is that there would be a gap
7 between the load and the supply at a future point, if
8 a decision was made to go ahead with DSM B at the
9 level expected, correct?

10 MS. VAN RUYVEN: A: That's right. If we had gone with
11 Option B and then two or three or four years into
12 Option B we were finding that we were falling short of
13 that, we would have a gap that we'd have to fill with
14 something else, which would obviously be a supply-side
15 addition.

16 MR. ANDREWS: Q: Yes. And so what I'm trying to kind
17 of break this down into is that the way in which that
18 harm would come about is that having chosen DSM B at
19 the expected level of savings, you would then take
20 something out of the supply stack, thinking that it
21 was taken care of by the expected savings from DSM B,
22 and that when the time comes after the test period,
23 and DSM B doesn't produce as expected, the harm is
24 that the supply side was not increased at the time
25 that the original decision was made.

26 MS. VAN RUYVEN: A: Yes, and I think the harm then is

1 wouldn't be doing a Call, because Option B pretty much
2 closes 100 percent of the gap, which gets to the next
3 part of why Option A -- we chose Option A is the
4 diversity of resources. So --

5 MR. ANDREWS: Q: Well, let me -- if I can -- before we
6 get into diversity of resources, you've just said that
7 if you did Option B, you -- did you say -- because I
8 don't recall your exact words, that you pretty much
9 wouldn't, or that you would not do a Call?

10 MS. VAN RUYVEN: A: Well, I don't have the exact
11 percentage of what Option B then contributes to the
12 gap, but I know Option A contributes 72 percent of the
13 resource needs, is Option A, and Option B is
14 significantly larger, and I think it's in the high
15 90s. So you would have a very small Call.

16 MR. ANDREWS: Q: Okay. Well, then, that's a very
17 important point which I will come back to.

18 So, now my question is, why not take the
19 same approach to DSM B that you took to the December
20 '08 adjustment to DSM A? With DSM A, you concluded in
21 December of '08 that the amount of savings was too
22 high. So, to adjust DSM A, you turned down the
23 expected electricity savings and kept the expected
24 spending the same. So, the unit cost went up, but the
25 unit cost is already so low that that's not a problem.
26 And by lowering the expected DSM A savings, you don't

1 the size of Option A, and then when you were asked,
2 you did a calculation to reduce the size of Option B.
3 But what about reducing the size of Option B further?
4 You're saying now that you can't do Option B because
5 you're worried that the expected savings at the
6 adjusted level wouldn't come through. You could cut
7 them in half and you'd still have cost-effective DSM
8 savings.

9 MS. VAN RUYVEN: A: So you're proposing another Option
10 C, maybe, which is somewhere in between.

11 MR. ANDREWS: Q: No, I'm asking you for the rationale
12 for leaving DSM savings on the table, as it were.
13 That with -- when you were looking at DSM A, you
14 adjusted the amount of savings. But now even with the
15 adjusted DSM B expected savings, you're saying "We
16 don't trust that we can get that amount." My question
17 is, why not just reduce the amount to something that
18 you feel comfortable you'll be able to get, the way
19 you did with DSM A?

20 MS. VAN RUYVEN: A: That's exactly what we did with
21 Option A. We --

22 MR. ANDREWS: Q: Yeah. And why not do the same with
23 DSM B?

24 MS. VAN RUYVEN: A: Because we're still looking at
25 diversity, is another issue for us.

26 MR. ANDREWS: Q: Well, let -- okay, but let's leave

1 diversity aside.

2 MS. VAN RUYVEN: A: Well, we --

3 MR. ANDREWS: Q: Is there no explanation under the
4 category of deliverability risk?

5 MS. VAN RUYVEN: A: Well, we set Option A in an area we
6 felt comfortable that we could deliver, and there's no
7 exact science that it was 9600 or versus 10,000 versus
8 13,000. I mean, we built a bottom-up plan, looking at
9 codes and standards that were on the horizon that we
10 could reasonably expect to happen. We looked at our
11 rate design and elasticity, and then we built up a
12 number of programs in that plan, as you can see, and
13 that's where we came up with -- and we used the
14 conservation potential review as an input, very
15 detailed study, and we came up with a level that we
16 felt comfortable with, albeit we still think there's
17 deliverability risk.

18 MR. ANDREWS: Q: Now, I'd like to turn your attention
19 to transcript Volume 4, page 565. This was our
20 exchange on Friday afternoon.

21 And perhaps we should have at the same time
22 the B.C. Hydro response, Exhibit B-12, Hydro response
23 to BCSEA IR 3.35.3.

24 If you're looking at the transcript, I'm
25 going to be looking at the -- your comment that begins
26 in the last line of that page, and the first --

1 continues on the following.

2 **Proceeding Time 9:13 a.m. T5**

3 So in the transcript exchange starting at
4 page 23, I asked if Hydro specifically -- if Hydro did
5 "...DSM B, would there be a change in the size
6 of the Clean Power Call?"

7 Your response was,

8 " Well, if we did Option B, and we've given
9 you some evidence as to why we didn't choose
10 that path, what you would find is Option B
11 would take up pretty much 100 percent of the
12 entire resource gap going forward which, if
13 you then proceeded with the Call, you'd end
14 up with a pretty substantial surplus."

15 Do you --

16 MS. VAN RUYVEN: A: Yes, I see that.

17 MR. ANDREWS: Q: And your answer continues, and I'll
18 get to the continuation, but just on the -- stopping
19 at the "pretty substantial surplus level" there, I
20 suggest that you would end up -- one would end up with
21 a pretty substantial surplus if you proceeded with
22 both Option B and the Clean Call, and Option B turned
23 out to deliver the expected level of savings.

24 Correct?

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

26 MR. ANDREWS: Q: But if as you now fear, Option B would

1 not deliver the expected level of savings, whatever
2 that shortfall was would come off the size of the
3 pretty substantial surplus.

4 MS. VAN RUYVEN: A: I'm not sure I follow. Could you
5 just repeat that?

6 MR. ANDREWS: Q: Well, if the amount of DSM savings
7 from B turned out in retrospect to be lower than
8 expected, then this pretty substantial surplus would
9 be smaller by that amount.

10 MS. VAN RUYVEN: A: Well, the adjusted Option B? The
11 adjusted Option B still almost closes the entire gap.

12 MR. ANDREWS: Q: Well, and this --

13 MS. VAN RUYVEN: A: And so if you did the Call you'd
14 still end up with a surplus.

15 MR. ANDREWS: Q: Well, depending on how much you
16 recovered from Option B. And in a scenario where you
17 get everything you ask for, then you've described it
18 as a pretty substantial surplus. But if as you are
19 expecting now, DSM B will deliver less than expected,
20 that shortfall will be -- will come off the pretty
21 substantial surplus.

22 MS. VAN RUYVEN: A: Yeah, but if Option B delivers at
23 the level that we have set, even with the adjustment,
24 it still is pretty much 100 percent of the entire gap.

25 MR. ANDREWS: Q: And is that a problem?

26 MS. VAN RUYVEN: A: Well, it doesn't really meet our

1 diversity of supply.

2 MR. ANDREWS: Q: Okay, so then we'll talk about --

3 MR. ELTON: A: Sorry --

4 MR. ANDREWS: Q: At this point we're still talking

5 about deliverability risk. What I'm getting at here

6 is that you've been talking about the deliverability

7 risk. I'm trying to kind of drill down into what

8 exactly the harm is, and we -- if we can agree that

9 having a pretty substantial surplus is not desirable,

10 that's not your planning objective, correct?

11 MS. VAN RUYVEN: A: That's correct. We try to plan to

12 meet that Special Direction 10 without a very large

13 surplus because that does add additional cost to our

14 ratepayers.

15 MR. ANDREWS: Q: And the harm of having a gap is a

16 problem which is qualitatively different than the

17 problem of having a pretty substantial surplus though,

18 correct?

19 MS. VAN RUYVEN: A: Yes, we're required by law not have

20 a gap by 2016. We're required to have -- to meet the

21 self-sufficiency Special Direction No. 10 by 2016.

22 MR. ANDREWS: Q: Yes. So what is really at play here

23 is the relationship between the size of the amount

24 expected from DSM B and the size of the Clean Call,

25 correct? Your fundamental fear is that there would be

26 a gap because the Clean Call was undersized, correct?

1 **Proceeding Time 9:17 a.m. T06**

2 MS. VAN RUYVEN: A: No, if we did Option B, our concern
3 would be, it would be too late at that point to
4 actually do a Call and bring resources on to meet that
5 self-sufficiency goal by 2016. That's our concern.

6 MR. ANDREWS: Q: Because you're -- in your answer,
7 you're assuming that if you did Option B, you wouldn't
8 do the Clean Call, or you would undersize the Clean
9 Call.

10 MS. VAN RUYVEN: A: That's correct. So if we had put
11 Option B in our planning stack, you would have seen
12 that there would have been very little room for a
13 Clean Call, if any at all, and then you would be into
14 a number of years, moving up to 2016, and if you found
15 you weren't able to deliver on the magnitude of the
16 size of Option B, you would run out of time to
17 actually then do a supply-size addition, to make up
18 the difference.

19 MR. ANDREWS: Q: Well, let me refer you now to the
20 response to BCSEA 3.35.3. And this was a question
21 that asked Hydro to do tables showing the size of the
22 pre- and post-attrition target for the Clean Power
23 Call. And in the response, to qualify the table that
24 Hydro did provide, Hydro says:

25 "B.C. Hydro would not necessarily reduce the
26 size of the Clean Power Call on a gigawatt

1 hour for gigawatt hour basis, even if it
2 were to consider some additional DSM volume
3 to be cost-effective."

4 Is that still correct? Is that correct? Is that
5 Hydro's approach?

6 MS. VAN RUYVEN: A: Well, I think that's in the context
7 of choosing Option A.

8 MR. ANDREWS: Q: Well, let's just explore that further,
9 because to explain that first sentence, the second
10 sentence is:

11 "As set out at page 27 of Exhibit B-10, a
12 3,000 gigawatt hour firm energy pre-
13 attrition Clean Power Call target is
14 required to ensure B.C. Hydro attracts cost-
15 effective bids, including from larger
16 projects, above 100 megawatts in size."

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

18 MR. ANDREWS: Q: So, can I for shorthand describe that
19 as a "lumpiness" argument? A lumpiness factor?

20 MS. VAN RUYVEN: A: No, I think it --

21 MR. ANDREWS: Q: That you wouldn't want to scale it
22 down to 95 megawatts and then lose your hundred
23 megawatt plant.

24 MS. VAN RUYVEN: A: Well, we were always planning this
25 larger Call to hopefully attract some larger projects,
26 and the reason for that was, we felt there would be

1 some economies of scale and some cost advantage to
2 getting some larger projects into the Call, and we
3 thought if we cut it back much more than the 3,000
4 gigawatt hours, you would start to run the risk of not
5 attracting some of those larger projects.

6 MR. ANDREWS: Q: And so, the upshot of that is, as
7 you've said in the first sentence, there is no one-to-
8 one relationship between the amount -- between an
9 incremental amount of DSM savings and necessarily
10 scaling back the size of the Clean Power Call.
11 Correct?

12 MS. VAN RUYVEN: A: Well, there is a relationship
13 between --

14 MR. ANDREWS: Q: Yes, but not --

15 MS. VAN RUYVEN: A: -- Option A and the size of the
16 Call, because you have to stack it up with everything
17 else in your resource stack, and come out with a
18 reasonable plan to get to the self-sufficiency by
19 2016. So they are related, because DSM is part of --
20 is an important resource we're relying on to meet that
21 self-sufficiency.

22 MR. ANDREWS: Q: They're related, but they're not one-
23 to-one. And so, going back to the first sentence, and
24 your previous response that this was to do with Option
25 DSM A, this is some additional DSM volume that Hydro
26 is saying that, even if it were to consider some

1 additional DSM volume, let's just confirm that, that's
2 talking about in addition to DSM A, correct?

3 MS. VAN RUYVEN: A: I'm assuming that's what that
4 answer is, yes.

5 MR. ANDREWS: Q: So it's saying that if there were some
6 additional DSM volume that was cost-effective, it
7 would not necessarily result in a reduction in the
8 size of the Clean Power Call.

9 MS. VAN RUYVEN: A: That's correct, and that's really
10 back to the diversity point.

11 **Proceeding Time 9:22 a.m. T7**

12 MR. ANDREWS: Q: All right, well, let me -- let's -- we
13 will get to diversity. And I think this may actually
14 be the time at which that will happen.

15 No, let me finish actually on this. To go
16 back to the transcript and the continuation of your
17 response, page 566, line 6. So at line 6 your answer
18 continues and this was the scenario in which Hydro did
19 Option B and the Clean Call. And you say:

20 " So, I'm not sure what decision we would
21 have made if we had chosen to go completely
22 with Option B, whether we would have
23 continued with a smaller Call, or just with
24 a bioenergy and standing offer Calls.
25 Because we didn't choose Option B, we -- for
26 all the reasons we've said around the

1 deliverability risk and diversity of
2 resources, and when we add that 3,000 Call
3 in there, you see that we come up with a
4 very small surplus of about 300 gigawatt
5 hours. By the time we're required to be
6 self-sufficient."

7 Is there anything you need to clarify about that or --

8 MS. VAN RUYVEN: A: No, I see that.

9 MR. ANDREWS: Q: Okay. So the reasoning there is that
10 Hydro decided not to do DSM Option B, and then you
11 adjusted the size of the Clean Call to a pre-attrition
12 figure of 3,000 gigawatt hours, which left you with an
13 appropriately small surplus of 300 gigawatt hours at
14 the critical point in time, correct?

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

16 MR. ANDREWS: Q: And you didn't do the thinking the
17 other way around, that is to say, what if we were to
18 do Option B but not expect as much savings from it as
19 we put on the chart in answer to BCSEA's question
20 about the December '08 numbers, and we were just -- we
21 scaled back DSMB. You didn't ask yourself what the
22 effect on the size of the Clean Call would be.

23 MS. VAN RUYVEN: A: Well, scaling back Option B is
24 Option A. That's exactly what it is. It's made up of
25 all the same programs, the codes and standards and
26 rates. It is Option B scaled back.

1 MR. ELTON: A: If I could add to this. Do you mind if
2 I just add something? I think that your question was
3 actually did we do the thinking? I recollect that the
4 way that this went was that we, you know, we asked our
5 staff obviously in the light of economic circumstances
6 to do the kind of work that would leave an evidentiary
7 update, that we were mutual in what we asked them. In
8 other words, we said we don't know what the answer
9 will be but come back with something.

10 They came with (a) a bunch of numbers,
11 which is what's in the evidentiary update, and (b) a
12 proposal around what we would do. And so we did
13 actually consider all of the options, including the
14 one you're talking about. In other words, we looked
15 at do you make the call smaller? Do you make the DSM
16 smaller? You know, is it correct to reduce Option A?
17 Would it be better to do Option B? We discussed all
18 those things. I think it's not correct to say we
19 didn't do the thinking. It's correct to say that
20 having done the thinking, we formed judgments that are
21 the subjects of this revised LTAP.

22 MR. ANDREWS: Q: Well, what scenario, then, did you
23 look at that involved doing Option B, and in that
24 scenario what was the size of the Clean Call?

25 MR. ELTON: A: Well, I mean, I'll carry on if you don't
26 mind. I mean, what we did was discuss the -- again,

1 Option B and instead of, as you seem to make a very
2 clear and quick link, saying that that would
3 automatically mean no Clean Call, instead of jumping
4 to that conclusion, saying if we did DSM B at the same
5 level of expenditures but reduce level of expected
6 savings, and we did some amount of Clean Call --

7 MS. VAN RUYVEN: A: Well, I think that's --

8 MR. ANDREWS: Q: -- I'm getting -- my question is, did
9 you examine that scenario and, if so, what was the
10 size of the Clean Call?

11 MS. VAN RUYVEN: A: Well, that's exactly the
12 conversations that Mr. Elton was just pointing out
13 that we did have, over a series of a number of months,
14 even before the evidentiary update. The appropriate
15 level of reliance on any resource.

16 MR. ELTON: A: So, for example, I remember -- it's
17 certainly in this discussion I was referring to and in
18 others, talking about the idea of a Clean Call of
19 1,000 or 1300, those kinds of Clean Call numbers. And
20 the discussion we had, as Ms. Van Ruyven said a few
21 minutes ago -- the discussion we had, as Ms. Van
22 Ruyven said a few minutes ago, was around then, if we
23 did that, what kind of projects would we get? Would
24 we be locked off from getting large projects?

25 Our assumption, which is to be tested, is
26 that large projects would give us more cost-effective

1 results. And we certainly wanted to test that.

2 So the answer is that we did actually
3 consider a range of possibilities, including the idea
4 of doing -- in other words, if you like, holding DSM
5 to its original level of spending and then going
6 beyond it to get the original or more levels. We did
7 consider that, yes.

8 MR. ANDREWS: Q: We seem to be missing each other's
9 thinking on this. I'm not talking about holding DSM
10 expected savings to the pre-December '08 level. You
11 reduce the expenditures that -- excuse me, you kept
12 expenditures the same, and for DSM A you reduced the
13 expected electricity savings. Now, when asked, you
14 computed a number for an adjusted DSM B amount of
15 savings, protesting that that was not what you wanted
16 to do.

17 What I'm asking you about is, whether you
18 considered reducing the expected savings from DSM B,
19 beyond what the adjusted number was that you provided
20 in the IR response, down to a number that corresponded
21 to what you actually think, and you're actually making
22 decisions based on, your expectation of how much DSM
23 savings would come from Option B. And I'm not getting
24 a sense, apart from the general statement that you
25 considered everything, that you did actually look at
26 the possibility of going with the extra DSM B

1 spending, having -- putting down less DSM savings
2 attributable to that, and what that effect -- what the
3 effect of that would be on the size of the Clean Call.

4 MS. VAN RUYVEN: A: So, we didn't do that thinking,
5 because we'd done that thinking prior to making the
6 decision of Option A versus B, and the percentage of
7 our reliance on DSM, and so we'd already made a
8 professional judgment that that was the right level to
9 rely on DSM at Option A. So, in the evidentiary
10 update, we didn't re-hash that thinking, because we
11 felt we had landed at a good balance of resources,
12 already pushing DSM, I think, pretty much as far as we
13 were comfortable with, and representing 72 percent of
14 the whole resource gap is relying on DSM.

15 So we'd already had those conversations and
16 done the thinking. The adjustment that we made in the
17 evidentiary update was simply an adjustment because of
18 the new load forecast, but we kept the percentage
19 basically the same, because we had done some rational
20 thinking about it. So we didn't go and revisit that
21 decision at that point in time.

22 MR. ANDREWS: Q: All right. Well, let's move, then,
23 you'll be happy to know, to diversity. And let me
24 begin by suggesting that the -- what we're talking
25 about here is diversity of resources and that these
26 include both supply-side and demand-side types of

1 resources. And that the advantage of diversity is
2 that all of these resources have intrinsic
3 uncertainties, and that one of the problems is that if
4 all these different resources, each with their own
5 uncertainties, are affected in the same way by the
6 same force, then the uncertainty is exacerbated, as
7 distinct from a situation where there -- the effects
8 on all of these different resources are independent of
9 each other. And if I can use an example of that, if
10 you're going to acquire 20 run-of-the-river
11 hydroelectric projects and they're all in the exact
12 same valley, then any climate risk, any problems to do
13 with the amount of water in-flow in that valley is
14 going to affect them all in the same way. Correct?

15 **Proceeding Time 9:32 a.m. T9**

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

17 MR. ANDREWS: Q: And so the lack of diversity there,
18 because they're all in the same valley, is because
19 they're all affected by weather in exactly the same
20 way.

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

22 MR. ANDREWS: Q: And so to reduce that risk, if you
23 were to have the 20 run-of-the-river projects in
24 different climatic locations all around the province,
25 each may have the same individual uncertainty as they
26 did before, but the aggregate risk would be lower,

1 correct?

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

3 MR. ANDREWS: Q: And this --

4 MR. ELTON: A: Sorry, that's true with respect to those
5 20 projects.

6 MR. ANDREWS: Q: Yes.

7 MR. ELTON: A: Remember that for example, we have --
8 you know, we have quite a lot of concentration on
9 hydro projects in the Peace and Columbia. So to the
10 extent those projects were outside those two
11 watersheds, arguably, even though they were all in the
12 same place, it might actually increase our overall
13 diversity.

14 MR. ANDREWS: Q: Fair enough.

15 MR. ELTON: A: Thank you.

16 MR. ANDREWS: Q: And the key point there is that there
17 is some driver that affects these projects in the same
18 way. Diversity to do with things that don't affect
19 the uncertainty isn't relevant. It doesn't matter if
20 these 20 run-a-river hydro projects are painted in all
21 sorts of different colours. That would create
22 diversity but it wouldn't change the aggregate
23 certainty, correct?

24 MR. ELTON: A: If they were all painted different
25 colours, I think it would not affect the diversity.

26 MR. ANDREWS: Q: All right. So in terms of the

1 diversity rationale for not proceeding with DSM Option
2 B, I'm suggesting that the only way I can see that
3 that makes sense is that there is a fear that by going
4 with DSM Option B, you would choose not to pursue as
5 much supply-side as you otherwise would. DSM Option B
6 would not come through with the amount of savings you
7 expected. You would find yourself in a gap and have
8 no or insufficient supply-side resources to meet that
9 gap. That would be the problem.

10 MS. VAN RUYVEN: A: Yes, that's a good description of
11 what we feel would be the downside of going with
12 Option B.

13 MR. ANDREWS: Q: Now, what is the common driver between
14 having -- between the problem with going with DSM B
15 and having a gap? How does having -- passing up DSM
16 savings add diversity to your portfolio?

17 MS. VAN RUYVEN: A: Well, it means you're not relying
18 on one single resource for 100 percent of closing that
19 gap, knowing that there's risk in delivering that.

20 MR. ANDREWS: Q: So in relation to this additional
21 energy, or it could be capacity, you're not taking it
22 from DSM but you are taking it from the supply side,
23 so --

24 MS. VAN RUYVEN: A: Right, you're striking a balance of
25 a significant amount of DSM, along with some supply-
26 side additions, to meet the gap and close it by 2016.

1 MR. ANDREWS: Q: So you didn't look at the balance, for
2 example, between the overall amount of supply and the
3 amount from DSM.

4 MS. VAN RUYVEN: A: Well, yes, we did because it --

5 MR. ANDREWS: Q: No, you're talking about the new
6 supply.

7 MS. VAN RUYVEN: A: Well, we also stacked up all our
8 existing supply. I mean, you have to look at our
9 whole resource stack.

10 MR. ANDREWS: Q: Well, if one were --

11 MR. GODSOE: I'd just ask that the witness be allowed to
12 finish the sentence. You've interrupted a couple of
13 times, Mr. Andrews.

14 MR. ANDREWS: Q: If you were looking --

15 THE CHAIRPERSON: Continue, Ms. Van Ruyven.

16 MS. VAN RUYVEN: A: I was going to say we also looked
17 at, for example on the supply side, our ResourceSmart
18 projects. So when you look at page 29 in the
19 evidentiary update where you actually see how we'd
20 stack up all of our resources to end up at that 300
21 gigawatt hour surplus by 2017, which is when we're
22 required to be self-sufficient that first year of
23 self-sufficiency, you have to look at our existing
24 resources, ResourceSmart, the supply-side additions
25 and the DSM. So it is all inter-related and linked.

26

Proceeding Time 9:37 a.m. T10

1 MR. ANDREWS: Q: Let me come back to the point here
2 that the balance that you're talking about appears to
3 be the balance between the amount of additional DSM
4 and the amount of additional supply. Is that correct?
5 MS. VAN RUYVEN: A: That's correct.
6 MR. ANDREWS: Q: It is not a balance between the amount
7 of DSM total and the amount of supply total, correct?
8 MS. VAN RUYVEN: A: I'm not sure what you mean by --
9 I'm not sure of the difference.
10 MR. ANDREWS: Q: Well, in terms of the -- of balances,
11 B.C. Hydro has a vast amount of supply on the supply
12 side. One could balance the total amount of supply to
13 the total amount of DSM, and look at that
14 relationship, but you chose not to do that.
15 MS. VAN RUYVEN: A: Well, we're only looking at filling
16 the incremental gap. We already have a significant
17 amount of supply that accounts for about 55,000
18 gigawatt hours of our entire system. What we're doing
19 here, in this long-term acquisition plan, is planning
20 for the gap.
21 MR. ANDREWS: Q: So, back to this question about the --
22 B.C. Hydro has a concept of an appropriate balance
23 between the amount of new DSM and the amount of new
24 supply.
25 MS. VAN RUYVEN: A: Well, we have a professional
26 judgment that we've made for what resources were

1 required to close the gap, and we look at cost-
2 effectiveness, we look at the deliverability risk, and
3 we look at the diversity of supply, so that we're not
4 putting all our eggs, so to speak, in one basket.

5 MR. ANDREWS: Q: And I'm not going to ask for a legal
6 opinion here, but do you not read the legislature's
7 expectation that Hydro pursue all cost-effective DSM
8 to mean that the legislature has addressed the
9 question of the appropriate balance between meeting a
10 gap with DSM and meeting a gap with supply, and told
11 B.C. Hydro that all of -- that DSM is to be the
12 preferred approach?

13 MS. VAN RUYVEN: A: Yes, we've certainly read the
14 *Utilities Commission Act* amendments, and we do believe
15 we have addressed that, and we do believe that cost-
16 effective -- the definition of "cost-effective" does
17 not mean lowest cost. It does also have these other
18 components.

19 MR. ELTON: A: I'm going to add to this, I think. I
20 think that the *Utilities Commission Act* asks the
21 utility to say why it can't plan 100 percent DSM. It
22 doesn't say you must use 100 percent DSM. In other
23 words, it doesn't make a decision about what the right
24 balance is. I think it's clear that it wants us, and
25 other utilities, to move further towards DSM. We're
26 the last utility to resist that. I mean, it's -- you

1 know, we're not going to resist that. It doesn't tell
2 us, though, that it must today all be 100 percent DSM.
3 And I think it does invite us to bring to the
4 Commission a professional judgment, as Ms. Van Ruyven
5 said, which is what we've done.

6 MR. ANDREWS: Q: I want to make a very clear
7 distinction between meeting the entire load -- or,
8 excuse me, the entire gap with DSM, and pursuing all
9 economically cost-effective DSM. And my questions
10 have been to do with pursuing Option B. And the
11 reasons why Hydro is saying that it wouldn't do it.
12 And you're saying that there is some kind of
13 appropriate balance between DSM and supply-side. I am
14 saying, surely the legislature intended to convey the
15 message that the hand is on the scale in favour of
16 DSM.

17 **Proceeding Time 9:43 a.m. T11**

18 MR. ELTON: A: Yeah. I think part of the challenge
19 here -- and so I'm going to make a few comments, and
20 if I'm not directly answering your question, I
21 apologize, but I think I'm trying to make this
22 discussion clearer. In our minds, Option A and
23 Option B are not two distinctly different activities.
24 I think if they were, a lot of your questions would
25 have a different results. It's already a continuum.
26 In other words, there was a bunch of things that we're

1 doing, and Ms. Van Ruyven has explained what they are,
2 and you get to a certain point and then another point
3 and another point, and how far do you go? I think in
4 some ways, by calling it Option A and Option B, there
5 may be an implication that there was a set of
6 different activities in Option B, and I don't believe
7 that's the case. And again, Ms. Van Ruyven can
8 comment and later panels can comment. My
9 understanding here from a policy perspective is you've
10 got different types of DSM, codes and standards, rates
11 and programs and so on. What the staff have done is
12 to come up with proposals for each one that push along
13 the continuum, as you're suggesting quite correctly,
14 the government policy is, and you get to a certain
15 point.

16 So it isn't a question, I don't think, of
17 saying, "Well, now can you look at Option B and try
18 this?" It's a question of saying, "Did you go far
19 enough with respect to each of those programs, codes
20 and standards, rates?" That I think is the question,
21 I'm sure there'll be lots of cross-examination on
22 that. We certainly cross-examined the people doing
23 this work along those lines, and I fully expect the
24 Commission to do -- this process to do the same thing.

25 So that's an important, you know,
26 explanation of how we are looking at this. So we

1 didn't look at Option B as if it was a different
2 program.

3 MR. ANDREWS: Q: I think where our minds are not
4 meeting here is the alternative in which you did go
5 farther on the spectrum of DSM by including the
6 spending, the additional 10 percent spending for
7 Option DSM B, but you did not cut back the size of the
8 Clean Call. Because so much of your response to the
9 problem of spending that Delta B is exclusively
10 related to the problem of undersizing the Clean Call.

11 MR. ELTON: A: But we did cut back the size of the
12 Clean Call.

13 MR. ANDREWS: Q: All right, I won't belabour that point
14 then.

15 I want to address the third of the three
16 reasons Hydro offers for not pursuing DSM Option B,
17 being -- and perhaps we could refer here to the
18 evidentiary update, Exhibit B-10, page 24. I'm
19 referring to the paragraph at the top of the page,
20 last sentence. So the sentence is:

21 "B.C. Hydro does not want to increase the
22 three-year expenditures because they
23 represent a substantial departure from
24 historical levels, and B.C. Hydro wants to
25 gain experience and learnings from three
26 years of operation at this higher level of

1 effort before contemplating further
2 increases in expenditures."

3 Is that still Hydro's position?

4 MS. VAN RUYVEN: A: Yes.

5 MR. ANDREWS: Q: Without trying to go into the numbers
6 but actually using a number, we're talking here about
7 DSM Option A being \$487 million over the three years,
8 correct?

9 MS. VAN RUYVEN: A: Yes, I think in this order we're
10 seeking, it's actually 418 million that we're asking
11 for approval, and the remaining amount is in other
12 filings. It's not in this actual LTAP. It's 418
13 million.

14 MR. ANDREWS: Q: Fair enough. But in relation to the
15 number 487, the incremental spending that would occur
16 from DSM B is some \$46 million, correct?

17 MS. VAN RUYVEN: A: Well, subject to check I'll -- I'm
18 not exactly sure what it is, but --

19 MR. ANDREWS: Q: So we're roughly talking about DSM
20 Option B being about a 10 percent higher overall level
21 of expenditure, correct?

22 MS. VAN RUYVEN: A: Again, subject to check and that's
23 probably correct.

24 MR. ANDREWS: Q: And B.C. Hydro is saying that it's
25 confident that it can spend the \$487 million, most of
26 which is being requested to be approved in this

1 proceeding, but it is nervous about spending the
2 additional -- the possibility of an additional 10
3 percent.

4 **Proceeding Time 9:47 a.m. T12**

5 MS. VAN RUYVEN: A: It's not about spending the money,
6 and there's no argument that Option B is lower-cost
7 than supply-side additions. It's whether or not we
8 can actually do it. So can we actually deliver on
9 that level of savings? It was never really about the
10 cost. I mean, we think we've done as much low-cost
11 DSM as we possibly can, looking at the deliverability
12 risk as well as the diversity issue. I mean, 72
13 percent is a pretty substantial reliance on DSM.

14 MR. ANDREWS: Thank you. I have no further questions.

15 THE CHAIRPERSON: Thank you, Mr. Andrews.

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

17 MR. BERTSCH: Q: Good morning, panel and Commission
18 Panel -- witness panel and Commission Panel. I would
19 like to start off with a topic -- if we look at all
20 the topics that have gone before, a lot of them have
21 been covered. But I wanted to pursue a little bit
22 more on the Smart Meters.

23 And first, I'd like to clarify some just
24 general boundaries, because I understand from the IRs
25 that it may be worthwhile to pursue that a little bit
26 further.

1 So if you could look at Exhibit B-4, JIESC
2 IR 2.23.5, if we look at the response, this is a
3 question regarding Smart Meters. There's some
4 expenditures there. And the answer from B.C. Hydro
5 was:

6 "B.C. Hydro is not requesting approval in
7 this application request."

8 MR. GODSOE: Sorry, what was the IR number reference?

9 MR. BERTSCH: It was JIESC 2.23.5.

10 MR. GODSOE: I think it's actually JIESC IR 2.23.1.

11 MR. BERTSCH: Well, the one I'm looking at is .5.

12 MR. GODSOE: No, that refers back --

13 MR. BERTSCH: Oh, sorry, yes, you're right. Yeah, I'm
14 sorry. That -- yeah, it does -- I'm sorry. 23.5
15 refers to 23.1.

16 MR. GODSOE: Right, right.

17 MR. BERTSCH: Q: And then in 23.1, we have that
18 statement, that B.C. Hydro is not requesting approval
19 in this application. And then, if we look through the
20 series there, there's 23.2 and 23.4, all with
21 relatively the same answer, referring back to 23.1.
22 Is that correct?

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

24 MR. BERTSCH: Q: And if you take a look at 23.3, in the
25 middle there, and we look at the answer there, it's a
26 little bit different --

1 MR. GODSOE: Sorry, just to be clear.

2 MR. BERTSCH: Yes?

3 MR. GODSOE: There's a revised response to 2.23.3, so I
4 want to make sure we're on the right IR. So, in
5 Exhibit B4-3, we gave a revised response. Is that
6 what you're referring to, or to the original response?

7 MR. BERTSCH: To the original, that's what I meant.

8 MR. GODSOE: I just want to make sure they have the
9 revised in front of them so they can look at both.

10 MR. BERTSCH: Sure.

11 MR. GODSOE: So it's Exhibit B4-3, revised response to
12 JIESC 2.23.3, and then we have both.

13 MR. BERTSCH: Q: Right. Looking at the type of
14 response that came back from the series I went through
15 first, and 23.3, would it be fair to say that B.C.
16 Hydro feels that IRs relating to DSM potential energy
17 savings are relevant to the LTAP, yet B.C. Hydro feels
18 that those IRs relating to SMI-specific expenditure
19 costs are not relevant -- relative?

20 MS. VAN RUYVEN: A: Yes, we're not asking for any SMI
21 expenditures in this filing.

22 **Proceeding Time 9:52 a.m. T13**

23 MR. BERTSCH: Q: But it would be appropriate to discuss
24 the energy savings due to --

25 MS. VAN RUYVEN: A: Which is what 23.23.3 [*sic*] talks
26 about, the expected energy savings from SMI in the

1 context of the long-term DSM plan, that's correct.

2 MR. BERTSCH: Q: Okay, thank you. Could you take a
3 look at COPE -- Exhibit B-4, COPE 2.10.1. And the
4 first line in the response from B.C. Hydro, and this
5 is requesting information relating to the costs and
6 financial impacts of SMI, the response is that B.C.
7 Hydro objects to this IR. And then COPE IR 1.7.5 is
8 referenced. If you could pull that one out, please.

9 And that's, sorry, Exhibit B-3. COPE
10 1.7.5. And this is talking about the financial impact
11 on B.C. Hydro, and again, is it fair to say that B.C.
12 Hydro feels questions relating to financial impacts
13 are not relevant?

14 MR. ELTON: A: Could you give that reference again?
15 1.7. --

16 MR. BERTSCH: Q: It's 1.7.5, COPE.

17 MS. VAN RUYVEN: A: Thank you.

18 MR. ELTON: A: Thank you.

19 MR. BERTSCH: Q: So again, the question is, does B.C.
20 Hydro feel that SMI financial impacts are not relevant
21 to this hearing?

22 MS. VAN RUYVEN: A: That's correct, because we're not
23 asking for any expenditures on SMI in this hearing.

24 MR. BERTSCH: Q: Okay, thank you. So with that in
25 mind, I'll try to steer away from the specific
26 expenditure costs and financial impacts, and go in the

1 areas that I think are relative -- are relevant in
2 this hearing.

3 On a general level, would you agree with
4 the following statement: Smart Meters and the Smart
5 Grid are significant enabling technologies for DSM and
6 therefore significant to the 2008 LTAP.

7 MS. VAN RUYVEN: A: Yes, I'd agree with that.

8 MR. BERTSCH: Q: Thank you. If you could refer back to
9 Exhibit B-4, JIESC 2.23.2, and the answer that's
10 provided is:

11 "B.C. Hydro is not seeking approval for SMI
12 expenditures as part of the 2008
13 LTAP...Accordingly, the business case for SMI
14 has not been provided."

15 So, the business case has not been provided because
16 B.C. Hydro is not asking for approval, but it still
17 begs the question, has B.C. Hydro developed a business
18 plan for SMI?

19 MR. ELTON: A: Perhaps I could make some general
20 comments about the status of the SMI project, and it
21 might be useful to refer to the service plan, pages 40
22 to 41, because I think they give a summary of where
23 the projects are at.

24 And actually I should probably begin with
25 page 39 -- halfway down page 39, you'll see there is a
26 heading, "Contemplated projects over 50 million", and

1 I'll just read what that says.

2 "B.C. Hydro is contemplating the following
3 projects over 50 million. These projects
4 are in the early identification or
5 definition phases, and final costs are as
6 yet uncertain. We will update interim
7 project cost estimates as we further refine
8 the scope of each project. These projects
9 have not yet been approved by our Board of
10 Directors or management."

11 So that's the general topic that this relates to.

12 **Proceeding Time 9:57 a.m. T14**

13 And then on page 40 you'll see under "Smart
14 Metering and Infrastructure Program", first a general
15 statement that we are planning to automate, modernize
16 and upgrade our grid system through a program, and
17 that in aggregate the projects will have a positive
18 net present value and improve service and so on.

19 We then have listed four projects, and this
20 is different from our last year's service plan where
21 we put them all in one. And I'll explain why that is
22 in a minute.

23 So the first part is the Smart Metering
24 project itself, which includes installing new digital
25 meters and so, and that form the foundation, amongst
26 other things, for the in-home display project, and

1 there was costs there.

2 Then the second project is in-home display
3 project, and you'll see there's costs there. And then
4 the third project is theft detection, and the fourth
5 project is grid modernization and infrastructure
6 upgrades.

7 Until quite recently we were describing
8 this project, for example, in our last year's service
9 plan, as one. As we've looked at what we are doing
10 and as we've looked at the requirements of the Act,
11 which say what we are to do, we've tried to, I think
12 for obvious reasons, to separate those things that are
13 required to comply with the Act, which is what the
14 first two projects I believe will do, versus those
15 things which we think we should do anyway because
16 they're good things to do, but which are not necessary
17 to comply with the Act. We're still working through
18 that, and so we haven't finalized, you know, our
19 determination of exactly what goes in which. But I
20 think these indicative costs are likely to be
21 substantially correct.

22 The point is that I think there will be a
23 different way of looking at these things both by B.C.
24 Hydro and I suspect by the B.C. Utilities Commission
25 in terms of which things are required by the Act
26 versus which things are, we believe, good business

1 practice.

2 So there was a preliminary business plan
3 for one thing. We are now working on business plans
4 for four different things.

5 So in other words, that's a lengthy answer
6 to your question, you know, "Is there a business
7 plan?" There isn't a business plan. There aren't
8 four business plans for these four things. We are
9 working on those things.

10 MR. BERTSCH: Q: But you have an internal plan,
11 business plan for all --

12 MR. ELTON: A: We are changing our internal plan, and
13 that's the point I'm trying to make. In other words,
14 this is relatively recent thinking and so we don't
15 today have, you know, formalized plans for these four
16 things. We have indicative plans at a level of detail
17 that justify putting them in the service plan,
18 remembering again that this part of the service plan
19 relates to contemplated projects. Clearly the first
20 two of these projects are projects that we must do
21 because they are legislated. The other two are
22 projects that we may or may not do, although frankly I
23 believe that we will.

24 MR. BERTSCH: Q: Okay, thank you.

25 Do you recall on Friday Mr. Wallace was
26 referring to the business case, Transcript Volume 4,

1 page 343? Three hundred and forty-three at the
2 bottom. At the bottom it says,

3 "... Now, you mentioned you will be filing a
4 business case. I take it that's still the
5 plan? To file one with the Commission?"

6 The answer that I'm looking -- if you go two pages up
7 to page 345, at the top, Mr. Elton's response is,

8 "You know...it would probably be in about four
9 or five months. But you know, it's just an
10 indication."

11 So in that response, it sounds like there's
12 some uncertainty there, and the question is, are the
13 delays or uncertainty due to current concerns in the
14 SMI being able to achieve the energy savings or
15 capacity savings, or is it being able to provide the
16 foundation in the LTAP? Maybe if you could describe
17 where those delays are coming from and what causes it.

18 MR. ELTON: A: Thank you. The uncertainties are not
19 related to the question of energy savings. They're
20 related really to two things. Firstly, the fact that,
21 as I've said, we've relatively recently decided to
22 look at this four projects rather than one and the
23 impacts of that. Second, I think, given that part of
24 this is legislated, there's an interesting governance
25 question, I think, which comes up whenever you have
26 something specifically directed or legislated by a

1 government, which is do we -- when do we go to the
2 Commission? And in particular, when do we go to the
3 Commission relative to getting government support for
4 what we're doing. And this is a constant challenge, I
5 think, for all of us. And that is a large reason for
6 the uncertainty.

7 **Proceeding Time 10:02 a.m. T15**

8 MR. BERTSCH: Q: Okay, thank you. I have a packet here
9 of excerpts from various service panels that I'd like
10 to hand out as an exhibit.

11 These are excerpts from the last three
12 service plans. C23-7 is the exhibit number.

13 THE HEARING OFFICER: C23-7.

14 (PAGE 12 FROM BC HYDRO SERVICE PLAN 2007/08 - 2009/10,
15 PAGE 7 FROM BC HYDRO SERVICE PLAN 2008/09 - 20010/11
16 AND PAGE 12 FROM BC HYDRO SERVICE PLAN 2009/10 -
17 2011/12, MARKED AS EXHIBIT C23-7)

18 MR. BERTSCH: Q: Mr. Elton, could you just remind us
19 what a service plan is for, and what it's -- what is
20 its intent?

21 MR. ELTON: A: Yes. We have, of course, one
22 shareholder, and just as every company reports to its
23 shareholders in different ways, B.C. Hydro reports to
24 its shareholder, really, through two basic ways. One
25 is to say, in advance, "This is what we plan to do,"
26 and it's a three-year planning cycle, and that is the

1 service plan. And then we are to report on our
2 progress against what we've said we would do in our
3 service plan. So it is the way in which
4 accountability -- or the service plan is part of the
5 way in which we are accountable to our shareholder.
6 And of course the service plan is a public document,
7 as we and the government are well aware, so it also
8 serves as a way of telling everyone what we plan to
9 do.

10 MR. BERTSCH: Q: And so it's basically a good snapshot
11 of the company at a particular point in time? Is that
12 another way of putting it?

13 MR. ELTON: A: It's a snapshot of what we intend to do.
14 I mean, it is more future-oriented than a report on
15 our current status, which of course is in the -- that
16 would be the annual report. But it certainly is a
17 very reliable snapshot of our planning.

18 MR. BERTSCH: Q: Okay, thank you. If you could look at
19 the first page, which is the service plan two years
20 ago, 2007 through 2010, and it's page 12. If you
21 could just look at the top, is your company structure.
22 And I see a date underneath there of December 31st,
23 2006. Do you see that?

24 MR. ELTON: A: I do.

25 MR. BERTSCH: Q: So, is this the company structure as
26 of that date?

1 MR. ELTON: A: It was, yes.

2 MR. BERTSCH: Q: Of December 31st, 2006.

3 MR. ELTON: A: Yes.

4 MR. BERTSCH: Q: If you could just confirm -- if we
5 look along the top, we see six groups.

6 MR. ELTON: A: Well, no, you see actually nine groups.
7 But one of the groups -- sorry, four of the groups are
8 put into one group, i.e., called "Corporate", yes.

9 MR. BERTSCH: Q: Quite. Yes, thank you. If you could
10 look at the next page, page 2, which is the next
11 year's -- last year's service plan. And as you
12 mentioned those three -- or four categories have been
13 pulled out into one. Would you confirm that the
14 groups are basically all the same in this year versus
15 last year? And that now there is still nine groups?

16 MR. ELTON: A: Yes. There were some minor changes
17 made, but broadly speaking they are the same, yes.

18 MR. BERTSCH: Q: And is this as of December 31st, 2007?
19 I don't see a date, but I assume the same logic.

20 MR. ELTON: A: That would be a reasonable assumption.
21 Very close to that, yes.

22 MR. BERTSCH: Q: Okay, thank you. If you could then
23 look at your page 3 of the service plan -- of the
24 packet, which is the service plan which I understand
25 was just released last week, is that right?

26 MR. ELTON: A: Yes.

1 MR. BERTSCH: Q: In conjunction with the budget. Would
2 you confirm that this information is correct as of
3 December 31st, 2008?

4 MR. ELTON: A: Yes.

5 MR. BERTSCH: Q: And would you confirm that they're the
6 same nine groups, plus the addition of one extra group
7 called "Smart Metering and infrastructure program"?

8 MR. ELTON: A: Yes.

9 MR. BERTSCH: Q: And could you confirm that this new
10 group has 25 people in it, including a senior vice-
11 president, as of December 31st, 2008?

12 MR. ELTON: A: I'd have to check whether the December
13 31st, 2008 date was a precise date. Subject to that,
14 yes.

15 MR. BERTSCH: Q: Thank you. So, from last year to this
16 year we have a brand-new group. Could you give me an
17 idea of when it was formed?

18 **Proceeding Time 10:07 a.m. T16**

19 MR. GODSOE: Could I just get an indication as to how
20 this is relevant to the LTAP?

21 THE CHAIRPERSON: Yes, I think that would help, Mr.
22 Bertsch.

23 MR. BERTSCH: Sure. The relevancy is that earlier on I
24 asked the relevancy of SMI in the LTAP and how
25 important it is. And the response was yes, it is
26 relevant. And what I'm trying to set the stage here

1 for is whether or not there is another group here that
2 potentially SMI has got more value or less value than
3 -- in the way of energy savings than what we could
4 perhaps have in here.

5 MR. GODSOE: So my friend's submissions confirm my
6 suspicion. We want to run an open, transparent
7 hearing, but there are boundaries. And what we've
8 said in relevancy, which is a legal concept, is that
9 the capability of SMI to deliver energy and capacity
10 certainly is within the scope of this proceeding. But
11 getting into the minutiae of how the group has changed
12 over the course of the year, I submit, is not relevant
13 to the LTAP at all.

14 MR. BERTSCH: Okay.

15 Q: Could you describe to me who's in the group? Are
16 they engineers looking at energy savings?

17 THE CHAIRPERSON: Mr. Bertsch.

18 MR. BERTSCH: Q: Or is all of that still -- yeah.

19 THE CHAIRPERSON: I think -- I take Mr. Godsoe's point
20 that there are certain aspects that are relevant, and
21 I think you've strayed over the boundary. So if you
22 can keep your cross-examination of this panel to
23 matters concerning energy and capacity savings that
24 SMI may deliver, that will be helpful.

25 MR. BERTSCH: Q: You described earlier the areas within
26 the Smart Metering and Infrastructure Program, and the

1 different sections within that. Would you say each of
2 those sections provide an enabling foundation for a
3 lot of your other DSM programs?

4 MS. VAN RUYVEN: A: Well, not necessarily all four of
5 them. Theft detection isn't necessarily a DSM
6 program. But certainly the Smart Metering and the in-
7 home displays, we believe, will help to enable us
8 reaching our DSM target. And then specifically there
9 are obviously some significant capacity benefits that
10 come with Smart Metering because it allows you to do
11 time of use rates.

12 MR. BERTSCH: Q: And is there -- in creating a
13 foundation, has there ever been discussion of the
14 ability to do LTAP without SMI?

15 MS. VAN RUYVEN: A: The ability to do the DSM programs?

16 MR. BERTSCH: Q: Yes. Is SMI required in order to meet
17 your targets?

18 MS. VAN RUYVEN: A: Well, the only energy targets we
19 have relating to SMI in the LTAP is the 400 gigawatt
20 hours of energy, so that is built into our plan and
21 that will help enable that. The real savings come
22 from capacity and you don't see the capacity savings
23 reflected in this LTAP. That is still being worked on
24 and calculated and we haven't even designed the time
25 of use rate yet. So that will come once we actually
26 have the time of use rate design in front of us and

1 MR. BERTSCH: Q: Panel 4. And again, this might go to
2 Panel 4. I notice that the energy savings is not due
3 to diversion and detection. Can you tell us a little
4 bit more about how the savings actually come through,
5 or is that Panel 4?

6 MS. VAN RUYVEN: A: On the diversion?

7 MR. BERTSCH: Q: On the 78 or 320 --

8 MS. VAN RUYVEN: A: Yes, no, Mr. Hobson would be able
9 to tell you, sort of, how they flow through and in --
10 when they arrive in each year and the quantities.

11 MR. BERTSCH: Q: Okay. Could you clarify in B.C.
12 Hydro's plan, is DSM -- is SMI required in order to
13 have time of use and critical peak rate structures?

14 MS. VAN RUYVEN: A: Yes, it is. Well, I believe other
15 jurisdictions have tried to do time of use and
16 critical peak pricing without Smart Metering, and I
17 don't believe that they've had particularly good
18 results in getting people to shift off high-load
19 hours.

20 MR. BERTSCH: Q: Do time of use and critical peak rate
21 structures save money -- save energy?

22 MS. VAN RUYVEN: A: No, they're -- well, they might
23 save a little bit of energy that comes with some
24 capacity savings. So generally, though, they are very
25 heavily weighted towards capacity savings.

26 MR. BERTSCH: Q: Didn't your time of use pilot show a

1 significant improvement?

2 MS. VAN RUYVEN: A: Yeah, there were some energy
3 savings that came with the time of use, but generally
4 we look for capacity savings when we do time of use.

5 MR. BERTSCH: Q: And so, again, would I further those
6 questions in Panel 4?

7 MR. GODSOE: With respect to the pilot, yes, it would be
8 Panel 4.

9 MR. BERTSCH: Q: Thank you. Okay, I'd like to switch
10 topics a little bit.

11 THE CHAIRPERSON: If you do that, Mr. Bertsch, I suggest
12 we'll have a 15-minute break. Thank you.

13 **(PROCEEDINGS ADJOURNED AT 10:14 A.M.)**

14 **(PROCEEDINGS RESUMED AT 10:30 A.M.) T18/19**

15 THE CHAIRPERSON: Please be seated.

16 MR. BERTSCH: I would like to enter another exhibit,
17 which is a press release regarding Obama's and
18 Harper's discussion on Thursday. It will be marked
19 C23-8.

20 THE HEARING OFFICER: Marked C23-8.

21 (TWO-PAGE PRESS RELEASE, DATED FEBRUARY 19, 2009,
22 MARKED EXHIBIT C23-8)

23 MR. BERTSCH: Q: Over the last couple of weeks, we've
24 certainly witnessed some phenomenal economic stimulus
25 packages around the world. And last Thursday Obama
26 came to Canada as his first visit. And they agreed to

1 establish the clean energy dialogue. This is a press
2 release from the White House in regards to that
3 agreement.

4 If you would look at the second page in the
5 "Annex", the very last portion headline says "Build a
6 more efficient electricity grid, based on clean and
7 renewable generation". And the third-last bullet
8 talks about \$11 billion Smart Grid technology from the
9 U.S.

10 I wonder if you could just comment, Mr.
11 Elton, on why you think Smart Grid technology is
12 included in the economic stimulus package.

13 MR. GODSOE: Well, again, Mr. Chair, I do want to run a
14 transparent hearing, but I'm struggling with the
15 relevancy of this.

16 MR. BERTSCH: The relevancy that I'm looking at, and I
17 can quickly go to the question if you'd like, if B.C.
18 Hydro -- if there was any stimulus money directed at
19 B.C. Hydro towards Smart Meters or Smart Grid, how
20 would that help its customers reduce its costs?

21 MR. ELTON: A: Sure. I mean, clearly --

22 MR. BERTSCH: Q: It's a possibility.

23 MR. ELTON: A: Right. Clearly, any additional sources
24 of funding that did not come from customers would --
25 to do something that is worth doing would reduce our
26 costs. So, if that -- if I am understanding your

1 question correctly, yes.

2 MR. BERTSCH: Q: And how do you see this dialogue being
3 a benefit to Hydro? Because it also talks about on
4 the second line Smart Meters and between the two
5 nations, some discussions going on there.

6 MR. ELTON: A: Well, let me make -- there is a general
7 -- I mean, there are, I think, over a hundred
8 utilities currently looking at various versions of
9 this. So clearly there is a lot of interest in it,
10 and this jurisdiction is no exception, both in terms
11 of the utilities and in terms of the government.

12 The other point I'll make is that -- I
13 mean, I can't resist making it, is that while it's
14 true that the 21st century grid will need to be bigger,
15 better and smarter, as it says, we shouldn't forget
16 the fact that the 20th century one worked really well,
17 and that it's important that the 21st century one works
18 really well as well. In other words, that there is
19 going to be a lot of money for investment here, I
20 think. The most important thing about the grid is
21 that it works. And so, you know, we will be
22 approaching our investment in the same way that I'm
23 sure every other utility will be, by making sure that
24 we do prudent things and deliver a grid that works.

25 MR. BERTSCH: Q: Thank you. If you could look at
26 Exhibit B-12, BCUC IR 3.270.1. And if you could just

1 keep your finger on that, I'll refer back to that. If
2 you look at the fourth paragraph, I'll read:

3 "Given the current global economic
4 conditions, B.C. Hydro will carefully
5 monitor its customer demand in the near
6 term. If conditions deteriorate from those
7 underpinning B.C. Hydro's 2008 load forecast
8 update set out in Exhibit B-10, the
9 shortfall in fiscal 2013 and 2014 may be
10 reduced or eliminated."

11 That's the fourth paragraph. Did you find it?

12 **Proceeding Time 10:35 a.m. T20**

13 MS. VAN RUYVEN: A: Yes, we see it.

14 MR. BERTSCH: Q: Now, as I mentioned in my opening
15 comments, the Throne Speech, and we don't have to pull
16 that, it says "Only a few weeks ago, most experts
17 predicted net growth for B.C. Today we are bracing
18 for a period of recession."

19 If you take that into context, and now look
20 at Exhibit B-10, page 29, Table 2-10. Given that
21 background, I notice that at the bottom you have high,
22 mid and low, and we've talked about this before.
23 Could you comment on given the situation today as of
24 February 23rd, where you think we are as far as low,
25 mid and high? Or maybe that's another -- whereabouts
26 are we? Do you have any idea where we --

1 MS. VAN RUYVEN: A: Well, we filed a new load forecast
2 with the evidentiary update on December 22nd, and our
3 most probable load forecast that we put forward is
4 always our mid-load forecast. And Mr. Ince on Panel 2
5 can tell you how we're doing against that new mid-load
6 forecast, but we plan to the mid-load.

7 MR. BERTSCH: Q: Okay, so Panel 2 will be more
8 questions about this.

9 MS. VAN RUYVEN: A: Yes, they can actually -- Mr. Ince
10 can actually show you how that new mid-load forecast,
11 how the actuals are performing against it.

12 MR. BERTSCH: Q: Take a look at Exhibit B-1, page 1-2,
13 and on line 11 and 12 we're talking about here the
14 changes in the LTAP filing cycle, and there's a note
15 that part of it is to reflect the advancement of DSM
16 initiatives. I wonder if you could describe in
17 general terms what this reflection will be, the
18 process, how it may or may not be different than the
19 semi-annual reports we see now. If you could maybe
20 expand upon that, I'd appreciate it.

21 MS. VAN RUYVEN: A: So what we're proposing is that we,
22 rather than putting in semi-annual reports on our DSM
23 performance, that we do it annually. And one of the
24 main reasons driving that request to the Commission is
25 that this is a quite a bit larger and more complex
26 plan. It has the codes and standards and the rates in

1 definition of a transmission line definition for cost-
2 effectiveness is relative to DSM, and how those two
3 can be linked?

4 MS. VAN RUYVEN: A: I believe it was in that particular
5 hearing that the Commission talked about cost-
6 effectiveness being more than just lowest cost, and it
7 took into account those five variables that you saw in
8 the application. So, I believe that's one of the
9 decisions before the Commission, where they actually
10 reinforce the fact that cost-effective was not just
11 lowest cost.

12 MR. BERTSCH: Those are all my questions, thank you.

13 THE CHAIRPERSON: Thank you, Mr. Bertsch.

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

15 MR. GATHERCOLE: Q: Good morning, Commissioners. Good
16 morning, panel.

17 MR. ELTON: A: Good morning.

18 MR. GATHERCOLE: Q: I think this will be a bit of a
19 change of pace for you, panel, and as you're aware, my
20 client's focus in this particular proceeding is on the
21 role of Site C, and the costs associated with it that
22 are included in the 2008 LTAP.

23 So, Ms. Van Ruyven, you can probably relax
24 a bit, because I expect most of my questions will be
25 directed to Mr. Elton.

26 MR. ELTON: A: We'll see about that.

1 MR. GATHERCOLE: Q: Although he may fool both of us and

2 --

3 MR. ELTON: A: Yeah.

4 MR. GATHERCOLE: Q: -- hand some off. Mr. Elton, I'd
5 like to start by asking if you're in a position to
6 clarify something for me, and that has to do with the
7 Throne Speech of last Monday. If you could turn to
8 page 6 of that in the -- it's Exhibit C17-8. Page 22,
9 sorry. I said page 6 because that was the page
10 reference when I printed it out off the -- but page 22
11 of the exhibit.

12 MR. ELTON: A: Yes.

13 MR. GATHERCOLE: Q: And a little past halfway down the
14 page, it says:

15 "More work will be done this year to advance
16 the dialogue on Site C to decide its merit."

17 MR. ELTON: A: Yes.

18 MR. GATHERCOLE: Q: Do you have any idea what that
19 means?

20 MR. ELTON: A: Well, certainly more work will be done
21 this year on Site C, and most of that work actually
22 will not be done -- will not be public consultation
23 type work, because a lot of that work has been done
24 for this phase. So most of the work that we plan to
25 do in 2009 is to bring to government the conclusions
26 of this phase that we're working on now, probably with

1 MR. GATHERCOLE: Q: "Site C continues to be an
2 economically attractive future resource in
3 terms of both cost and in terms of providing
4 a backup, should not all of the actions of
5 B.C. Hydro as included in its base plan
6 materialize."
7 MR. ELTON: A: Yes.
8 MR. GATHERCOLE: Q: That's an accurate reflection of
9 where you see Site C in the 2008 LTAP.
10 MR. ELTON: A: Yes.
11 MR. GATHERCOLE: Q: Now, am I correct that Site C is
12 not even part of the first contingency resource plan?
13 MR. ELTON: A: Maybe we could get a reference for that,
14 Mr. Gathercole.
15 MR. GATHERCOLE: Q: Yes, you can. It's Exhibit B-10,
16 page 34. That's the December upgrade -- or update,
17 where you see "2.73 contingency resource plans"?
18 MR. ELTON: A: Yes.
19 MR. GATHERCOLE: Q: And it refers to Mica 5 and 6 in
20 both CRP 1 and 2, and the potential timing for Site C
21 in CRP 2.
22 MR. ELTON: A: Yes.
23 MR. GATHERCOLE: Q: So I took that to mean that Site C
24 was only part of CRP 2 but not part of CRP 1.
25 MR. ELTON: A: I believe that's correct.
26 MR. GATHERCOLE: Q: If it turns out that is isn't,

1 perhaps you could undertake to let us know.

2 MR. GODSOE: Or you can address that question to Panel 4.

3 MR. GATHERCOLE: Okay, thank you.

4 MR. GATHERCOLE: Q: Now, as I understand it, the base
5 plan includes three basic programs, correct? That's
6 DSM, IPP purchases, and ResourceSmart.

7 MR. ELTON: A: Yes.

8 MR. GATHERCOLE: Q: Would you agree that all three of
9 these are relatively short-time timeframes for a
10 decision to proceed -- from a decision to proceed to
11 coming on line?

12 MR. ELTON: A: Well, short relative to, for example,
13 Site C.

14 MR. GATHERCOLE: Q: Exactly.

15 MR. ELTON: A: Yeah, I'd say short -- I mean, the two
16 things that have a long timeline are Site C and
17 transmission builds, basically. So yes.

18 MR. GATHERCOLE: Q: Okay, so would it be fair to say
19 that it's a timeframe of roughly 1 to 5 years for
20 those basic, three basic programs?

21 MR. ELTON: A: Broadly speaking, yes.

22 MR. GATHERCOLE: Q: And as you indicated, Site C has a
23 substantially longer timeframe.

24 MR. ELTON: A: Yes.

25 MR. GATHERCOLE: Q: It's earliest in-service date is
26 projected to be 2019.

1 MR. ELTON: A: Yes.

2 MR. GATHERCOLE: Q: So that's at least ten years.

3 MR. ELTON: A: Yes.

4 MR. GATHERCOLE: Q: This is where I have a bit of
5 problem, Mr. Elton, is why a ten-year program would be
6 considered a contingency resource for shorter-term
7 programs.

8 MR. ELTON: A: I think it's considered -- I mean, it's
9 not considered a contingency resource for anything
10 that would happen before it could come in service.
11 This program is, you know, this LTAP refers to a
12 longer period than that, and so it's a contingency
13 resource for the later parts of the timeframe.

14 MR. GATHERCOLE: Q: Because would you not agree that a
15 contingency resource is one you can develop quickly to
16 meet an unexpected energy or capacity shortfall in
17 your base plan? That's what I would think a
18 contingency resource would be.

19 MR. ELTON: A: Well, if you're talking about the first
20 few years, that's correct. I think the challenge with
21 something that does much take a much longer time,
22 which Site C obviously does, is you do need to spend
23 time and therefore money, I believe, to preserve it as
24 an option. In other words, if you see it as
25 potentially being a good option down the road, because
26 of the timeframe issue you've mentioned, you have to

1 spend time and do work and spend money now in order to
2 preserve it as an option. Otherwise when you get to
3 that point down the road, you won't have it as a
4 possibility.

5 **Proceeding Time 10:49 a.m. T23**

6 MR. GATHERCOLE: Q: Well, I want to explore that a
7 little bit, but first of all, could you -- in your
8 opening statement, at the bottom of page 1 and the top
9 of page 2, that's Exhibit B-14, you talk about long-
10 term resource planning, and you say:

11 "The practice of long-term resource planning
12 must be dynamic and adapted to changing
13 circumstances if it is to meet its objective
14 of guiding resource choices to the most
15 cost-effective and risk-appropriate
16 alternatives."

17 MR. ELTON: A: Yes.

18 MR. GATHERCOLE: Q: And could you explain to me how you
19 see Site C fitting into this dynamic and adaptive to
20 changing circumstances, long-term planning?

21 MR. GODSOE: It might also be helpful, because I think
22 this -- that question was put by PVEA in an IR, about
23 why is Site C an appropriate back-up, to refer to
24 Exhibit B-3, response to PVEA IR 1.1.1.

25 MR. GATHERCOLE: Q: I intend to do that a little later,
26 but I just want to actually refer to another IR, which

1 is again in Exhibit B-3, and it's B.C. Utilities
2 Commission IR 1.121.1, which asks the question, "How
3 useful is a back-up that has a minimum ten-year lead
4 time?"

5 MR. ELTON: A: Did you want me to answer the first
6 question about the opening statement? Or did you want
7 me to relate it to the IR that you just --

8 MR. GATHERCOLE: Q: I'm going to ask -- answer the
9 first question if you would, thank you.

10 MR. ELTON: A: All right.

11 MR. GATHERCOLE: Q: And then --

12 MR. ELTON: A: Thank you.

13 MR. GATHERCOLE: Q: Because I assumed that your answer
14 might be something along the lines of the answer in
15 the IR.

16 MR. ELTON: A: Well, so, in terms of the opening
17 statement, I mean, again, I stand by what the opening
18 statement says. It talks about the need to plan -- I
19 mean, I'll go to page 1 as well.

20 "The need to plan for customer demand now
21 and into the future."

22 As you say, being prepared for emerging issues,
23 unexpected events and uncertainties that may put plans
24 at risk, and be aware of the change in interests of
25 various stakeholders. So, yes, dynamic and adaptive
26 to changing circumstances isn't -- adaptive to

1 changing circumstances doesn't just mean that you wait
2 for circumstances to change and then you act. You
3 have to make sure that, when those circumstances
4 occur, that you have as many options as you need to be
5 able to act.

6 Site C, on which no decision has been made,
7 is a potential option, and therefore it is, I think,
8 very consistent with what I said there to make sure
9 that we keep in place the option to be able to have it
10 as a choice, as and when -- you know, as and when it
11 becomes appropriate.

12 So give me the IR reference that you gave,
13 again?

14 MR. GATHERCOLE: Q: It's Exhibit B-3, B.C. Utilities
15 Commission IR 1.121.1.

16 MR. ELTON: A: 121. Thank you very much. Yes, I have
17 that.

18 MR. GATHERCOLE: Q: Okay. In the second paragraph
19 there, you say that you're proposing in the 2008 LTAP
20 to advance Site C through Stage 2 of its development
21 plan.

22 "This is not a proposal requesting approval
23 to proceed through development and
24 construction for a specific in-service date
25 10 years hence. Advancing Site C in stages
26 with incremental decision points allowing

1 informed decisions to proceed or not to
2 proceed at each decision point provides a
3 framework for reducing the effective lead
4 time for the project to more manageable time
5 steps."

6 Correct?

7 MR. ELTON: A: Yes.

8 MR. GATHERCOLE: Q: Okay. What I'd like to explore
9 with you, briefly, Mr. Elton, the concept of decision
10 points. And in particular, I want to try to determine
11 what decision point is the point of no return, when
12 the decision to build Site C is final and irrevocable,
13 and it becomes part of your base plan in some future
14 LTAP.

15 Now, I gather as of some time this year,
16 Stage 2 will be completed.

17 **Proceeding Time 10:54 a.m. T24**

18 MR. ELTON: A: From the perspective of B.C. Hydro, yes,
19 it will.

20 MR. GATHERCOLE: Q: And the original date for
21 completion was June of this year?

22 MR. ELTON: A: I'd have to -- I mean subject to check,
23 yes. Yes, it sounds about right.

24 MR. GATHERCOLE: Q: I believe on Thursday you had a
25 brief discussion with Mr. Wallace, and from my memory
26 I believe it's around page 307-308 of transcript

1 Volume 3, in which you indicated it might be some time
2 around September before you actually make a
3 recommendation to the provincial government.

4 MR. ELTON: A: Your memory of transcript pages is far
5 better than mine, Mr. Gathercole, so I think it might
6 be good if we could check that.

7 MR. GATHERCOLE: Q: I actually did have a note of it
8 but I notice I don't have it now.

9 MR. ELTON: A: Okay. So Mr. Wallace's cross-
10 examination started at page 308, and so -- yes, I
11 think he said -- I'm on page 309, line 9 or
12 thereabouts.

13 " MR. WALLACE: ...it looked like that next
14 step...was to happen sometime in the sort of
15 June, July, August period? Is that still
16 the schedule?

17 MR. ELTON: A: Yes, it is. I think it
18 might be September but it's in that...It's in
19 that area."

20 So, yes.

21 MR. GATHERCOLE: Q: So somewhere in there you would
22 make the recommendation to government as to whether
23 it's B.C. Hydro's view that you should proceed to
24 Stage 3.

25 MR. ELTON: A: We expect to. I mean, we haven't yet
26 discussed with our board whether we will make a

1 recommendation or whether we will simply say, "Here
2 are the results of Stage 2." But I think, I expect
3 that we will make a recommendation, yes.

4 MR. GATHERCOLE: Q: Okay. And when would you
5 anticipate the government's decision on whether or not
6 to proceed to Stage 3?

7 MR. ELTON: A: I can't comment on that.

8 MR. GATHERCOLE: Q: If the decision -- if you make your
9 recommendation and the government's decision is to
10 proceed to Stage 3, does B.C. Hydro consider that
11 decision to be a final decision that Site C will be
12 built?

13 MR. ELTON: A: No, because there would then be
14 regulatory processes that would be very significant.

15 MR. GATHERCOLE: Q: Sorry, because I understand that
16 Stage 3 is expected to take two years and involves
17 applications, both obtaining the necessary regulatory
18 approvals which are from this Commission and from the
19 Environmental Assessment Agency.

20 MR. ELTON: A: Yes, and the precise shape of the
21 regulatory processes and how they could be combined
22 possibly is still to be determined. But yes, they
23 would be that.

24 MR. GATHERCOLE: Q: When you say the scope of the
25 regulatory processes, are you talking about with
26 respect to this Commission and the Environmental

1 Assessment Authority in terms of who looks at what?

2 MR. ELTON: A: I think I'm talking about the -- I mean,
3 there's a panoply of potential regulatory hearings
4 here, including federal regulations, and I think it's
5 the question of -- what I'm saying is that we haven't
6 yet developed our regulatory strategy as to how we
7 would like that to go, and certainly the regulatory
8 bodies concerned haven't been able to do that either.

9 MR. GATHERCOLE: Q: Does B.C. Hydro have any position
10 with respect to what it considers the appropriate
11 scope of the Commission's review at the -- as part of
12 Stage 3? An example, if the governments says, "We
13 want to proceed to Stage 3," you say that isn't the
14 decision to build Site C, correct?

15 MR. ELTON: A: That's my understanding. I've had no
16 suggestion from anyone that government is considering
17 or has considered making a decision that would say
18 that in some way Site C would be exempt from the
19 normal regulatory processes.

20 MR. GATHERCOLE: Q: So that would mean that it would be
21 open to the Commission to say, "We don't agree with
22 the decision to proceed."

23 MR. ELTON: A: That's always been my understanding, Mr.
24 Gathercole.

25 MR. GATHERCOLE: Q: If the Commission decides after a
26 hearing that Site C should proceed, you'd now obtain

1 the regulatory approvals, you know, including the
2 other regulatory approvals which you need to obtain.
3 Is that in the final decision, and that's the decision
4 to proceed to build Site C? I'm just trying to get a
5 sense of what we're looking at. As you can
6 understand, my clients are somewhat concerned about
7 the time.

8 **Proceeding Time 11:00 a.m. T25**

9 MR. ELTON: A: I do understand that. I think with any
10 project that -- I mean first of all, the kinds of
11 stages we're talking about are normal for a project.
12 In a project of this size, they happen to be in --
13 longer and more complex, but they're normal stages in
14 a process. In the end, at a certain point,
15 construction is about to start and you're about to
16 spend -- and you know, and this is assuming that
17 everything has been approved, and again, I'm not pre-
18 judging that, because no decision has been made. But
19 if in the end you get to that point, and you're about
20 to spend several billion dollars, that would again be
21 a point where I would expect that certainly B.C.
22 Hydro, and I would expect its shareholder, would say,
23 "Is this the right thing to do? Is this what we want
24 to do? Where are we in terms of, you know,
25 everything?" You know, that would just be a normal
26 thing. That's what we would do on any project of

1 significant size.

2 MR. GATHERCOLE: Q: Because following Stage 3, Stage 4
3 is stated to be engineering. And what I'm referring
4 to here is Exhibit B-1-1, Appendix L-1, page 18 of 19.
5 There's a little chart at the bottom of the page that
6 sets out the stages. So, you know, I don't think you
7 need to, you know, refer to it. You can -- but Stage
8 4 is stated to be engineering, to take one year. What
9 would that involve?

10 MR. ELTON: A: Well, that, I mean, there will be
11 engineering -- there's engineering in all phases, and
12 so that would -- and, you know, that would involve --
13 I mean, let's be clear that the stage of engineering
14 work that has been done so far is -- you know, is not
15 exhaustive by any means. So there are still, as you
16 would expect, large questions about how this would be
17 built and, you know, what the technical issues are.
18 So, the last year of engineering work would include
19 getting everything absolutely precise, in terms of
20 making sure that we could turn over to some
21 contractor, or whoever -- however we're doing this,
22 information within our specificity. But that work
23 will be continuing through the -- through Stage 3 as
24 well. In other words, although Stage 3 is described
25 as regulatory - environmental assessment, there will
26 be a lot of -- there would be a lot of engineering

1 work and continued environmental studies, as well as
2 simply going through a regulatory process.

3 MR. GATHERCOLE: Q: But after Stage 4, the next stage
4 is Stage 5, and that's construction. So presumably
5 the various -- very latest we would have the final
6 decision to proceed would be at the end of Stage 4.

7 MR. ELTON: A: Yes.

8 MR. GATHERCOLE: Q: Now, if you could turn to Exhibit
9 B-12, and it's Independent Power Producers of British
10 Columbia IR 3.20.1.

11 MR. ELTON: A: You said 3.20.1?

12 MR. GATHERCOLE: Q: Yes.

13 MR. ELTON: A: I have it.

14 MR. GATHERCOLE: Q: Okay. I'm not concerned with the
15 question, but with part of the response, which is
16 halfway in paragraph 1.

17 "The CRPs seek to continue advancing
18 projects through the early stages of
19 development thus reducing the lead time to
20 commissioning without necessarily committing
21 to the construction of the resource, thus
22 preserving the earliest possible in-service
23 date for the project."

24 Now, when Mr. Weafer was questioning you on Friday, he
25 explored the idea of making IPP projects shelf-ready.
26 And you indicated the difficulties -- Ms. Van Ruyven,

1 I promised I wouldn't ask you anything, but you
2 discussed the differences between making something
3 shelf-ready for an IPP project as compared to a
4 project that B.C. Hydro would be building itself. Do
5 you recall that?

6 MS. VAN RUYVEN: A: Yes, I do recall that.

7 MR. GATHERCOLE: Q: Is it B.C. Hydro's -- or, sorry, is
8 the process outlined for Site C in this LTAP designed
9 to get approval to move the project to shelf-ready
10 status? So, B.C. Hydro and the government can decide
11 whether to proceed with it, depending on what
12 resources are available over the next ten years.

13 MR. ELTON: A: So, yes, only subject to -- again, I
14 don't want to give any impression that any decision
15 has been made for even to get it shelf-ready. The
16 decision is being made stage by stage. So today the
17 decision -- not today. Some time ago a decision was
18 made to move through Stage 2. At the end of Stage 2,
19 there would be a decision as to whether to go to Stage
20 3. So subject to that qualifier, yes.

21 **Proceeding Time 11:04 a.m. T26**

22 MR. GATHERCOLE: Q: What I'm saying is you could get to
23 the end of Stage 3 or Stage 4. You've all your
24 approvals. You've got all your engineering work done.
25 You say, "Okay, we've got it there. We're not going
26 to proceed with it now. We're going to keep it in our

1 back pocket and decide when to proceed, sometime
2 presumably after 2019."

3 MR. ELTON: A: That would certainly be a possibility,
4 yes.

5 MR. GATHERCOLE: Q: Now, B.C. Hydro has already
6 expended a fair amount of money the first two stages,
7 correct?

8 MR. ELTON: A: Yes.

9 MR. GATHERCOLE: Q: And I'll get into that later but --
10 Stages 3 and 4, I would suggest, will also require
11 significant expenditures over the next three years or
12 so.

13 MR. ELTON: A: Yes.

14 MR. GATHERCOLE: Q: And these expenditures, based on
15 what we've been talking about, could well be incurred
16 before a final decision to proceed with Site C has
17 been made.

18 MR. ELTON: A: The expenditures in 3 and 4, I believe,
19 as I've said earlier, would be incurred before such a
20 decision was made, yes.

21 MR. GATHERCOLE: Q: So if that's the case and the
22 decision somewhere down the line is made not to
23 proceed with Site C, that's quite a bit of money that
24 could be considered to be wasted, do you not agree?

25 MR. ELTON: A: It's an interesting question as to
26 whether you consider that to be wasted. You know,

1 when we started this work on Phase 1 of Site C, we
2 obtained some -- or we contracted with some experts in
3 large projects from -- who have worked on large
4 projects around the globe. And you know, we had a
5 board committee at the time that was looking at this,
6 and we had these folks speak to the board committee,
7 which was actually a full committee of the board. And
8 one of their first points was you need to be clear
9 from the beginning that the first job now is to spend
10 the right amount of money on this project to find out
11 whether it's the right thing to do, and that if you
12 spend that amount of money and you reach a decision
13 either yes or no, you've done the right thing. And so
14 in that sense it isn't wasted because, you know, in
15 any kind of situation -- in any kind of company like
16 this, we should be looking at options, and sometimes
17 those options will turn out not to go into fruition.

18 The question is, do we prudently go through
19 those phase, and is the money we're spending prudent,
20 given that test that I just laid out.

21 MR. GATHERCOLE: Q: Do you foresee the possibility
22 somewhere along this process, the later the decision
23 is having to be made, that B.C. Hydro would consider
24 that it had already invested so much in this project
25 that it had no choice but to proceed with it?

26 MR. ELTON: A: That would be an extremely foolish

1 approach for B.C. Hydro to take, and all I can say is
2 that I certainly would not take such an approach and I
3 don't believe that as a company that we would.

4 MR. GATHERCOLE: Q: Thank you.

5 If we could turn now to Special Direction
6 No. 10, and I think we've already discussed to a
7 certain extent what I want to cover. And that of
8 course is -- and it's been discussed before, the
9 requirement in Section 3 for self-sufficiency?

10 MR. ELTON: A: Yes.

11 MR. GATHERCOLE: Q: Self-sufficiency as defined in the
12 Special Direction by 2016 and as soon as practicable
13 no later than 2026, to exceed electricity supply
14 obligations by 3,000 gigawatt hours.

15 MR. ELTON: A: Yes.

16 MR. GATHERCOLE: Q: And I think you've indicated
17 because of timing of Site C, that Site C can't help
18 meet the first goal.

19 MR. ELTON: A: Correct.

20 MR. GATHERCOLE: Q: It can only be considered with
21 respect to meeting the second goal. And you had a
22 discussion last week with Mr. Austin regarding the --
23 you have the words "as soon as practicable", and I
24 don't want to get into trying to define that.

25 Let me just ask you, is it possible that
26 B.C. Hydro could meet the second goal as well as the

1 first, prior to 2019?

2 MR. ELTON: A: Prior to two thousand --

3 MR. GATHERCOLE: Q: 2019.

4 MR. ELTON: A: Yes, it is possible.

5 MR. GATHERCOLE: Q: And I'd like to explore that
6 briefly with you. If you could turn to Exhibit B-3,
7 B.C. Utilities Commission IR 1.143.1. Do you have
8 that, Mr. Elton?

9 **Proceeding Time 11:09 a.m. T27**

10 MR. ELTON: A: Yes.

11 MR. GATHERCOLE: Q: And as I understand the response to
12 that, starting halfway down the response, you say:

13 "The actions in the 2008 LTAP prepare B.C.
14 Hydro to be self-sufficient while
15 recognizing the challenges and uncertainties
16 that are being addressed."

17 And you list six bullets of various things that, at
18 the end of the answer, you say

19 "...are being proposed to meet B.C. Hydro's
20 current and near-term obligations, including
21 the move to self-sufficiency. The actions
22 are also part of the first step to maintain
23 the capability of exceeding the electricity
24 supply obligations by at least 3,000
25 gigawatt hours per year, and the capacity
26 required to integrate the energy in the most

1 cost-effective manner ..."

2 Et cetera. So I saw those as possible ways you could
3 meet the 2026 goal, you know, earlier than 2026.

4 MR. ELTON: A: Well, yes, these six actions that are
5 all bulleted would all -- would add up to possible
6 ways of doing that, yes.

7 MR. GATHERCOLE: Q: Yes, okay. And they would be the
8 ones, presumably, that would get you to the 2026 goal
9 prior to 2019, that you said is possible.

10 MR. ELTON: A: If you adopted them at that -- at a
11 speed to do that, yes.

12 MR. GATHERCOLE: Q: Okay. Now, one of them, the third
13 bullet, is Site C, so we put that one aside. Because
14 that, by definition, will not be completed prior to
15 2019. So, starting with the first, the DSM plan --

16 MR. ELTON: A: Sorry, maybe I misunderstood your
17 question, then. So, let me give a clear answer. So,
18 these six actions were a way to help us maintain the
19 capability of exceeding the electricity supply
20 obligations by at least 3,000 -- this is the last
21 paragraph of this IR response.

22 MR. GATHERCOLE: Q: Yes.

23 MR. ELTON: A: So, line 4 of that last paragraph.
24 There is no date in there, so that would be by 2026 or
25 as soon as practicable.

26 MR. GATHERCOLE: Q: Well, I -- as soon as practicable,

1 and I asked you previously, is it possible that this
2 could be done prior to 2019.

3 MR. ELTON: A: '19.

4 MR. GATHERCOLE: Q: And you said yes.

5 MR. ELTON: A: Yes, I understand.

6 MR. GATHERCOLE: Q: So that is --

7 MR. ELTON: A: I'm just clarifying, then, that in other
8 words, this -- maybe I was misunderstanding your
9 question, that what this response says is that these
10 six actions could get you there -- I mean, if you did
11 them --

12 MR. GATHERCOLE: Q: Yes.

13 MR. ELTON: A: -- if things worked out that way, as
14 soon as possible, or as soon as practicable. The Site
15 C one in particular could not get you there before
16 2019, you're right.

17 MR. GATHERCOLE: Q: That's right.

18 MR. ELTON: A: Yes.

19 MR. GATHERCOLE: Q: So I put that aside. But the first
20 one, the DSM plan, that could be -- projects could be
21 online prior to 20,000 -- 2019. That could get you to
22 the 2026 goal.

23 MR. ELTON: A: Well, yes. I mean, there are several of
24 these that you could do that would get you to an
25 earlier than 2019 goal. Obviously, what you would do,
26 I think, is as we develop these plans is look at, you

1 know, how cost-effective -- which of course is
2 included in our definition of how practical it is --
3 in other words, which ones would you pick?

4 MR. GATHERCOLE: Q: Yeah, I'm not getting you -- asking
5 you to commit to anything, I'm just exploring --

6 MR. ELTON: A: Right.

7 MR. GATHERCOLE: Q: -- the possibility. And the second
8 bullet, the Clean Power Call, would also be achievable
9 prior to 2019.

10 MR. ELTON: A: This and subsequent Clean Power Calls,
11 yes.

12 MR. GATHERCOLE: Q: Yes. And the Burrard, continuing
13 to provide dependable capacity and firm energy.

14 MR. ELTON: A: I believe that is a -- yes. Yes.

15 MR. GATHERCOLE: Q: And Mica 5 and Mica 6 could be
16 brought on prior to 2019.

17 MR. ELTON: A: Yes.

18 MR. GATHERCOLE: Q: And 5L83 could be completed prior
19 to 2019.

20 MR. ELTON: A: Yes.

21 MR. GATHERCOLE: Q: Thank you. So, Site C is really
22 just one of many alternatives that are available to
23 B.C. Hydro to Special Direction No. 10 goals.

24 **Proceeding Time 11:14 a.m. T28**

25 MR. ELTON: A: Yes.

26 MR. GATHERCOLE: Q: Now, given the fact that you said

1 one of the things that could happen is you could go
2 through all the stages that are proposed in this LTAP,
3 other than construction, and have Site C shelf ready
4 to proceed later than 2019. Assume the decision to
5 start construction is made sometime in the next few
6 years, so you're talking about completion date of
7 somewhere in the 2019-2021. So construction is
8 started, and a subsequent LTAP comes before this
9 Commission to suggest that DSM programs, IPP
10 acquisitions, and ResourceSmart programs will in fact
11 meet the 2026 goal without Site C. So you've started
12 construction, and thinking back to Revelstoke or
13 something similar. What would happen then? What
14 would -- I take it you couldn't, wouldn't be able to
15 stop construction, or could you?

16 MR. ELTON: A: You can always stop construction. I
17 mean, I think the first thing is that you are
18 emphasizing that a decision, like going ahead with the
19 construction of Site C, is a very large decision and
20 the people that were around at the time, whoever they
21 were, are, will be, should -- would take that
22 responsibility very seriously.

23 There are projects, as we know, I mean
24 there are projects in this current environment that
25 have started construction that have stopped
26 construction. So, but that's hardly a scenario that

1 anybody would want.

2 So, no, I think that when you decide to
3 move ahead on any of these plans really, particularly
4 the ones that involve physically, you know, putting
5 something in the ground, at a certain point you've got
6 to say, "This is the best that we can do under the
7 circumstances. We can't predict the future perfectly.
8 Let's go ahead, and frankly, without regrets." In
9 other words, if it then turns out -- if it turns out
10 the rational decision would be to stop construction,
11 that's one thing. If it turns out, "Oh, I wish we'd
12 made a different decision," that's a different thing.
13 In other words, these kinds of processes are set up to
14 make the best decision given the information available
15 to us. We move ahead. You know, we'll never be able
16 to predict the future perfectly.

17 MR. GATHERCOLE: Q: I appreciate that. And if Site C
18 would then continue in those circumstances, you would
19 presumably -- you would have two alternatives. One is
20 to cut back on the IPPs and/or DSM, and presumably it
21 would be the former first.

22 MR. ELTON: A: There's so many different possibilities.
23 I mean Site C, if it was built, is an asset that would
24 be around for, you know, 70 years, 80 years, whatever
25 the number is. It's a very big long-term investment
26 that if you decided to make it, if we all decided to

1 make it, would have all kinds of impacts. I can't
2 predict what those various impacts could be.

3 MR. GATHERCOLE: Q: One of the impacts would be
4 obviously because you have that resource available,
5 you wouldn't need as much DSM as you would if you
6 didn't have that resource available.

7 MR. ELTON: A: That will be true, yes.

8 MR. GATHERCOLE: Q: So either you'd be cutting back on
9 other resources or you'd be having a significant
10 surplus, and you've already discussed with other
11 cross-examiners what happens with surplus and the
12 prices, et cetera, so I won't get into that, but that
13 would be an alternative.

14 MR. ELTON: A: There is that potential. But again, I
15 mean, you're creating a scenario where you are
16 building Site C. Once you decide to do that, then
17 everybody knows that you're doing that and everybody
18 knows that for many years to come you've got this
19 asset. That would of course change all the plans. In
20 other words, it's a large, lumpy investment and large,
21 lumpy investments have certain characteristics, which
22 I think is --

23 MR. GATHERCOLE: Q: Which I why I thought the most
24 utilities in North America in their planning since the
25 '80s were getting away from major central station
26 projects, because of the lumpiness that they provide.

1 MR. ELTON: A: That's an interesting comment. I mean,
2 I think you need a mixture. And interestingly,
3 Ontario just announced some large renewable wind
4 projects. They were, I believe, quite large. So, and
5 I think there were some statements that that was
6 something they deliberately sought. So I think
7 utilities need a mixture of large and small process.

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

9 MR. GATHERCOLE: Q: I'd like to explore with you the
10 recent history of your consideration of Site C. In
11 Exhibit B-1-1, Appendix L-1, at page 10 of 19, right
12 at the very bottom of the second column on that page,
13 do you have that?

14 MR. ELTON: A: Yes.

15 MR. GATHERCOLE: Q: "Since June 2004, B.C. Hydro
16 has undertaken a feasibility review to
17 better understand Site C and its advantages
18 and disadvantages..."

19 What prompted that review starting in June, 2004?

20 MR. ELTON: A: There have been discussions within the
21 company about our options going forward. Obviously we
22 were all well aware that the company had been through
23 the Site C and had presented it to the Commission some
24 time ago. It's never -- and, I mean, as you would
25 imagine, there are people within the company that
26 worked on that application and, you know, continue to

1 be interested in it. When you looked at the options
2 open to us, it's clear that it's an option that, if
3 it's possible to build it, you know, if you can deal
4 with all of the various stakeholders and First Nations
5 and so on, that would live near it or be affected by
6 it, that it's an option that must be considered. It
7 would be imprudent not to consider it.

8 We discussed that with government, and they
9 agreed that it's something that we should be looking
10 at. We did some opinion polling to just see what the
11 interest of the public was, positively or negatively,
12 in different types of energy sources, and the answers
13 came back, as I've said before, that the first thing
14 is conservation, and then after that that people were
15 interested in clean sources of energy and large hydro
16 was one of the possibilities.

17 So, we just felt that it was a prudent
18 thing to do to explore the options.

19 MR. GATHERCOLE: Q: And as I recall, the 2006 LTAP
20 addressed the proposed staging of Site C?

21 MR. ELTON: A: Yes.

22 MR. GATHERCOLE: Q: And it's B.C. Hydro's position that
23 the staging continues to be mandated by the 2007
24 Energy Plan?

25 MR. ELTON: A: The -- maybe we should just check the
26 wording of the 2007 Energy Plan.

1 MR. GATHERCOLE: Q: I'll get to that --

2 MR. ELTON: A: Okay.

3 MR. GATHERCOLE: Q: -- in a while. So, we can leave
4 that question.

5 MR. ELTON: A: No, but you're asking me if something is
6 mandated by the 2007 Energy Plan, and it might be
7 useful to look at what it says.

8 MR. GATHERCOLE: Q: Okay, if you can address --

9 MR. ELTON: A: Thank you.

10 MR. GATHERCOLE: Q: If you can direct me to where it
11 refers to it, because the only reference I could find
12 is on page 4.

13 MR. ELTON: A: Yes. Yes, and I'll read -- I'll just
14 read out that -- the bottom of page 4, that:
15 "B.C. Hydro and the province will enter into
16 initial discussions with First Nations, the
17 province of Alberta and communities to
18 discuss Site C, to ensure that
19 communications regarding the potential
20 project and the processes being followed are
21 well-known."

22 And, yes. I don't think that the staging process that
23 we followed was mandated by the Energy Plan. I wanted
24 to check it, just to make sure of that, but I don't
25 think it is.

26 MR. GATHERCOLE: Q: Okay. It isn't mandated. It's not

1 a policy direction --

2 MR. ELTON: A: No, I don't think it is, no.

3 MR. GATHERCOLE: Q: So it just -- and certainly in
4 response to -- in Exhibit B-1-1, Appendix L-1, page 8
5 of 19, there is a reference there that refers to those
6 exact words.

7 MR. ELTON: A: Yes.

8 MR. GATHERCOLE: Q: As the basis for continuing.

9 MR. ELTON: A: Yes.

10 MR. GATHERCOLE: Q: Do I take it from what you said
11 with respect to B.C. Hydro's consideration of Site C,
12 that Site C would be in the 2008 LTAP even if it
13 wasn't mentioned in the 2007 Energy Plan?

14 **Proceeding Time 11:24 a.m. T30**

15 MR. ELTON: A: If -- let me just think about the
16 question there. To do something like approach Site C
17 would require us to be comfortable that our
18 shareholder was interested in us doing that. So
19 clearly if they said, "We don't want you to touch Site
20 C," it wouldn't be in our LTAP.

21 MR. GATHERCOLE: Q: That's right.

22 MR. ELTON: A: And so --

23 MR. GATHERCOLE: Q: If they said, "We just want you to
24 do good long-term acquisition policies" --

25 MR. ELTON: A: If they --

26 MR. GATHERCOLE: Q: -- with no mention of Site C

1 whatsoever, would it be in the LTAP?

2 MR. ELTON: A: Yes.

3 MR. GATHERCOLE: Q: On the basis that we've previously
4 discussed.

5 MR. ELTON: A: Yes.

6 MR. GATHERCOLE: Q: Okay.

7 MR. ELTON: A: And the staging that you referred to,
8 some form of that would have been in the LTAP also,
9 because I think -- I made a comment the other day
10 about how governments often are at their best when
11 they focus on, you know, large fuel-source-type
12 choices versus individual projects. However, I think
13 it would be naïve of us to assume in this case that a
14 provincial government would not be interested in an
15 individual project of this size, and therefore it
16 would be, I think, imprudent of us not to make sure
17 that we check, each time we get to a significant
18 stage, with government to make sure that, yes, you
19 know, do you want us to continue with this? That's
20 the -- so although the staging is not -- you're right,
21 it's not directed by the Energy Plan, we believe it's
22 the prudent way to go about this project.

23 MR. GATHERCOLE: Q: I'd like to turn to the costs of
24 Site C included in the LTAP. The first is capital
25 cost projection, which is set out in Table 3.19 in
26 Exhibit B-1, chapter 3, page 3-29. And Mr. Wallace

1 referred you to this, when he was cross-examining you.

2 MR. ELTON: A: Yes.

3 MR. GATHERCOLE: Q: And he looked at the cost per
4 megawatt hour. I want to look at the absolute capital
5 costs. And as I see in that table, there's a range of
6 between 5 and 6.6 billion.

7 MR. ELTON: A: Yes.

8 MR. GATHERCOLE: Q: Now, if you could refer to Exhibit
9 B-3, the PVEA IR 1.4.1.

10 MR. ELTON: A: 1.4.1?

11 MR. GATHERCOLE: Q: Yes.

12 MR. ELTON: A: Yes.

13 MR. GATHERCOLE: Q: And we ask how confident B.C. Hydro
14 is in its projected capital costs.

15 MR. ELTON: A: Yes.

16 MR. GATHERCOLE: Q: And you point out:

17 "The final cost estimate will be known only
18 after a competitive procurement process is
19 completed, and final bids are accepted.

20 This occurs just prior to construction."

21 So I read that to say we wouldn't really be looking at
22 fairly, should I say "concrete"? Costs until at least
23 after Stage 4.

24 MR. ELTON: A: Yeah. I mean, I think the IR speaks for
25 itself. That's the final cost estimate. It also says
26 that we would -- we will be updating this type of cost

1 estimate that's on 3-29 of the -- you know, that you
2 just referred to, Table 3-19.

3 MR. GATHERCOLE: Q: Yeah.

4 MR. ELTON: A: At the end of Stage 2. And then again,
5 if Stage -- if we went into Stage 3 at the end of
6 Stage 3. So in other words, there would be
7 progressively firmer cost estimates.

8 MR. GATHERCOLE: Q: That's right. I would expect you
9 wouldn't have significantly different figures by the
10 end of Stage 2.

11 MR. ELTON: A: I won't speculate on that, but I mean,
12 you're aware of the effects of things like, you know,
13 like just one year or two years' worth of inflation on
14 this kind of project. So, but again, I'll make no
15 comment on what the Stage 2 costs are because,
16 frankly, I haven't seen anything yet.

17 MR. GATHERCOLE: Q: But I was thinking not so much in
18 the level of the costs, but in the strength of the
19 estimate. We're only talking a few months.

20 MR. ELTON: A: No, I think it's -- I certainly -- at
21 the end of Stage 2, we'll be a long way from being
22 able to make, you know, solid and reliable cost
23 estimates. I'm just saying that they will be more
24 solid and reliable in the ends -- the ones at the end
25 of Stage 1. There will at least have been some
26 updating of engineering work and that kind of thing.

1 **Proceeding Time 11:29 a.m. T31**

2 MR. GATHERCOLE: Q: Turning to the expenses that B.C.
3 Hydro is asking the Commission to approve in this
4 proceeding, you're asking approval for \$41 million for
5 Stage 2 expenditures, correct?

6 MR. ELTON: A: Yes.

7 MR. GATHERCOLE: Q: This is a question of clarification
8 and you may not have the answer, but if you can
9 undertake through somebody to come up with the answer.
10 In the 2006 IEA/LTAP decision, the Commission approved
11 spending on Stage 1 on Site C of 14.7 million, and
12 B.C. Hydro expended only 7.7 million total. And the
13 reference there is Exhibit B-3, JIESC IR 1.1.1, page
14 202, a \$7 million difference. If you can take that
15 subject to check.

16 MR. ELTON: A: Yes.

17 MR. GATHERCOLE: Q: And that response also states that
18 the difference will be shifted into future stages of
19 the project. So my question is, does the 41 million
20 requested in this application include the 7 million,
21 or is in addition to the 7 million? In other words,
22 what are the expenditures that will in fact be made on
23 Stage 2?

24 MR. ELTON: A: So there will be a full explanation of
25 that on Panel 4, Mr. Savidant.

26 MR. GATHERCOLE: Q: So you can give Panel 4 a heads-up.

1 MR. ELTON: A: Thank you.

2 MR. GATHERCOLE: Q: Now, if you could turn to Exhibit
3 B-4, PVEA IRs 2.1.1 and 2.1.2. Do you have that?

4 MR. ELTON: A: 2.1.1?

5 MR. GATHERCOLE: Q: Yes.

6 MR. ELTON: A: Yes.

7 MR. GATHERCOLE: Q: And the reason that I asked that
8 question was I was concerned that you were asking for
9 approval in this proceeding, and because of various
10 adjournments it seemed likely that the final decision
11 of the Commission would not come down until almost the
12 end of Stage 2. And so I ask, how will this impact on
13 how B.C. Hydro proceeds with Phase 2? And your
14 indication is that the B.C. Government directed B.C.
15 Hydro to proceed to Stage 2 of Site C through the
16 release of the 2007 Energy Plan. There will be no
17 impact on the work. The work was just going to
18 continue.

19 And my first question is, you talk here
20 about a direction. I take it what you're referring to
21 is what we discussed a few minutes ago with respect to
22 what's in the Energy Plan?

23 MR. ELTON: A: It's what's in the Energy Plan. I mean,
24 again the word "direction" is not necessarily -- does
25 not necessarily relate to a legal direction.

26 MR. GATHERCOLE: Q: But you treated those words as a

1 direction to proceed to Stage 2, because I thought you
2 said earlier that you didn't see that as a direction
3 with respect to stages.

4 MR. GODSOE: Could I just clarify, did we ever refer to
5 page 23 of the Energy Plan, the 2007 Energy Plan?
6 Because Site C is clearly referred to there, and I
7 thought I heard my friend saying it was only referred
8 to at the beginning of --

9 MR. GATHERCOLE: I said the only thing that I saw that
10 related to a direction was the words on page -- that I
11 referred to.

12 MR. GODSOE: Well, this does talk about entering into,
13 "will enter into initial discussions". It might be
14 helpful for everybody who's here.

15 MR. ELTON: A: Thank you.

16 MR. GATHERCOLE: Q: And at 2.1.2 -- oh, sorry.

17 MR. ELTON: A: Yeah, I mean, I think the paragraph on
18 page 23 is an expansion of the paragraph on page 4.
19 I'm now in the Energy Plan. But I mean the wording of
20 both is "B.C. Hydro and the province will enter into
21 initial discussions". So, you know, it then talks
22 about the decision-making process and Site C includes
23 various things. So, I mean, we certainly believe that
24 the Energy Plan requires us to enter into discussions
25 as we discussed, and to do various things. I think
26 the question of whether or not we've prudently acted

1 in response to that will be something that will be
2 discussed at a different date. And as the response to
3 the IR makes clear, we have gone ahead with Stage 2 on
4 that understanding.

5 **Proceeding Time 11:34 a.m. T32**

6 MR. GATHERCOLE: Q: And 2.1.2, the next IR, you
7 indicate that you will substantially spend \$41 million
8 requested by the time the Commission decision comes
9 out.

10 MR. ELTON: A: Yes.

11 MR. GATHERCOLE: Q: Is it B.C. Hydro's position that,
12 because of what's in the Energy Plan, the Commission
13 has no alternative but to approve the Stage 2
14 expenses?

15 MR. ELTON: A: I've said, I think more than once, the
16 prudence of those expenses is definitely something
17 that the Commission will be looking at.

18 MR. GATHERCOLE: Q: And then what happens to -- who's
19 responsible if the Commission should disallow them in
20 whole or in part?

21 MR. GODSOE: I think we're getting into legal
22 interpretation of how Section 44.1 interacts with the
23 revenue requirements, which I'm happy to address in
24 argument, but I do think is getting into legal
25 interpretations.

26 MR. GATHERCOLE: Fair enough.

1 MR. GATHERCOLE: Q: Finally, Mr. Elton, on Friday I
2 provided your counsel with a copy of a letter
3 addressed to you dated January 26, 2009 from Ken and
4 Arlene Boon in Fort St. John.

5 MR. ELTON: A: Yes.

6 MR. GATHERCOLE: Q: Have you received that letter?

7 MR. ELTON: A: I did.

8 MR. GATHERCOLE: Q: Could we -- I'll just mark it -- I
9 don't intend to get into the details with you, I just
10 wanted to make sure we had it as part of the record.

11 It's -- that would be Exhibit C12-4.

12 THE HEARING OFFICER: C12-4.

13 (ONE-PAGE LETTER DATED JANUARY 26, 2009 FROM KEN &
14 ARLENE BOON TO BOB ELTON, MARKED EXHIBIT C12-4)

15 MR. GATHERCOLE: Q: Have you had a chance to reply to
16 it yet?

17 MR. ELTON: A: I don't know whether we've replied to
18 the letter.

19 MR. GATHERCOLE: Q: Could you undertake to check and,
20 if a reply has been made, if you could provide it
21 prior to Panel 4?

22 MR. ELTON: A: Yes.

23 MR. GATHERCOLE: Q: Thank you.

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

25 **Information Request**

26 MR. GATHERCOLE: Q: Without going into detail, you will

1 agree that the letter expresses considerable concern
2 on the part of people in northeastern B.C. about the
3 consultation process?

4 MR. ELTON: A: Yes.

5 MR. GATHERCOLE: Q: Have you received other indications
6 of this concern?

7 MR. ELTON: A: We have received -- you know, as you can
8 imagine, we've received a variety of responses to the
9 consultation we've carried out. So let me be clear
10 that I believed that -- I believe that we carried out
11 or attempted to carry out a consultation that would
12 genuinely listen to all shades of opinion. I will
13 reiterate that we have made no decision on Site C.
14 And so I think with any kind of consultation process,
15 I mean, there's a big human factor involved here, that
16 I understand fully that individuals are coming out to
17 consultation meetings, they're dealing with what they
18 perceive to be a large company that they probably
19 perceive to have made a decision, and I think it's
20 very hard for anyone to feel completely served by a
21 consultation process.

22 I think our job is to listen to and record
23 faithfully and exhaustively the comments that have
24 been made, and to make sure that they're reflected in,
25 you know, whatever reports -- we made a habit of -- we
26 made a practice at the end of Phase 1 of giving very

1 exhaustive reporting on the consultation and we will
2 do the same thing here, and I think it will be
3 interesting then to see whether that range of opinions
4 is fully reflected. I believe it will be.

5 MR. GATHERCOLE: Q: Thank you. Now, the Energy Plan
6 refers to the government and B.C. Hydro carrying out
7 consultation.

8 MR. ELTON: A: Yes.

9 MR. GATHERCOLE: Q: Who is primarily responsible? I
10 know you're primarily responsible for paying for it,
11 but --

12 MR. ELTON: A: In terms of the consultation with
13 stakeholders and First Nations, B.C. Hydro is doing
14 the consultation. To the extent -- although I should
15 qualify that. There may well be times with First
16 Nations when, because of other issues, government may
17 be involved. In terms of consultation with, for
18 example, the government of Alberta or the government
19 of the Northwest Territories, the government -- the
20 British Columbia government, I believe, will lead
21 those negotiations -- or, sorry, will lead that
22 consultation. Although again, we will be very much at
23 the table.

24 MR. GATHERCOLE: Q: Does the government have any role
25 at all in the public consultation process?

26 MR. ELTON: A: That's really a separate decision for

1 government. In other words, we've tried to design a
2 process that doesn't require them to be leading any
3 part of it. I think individual -- you know,
4 government will obviously, as time goes on, think
5 about what it wants to do.

6 MR. GATHERCOLE: Thank you, Mr. Elton. Thank you, Mr.
7 Chairperson.

8 MR. ELTON: A: Thank you.

9 THE CHAIRPERSON: Who's next?

10 Good morning, Mr. Oulton. As we're
11 approaching the lunch break, probably best you start
12 and make -- when you find yourself at a convenient
13 time, round around five to twelve, let us know.

14 MR. OULTON: I am in your hands.

15 THE CHAIRPERSON: No, I am in your hands there.

16 MR. OULTON: Mr. Chair, I expect the first area that I
17 will be canvassing on cross-examination, which I'm
18 sure will come as a surprise to the panel, being
19 Burrard, is going to take me well past the noon hour.
20 There probably will be a convenient time, but I'm
21 content to break now and come back 20 minutes early,
22 or start now and hope for the best.

23 THE CHAIRPERSON: I think we'll start now and hope for
24 the best.

25 MR. OULTON: All right.

26 THE CHAIRPERSON: But like I say, when you come to a

1 convenient spot, let me know.

2 MR. OULTON: All right.

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

4 **CROSS-EXAMINATION BY MR. OULTON:**

5 MR. OULTON: Q: Good afternoon -- or good morning,
6 actually. I'm already losing track of time.

7 MR. ELTON: A: Good morning after the break.

8 MR. OULTON: Q: Good morning, Mr. Elton. Good morning,
9 Ms. Van Ruyven.

10 I understand from Mr. Godsoe's opening that
11 the two of you, as well as Panel 2, are primarily
12 responsible for dealing with policy questions, and I
13 invite you to tell me when my questions are of such a
14 detail that I should be referring them elsewhere.

15 MR. ELTON: A: Thank you.

16 MR. OULTON: Q: As I indicated, the first topic, which
17 I'm sure comes as a great surprise, is I'd like to
18 talk about Burrard. You're both familiar with the
19 Burrard Thermal Generating Station, I take it.

20 MR. ELTON: A: Yes.

21 MR. OULTON: Q: And to your knowledge and
22 understanding, it's an electricity generating facility
23 within the province, within the meaning of Special
24 Direction 10, and I'm not looking for a legal
25 conclusion but that's your understanding, correct?

26 MR. ELTON: A: Yes.

1 MR. OULTON: Q: And it's been a longtime generation
2 asset of B.C. Hydro, correct?

3 MR. ELTON: A: Yes.

4 MR. OULTON: Q: And it's a unique asset, one with
5 tremendous value, I think you said, on Friday, Mr.
6 Elton.

7 MR. ELTON: A: Yes.

8 MR. OULTON: Q: And it's important in a number of ways,
9 and one of these is from a planning perspective it has
10 a firm energy capacity that B.C. Hydro can draw upon
11 when it needs to. Is that correct?

12 MR. ELTON: A: A firm energy capability or a capacity?

13 MR. OULTON: Q: Capability.

14 MR. ELTON: A: A firm energy capability, yes.

15 MR. OULTON: Q: And that capability extends up to
16 approximately 7,000 gigawatt hours per year, is that
17 correct? That's it's rated capability?

18 MR. ELTON: A: Yeah, I think -- Panel 2 can get into
19 this. I think we've used a practical maximum of 6100,
20 but I could check that. Or Panel 2 actually could
21 give you more on that.

22 MR. OULTON: Q: All right. I just -- I note that
23 there's a publication on your website that notes that
24 it's 7,500 gigawatt hour per year facility, but I take
25 your point that for practical purposes you set a limit
26 of 6100. Is that fair?

1 MR. ELTON: A: Yes. Yes. Again, I think Panel 2 could
2 help you on that.

3 MR. OULTON: Q: All right. And in the LTAP, B.C. Hydro
4 proposes only to rely on about half of this capacity,
5 capability for planning purposes, correct?

6 MR. ELTON: A: Yes.

7 MR. OULTON: Q: Again, you're only seeking approval to
8 rely on about 3,000 gigawatt hours per year for
9 planning purposes?

10 MR. ELTON: A: We are seeking 3,000. I think the word
11 "only" is your qualifier.

12 MR. OULTON: Q: All right. Point taken, Mr. Elton.
13 You'll agree with me that there's a distinction
14 between planning and operation.

15 MR. ELTON: A: Yes.

16 MR. OULTON: Q: And in broad terms, planning refers to
17 whether B.C. Hydro has sufficient resource under its
18 control to meet its needs. Is that a fair
19 description?

20 MR. ELTON: A: Broadly speaking, yes.

21 MR. OULTON: Q: And operation, on the other hand, is
22 what resources are actually used in any given
23 situation to meet those needs.

24 MR. ELTON: A: Yes, and the criteria that you would use
25 to make those decisions.

26 MR. OULTON: Q: And I believe you noted on Friday, Mr.

1 Elton, that B.C. Hydro still intends to operate its
2 system broadly, and in particular Burrard, in the
3 manner that's most efficient and cost-effective,
4 notwithstanding whatever planning considerations have
5 been set out in the long term.

6 MR. ELTON: A: I think because I did -- we did canvass
7 this, it might be useful to go to the transcripts
8 because I think it, you know, there was quite a lot of
9 discussion about this and it might be useful to look
10 at what I said in answer to your questions.

11 MR. OULTON: Q: All right. The reference I have here,
12 and I didn't bring a full copy of the transcript, is
13 Volume 4, page 449, lines 4 to 9. And I'll take this
14 opportunity to grab my copy.

15 MR. ELTON: A: So yes, I have page 449.

16 MR. OULTON: Q: All right, and I think the question
17 that you're responding to is set out on the previous
18 page starting at line 22, and it's a question for Mr.
19 Austin where he says,
20 "So the question that I have is, assuming
21 it's capable of production 3,000 gigawatt
22 hours..."

23 That's a reference to Burrard to your recollection?

24 MR. ELTON: A: Yes. Yes.

25 MR. OULTON: Q: And it says,
26 " ...might there be a big difference in

1 reality in terms of what actually happens in
2 relation to the plant,..."

3 And he goes on to talk about its age and its
4 reliability, and the fact that it's not a brand-new
5 asset.

6 **Proceeding Time 11:45 a.m. T34**

7 And then this is where you answer,

8 " Thank you. What we will do is -- you
9 know, we've just described for planning
10 purposes what the SD 10 says. What we will
11 do, as we've always done, is operate our
12 system, or the system as efficiently as we
13 can, and that means at any given time making
14 what we believe to be the right marginal
15 decision with respect to the assets that are
16 available and what their marginal cost is.
17 ..."

18 And so I took that to mean that you were going to
19 operate the system, including Burrard, in the most
20 efficient and cost-effective manner.

21 MR. ELTON: A: Yes.

22 MR. OULTON: Q: And what you're referring to there is,
23 there is a distinction between how Burrard is treated
24 for planning purposes and what may -- what will
25 actually happen in its operation, for a variety of
26 considerations. I think they're referred to as

1 "economic dispatch" considerations.

2 MR. ELTON: A: Yes. There's a distinction between what
3 we use for planning purposes and what is most likely
4 to happen. In other words, you know, there is
5 obviously a wide range of possible outcomes. But it's
6 most likely that we would actually use Burrard less
7 than we plan to use it. And again, Panel 2 could give
8 you more detail on that.

9 MR. OULTON: Q: All right. And in the past, B.C. Hydro
10 has historically relied on the 6100 figure that you
11 were speaking of earlier for Burrard for planning
12 purposes, is that correct?

13 MR. ELTON: A: I believe so, yes.

14 MR. OULTON: Q: In particular, subject to check, in the
15 2006 LTAP, B.C. Hydro relied upon Burrard for 6100
16 gigawatt hours per year up to and including 2015.

17 MR. ELTON: A: Yes.

18 MR. OULTON: Q: And I'm correct that Burrard has not
19 operated at that level at any time in recent years, is
20 that correct?

21 MR. ELTON: A: That's correct.

22 MR. OULTON: Q: In fact, in the past 40 years, Burrard
23 has operated, on average, around 1100 gigawatt hours
24 per year, is that correct?

25 MR. ELTON: A: Could you show me a document that you
26 must have got that number from?

1 MR. OULTON: Q: Certainly. It's page 5-25 of Exhibit
2 B-1. It's the LTAP application. And in particular, I
3 took that partly from Figure 5-7, which sets out
4 Burrard's actual annual generation from, as I read it,
5 1961 through to 2006. In the paragraph immediately
6 above that table, it describes what is depicted there,
7 and it says,

8 "Figure 5-7 shows a chronological plot of
9 actual generation from Burrard over its
10 operating life..."

11 And it says:

12 "The swing operation of Burrard is reflected
13 in the historical annual outputs from
14 Burrard that show, since 1970 ..."

15 And that's where I said "approximately 40 years",

16 "... the plan has undergone seven years of
17 relatively heavy operation ..."

18 Which would be more than 3,000,

19 "... seven years of intermediate operation ..."

20 So between 1,000 and 3,000,

21 "... and 24 years of low operation."

22 Which would be less than 1,000 gigawatt-hours per
23 year.

24 "The historical average annual generation
25 corresponds to approximately 1100 gigawatt
26 hours per year."

1 MR. ELTON: A: Yes.

2 MR. OULTON: Q: And again, the maximum that we've seen
3 in that period was in 1989, where it hit 4200 gigawatt
4 hours per year, correct?

5 MR. ELTON: A: Yes.

6 MR. OULTON: Q: And that's not the norm, I would
7 suggest.

8 MR. ELTON: A: Well, the average, as you said, is 1100,
9 and so -- I mean, that's not -- I guess the norm would
10 be the median. I'm not sure what that is, but
11 certainly 4200 could not be the norm, as it's the
12 highest.

13 MR. OULTON: Q: Yes. And as I understand it, what
14 essentially occurred in the past is B.C. Hydro relied
15 on Burrard for 6100, or I'm going to use the figure
16 6,000, just because it's a nice round number; 6,000
17 gigawatt hours per year for planning purposes, but
18 when it came to the actual operation, it only operated
19 the station at whatever level was required to achieve
20 -- and this is another phrase that I've seen in the
21 application -- "system reliability and support". Is
22 that fair to say?

23 MR. ELTON: A: Yes.

24 MR. OULTON: Q: And what B.C. Hydro would essentially
25 do is displace any power it needed in excess of that
26 level, using other sources, is that correct?

1 MR. ELTON: A: Well, at any given time the decision
2 would be made as to what to run and, for example, as
3 long as there was an import available from a gas plant
4 that was more efficient then, given that the price of
5 gas would be the same for Burrard or that other gas
6 plant, and given that there were always more efficient
7 gas plants because of age, there would almost always
8 be an alternative, which was to import from the other
9 gas plant.

10 MR. OULTON: Q: Okay. And this is something that B.C.
11 Hydro refers to as the "economic dispatch" of Burrard?

12 MR. ELTON: A: Yes.

13 MR. OULTON: Q: And what that refers to is, for
14 anything over and above the system reliability and
15 support level, it's more economical to use other
16 sources than it is Burrard, in most circumstances.

17 MR. ELTON: A: Yes. The decision is made, you know,
18 frequently, and so based on the knowledge of what
19 sources are available and what the marginal cost is
20 that we should be prepared to spend, yes.

21 MR. OULTON: Q: And I know you referred to imports from
22 other gas-fired generation, the power that's used to
23 displace Burrard, it's not always market power, is it?

24 **Proceeding Time 11:51 a.m. T35**

25 MR. ELTON: A: No. Again, Panel 2 would give you the
26 chapter and verse on what, in practice, has been used

1 to displace Burrard.

2 MR. OULTON: Q: In broad terms, there are domestic
3 resources that are used, such as the non-firm power
4 that's generally available in many years from B.C.
5 Hydro's own Heritage resources, is that correct?

6 MR. ELTON: A: Yes, depending on the weather and a lot
7 of other things, yes.

8 MR. OULTON: Q: Yes. And there's also non-firm energy
9 from Alcan?

10 MR. ELTON: A: Yes.

11 MR. OULTON: Q: And non-firm that's available from
12 IPPs.

13 MR. ELTON: A: Yes.

14 MR. OULTON: Q: And B.C. Hydro has done models and
15 projections in connection with preparing this LTAP
16 application, of what Burrard's operations are expected
17 to look like going forward under the various scenarios
18 that it tested. Is that correct?

19 MR. ELTON: A: Yes.

20 MR. OULTON: Q: And under each of these models, they
21 all show that essentially zero gigawatt hours per year
22 of economic dispatch for Burrard in the period that's
23 being covered by this LTAP.

24 MR. ELTON: A: I think there's an IR on that, which we
25 probably should look at together.

26 MR. OULTON: Q: That would be BCUC 1.102.1, I believe,

1 which I was about to take you to.

2 MR. ELTON: A: I'm waiting for Mr. Godsoe to tell me,
3 but I don't know personally. I think that sounds
4 about right, but let's get that.

5 MR. OULTON: Do I have that right, Mr. Godsoe?

6 MR. GODSOE: That's right.

7 MR. OULTON: Q: That's good. I believe it's the third
8 full paragraph on the first --

9 MR. ELTON: A: Could you give me the reference again to
10 make sure I have the right one?

11 MR. OULTON: Q: It's the response to BCUC IR 1.102.1.

12 MR. ELTON: A: Yeah.

13 MR. OULTON: Q: And that's from Exhibit B-3.

14 MR. ELTON: A: Yes, this is the one I have, thank you.

15 MR. OULTON: Q: And I think the paragraph is the third
16 paragraph in the response?

17 MR. ELTON: A: Yes.

18 MR. OULTON: Q: And what that says is that the annual
19 energy output from Burrard is modelled, it shows zero
20 gigawatt hours per year economic dispatch in all
21 portfolios, and that includes the scenario where
22 Burrard was relied upon for 6,000 gigawatt hours per
23 year, is that correct?

24 MR. ELTON: A: What it says, yes.

25 MR. OULTON: Q: And what this means, and perhaps this
26 is a question for Panel 2, but if you have an

1 understanding of this I would ask that you provide
2 your views. But as I understand it, it means that if
3 B.C. Hydro relies upon Burrard for 6,000 gigawatt
4 hours per year for planning purposes, it anticipates
5 that Burrard would actually operate at much below that
6 level, in fact a similar level, the system reliability
7 and support level in all scenarios, including 6,000.

8 MR. ELTON: A: I'm not sure I fully understood your
9 question. Do you mind breaking it down?

10 MR. OULTON: Q: What I understand this part of the
11 response to be saying is that whether B.C. Hydro
12 relies upon Burrard for 6,000 gigawatt hours per years
13 for planning purposes, or 3,000, or 600, which I
14 believe were the three primary scenarios that were
15 modelled, they anticipate zero gigawatt hours per year
16 economic dispatch, which I understand to mean they
17 expect Burrard's operation to be at the system
18 reliability and support level, the minimum levels in
19 all scenarios.

20 MR. ELTON: A: And that level is 600, I think, or
21 approximately 600 gigawatt hours. Yes.

22 MR. OULTON: Q: And again, that's because Burrard's
23 capability is displaced by other, more economic
24 sources once you exceed that system reliability and
25 support.

26 MR. ELTON: A: Yes. And just to be clear, the comment

1 just made about the 600, if you go to page 3 of 4,
2 first paragraph, that is where we talk about excluding
3 economic dispatch, which is what you were just asking
4 about, that an estimate of 600 has been assumed for
5 system reliability and support, and that obviously
6 that number could go up -- go higher or lower
7 depending on any circumstances.

8 MR. OULTON: Q: Yeah, and there are a number of
9 circumstances that are identified in that particular
10 part of the response, none of which have to do with
11 the level that Burrard has relied upon for planning
12 purposes, is that fair to say?

13 MR. ELTON: A: None of them have to do with the
14 economic dispatch number.

15 MR. OULTON: I note the time, Mr. Chair. This is
16 probably a convenient spot to break.

17 THE CHAIRPERSON: Very good, we shall break.

18 Mr. Fulton, is it 90 minutes? I don't want
19 to -- an hour and a half?

20 MR. FULTON: I think, in an effort to redeem myself with
21 my colleagues, Mr. Chairman, I think we could probably
22 resume at 1:30.

23 MR. FULTON: Let's do that then. Thank you.

24 **(PROCEEDINGS ADJOURNED AT 11:51 A.M.)**

25 **(PROCEEDINGS RESUMED AT 1:30 P.M.)** **T36/37**

26 THE CHAIRPERSON: Please be seated.

1 Mr. Godsoe.

2 MR. GODSOE: Mr. Chairman, Commissioners, I have one
3 preliminary matter. It concerns errata to transcript
4 volume 4, page 519, line 17. There's a reference to
5 "tech capital", small t-e-c-h, and that should read
6 capital T-e-c-k, as in "Teck Cominco".

7 THE CHAIRPERSON: Okay, thank you. Mr. Oulton, please
8 proceed.

9 **CROSS-EXAMINATION BY MR. OULTON (Continued):**

10 MR. OULTON: Q: Mr. Chairman, Commissioners, good
11 afternoon. Good afternoon, panel.

12 Before the break, we were dealing with the
13 response given to BCUC IR 1.102.1, and before moving
14 on, I'd like to ask a couple of questions relating to
15 the matters raised in that response, the first of
16 which deals with Table 5-8, and I ask first whether
17 you're familiar with that table and can -- comfortable
18 giving answers regarding what it sets out, or if
19 that's a matter that I should refer to Panel 2.

20 MR. ELTON: A: I think it's best referred to Panel 2.

21 MR. OULTON: Q: All right. And second, relates to the
22 table at the conclusion of that IR response, which as
23 I understand it sets out the relative contribution of
24 various sources to the power that displaces Burrard.
25 And again, is that something I should refer to Panel
26 2, or is that something --

1 MR. ELTON: A: Again, I think Panel 2 would be good.

2 MR. OULTON: Q: Then moving on, you'd agree with me
3 that it's in the best interests of ratepayers for B.C.
4 Hydro to secure reliable supply at the lowest prices
5 it can, correct?

6 MR. ELTON: A: Yes. There has been the usual -- with
7 the usual qualifier around the lowest prices -- you
8 know, we've discussed what that means, in terms of, it
9 includes various factors as well as what today's
10 lowest cost is, but, yes.

11 MR. OULTON: Q: And you'll also agree that, prior to
12 2016, there is no restriction on B.C. Hydro's ability
13 to rely on imports of market power to satisfy its
14 capacity -- or its electricity needs.

15 MR. ELTON: A: What do you mean by "no restrictions"?

16 MR. OULTON: Q: No legal restrictions. I appreciate
17 there is transmission constraints and the like, but no
18 legal requirement saying you can't rely on it.

19 MR. ELTON: A: There is no legal requirement. I mean,
20 I think there is a general policy direction which
21 government has set that we're obviously interested in
22 following, but there is no legal requirement -- no
23 legal restraint.

24 **Proceeding Time 1:32 p.m. T38**

25 MR. OULTON: Q: The legal ramifications of Special
26 Direction 10, namely self-sufficiency, come into play

1 in 2016, correct?

2 MR. ELTON: A: I think the wording is "by 2016" and so
3 it doesn't -- it certainly doesn't preclude getting
4 there earlier. It means you cannot get there later.

5 MR. OULTON: Q: So the requirement is to be there at
6 2016 but there's no restriction on what B.C. Hydro
7 does in the interim.

8 MR. ELTON: A: I think I answered that, yeah.

9 MR. OULTON: Q: You'd agree that market power can be
10 used to displace Burrard's capability in its actual
11 operation. Is that correct?

12 MR. ELTON: A: Did you say "market power"?

13 MR. OULTON: Q: Yes.

14 MR. ELTON: A: Oh sorry, you mean power from the
15 market.

16 MR. OULTON: Q: Yes.

17 MR. ELTON: A: I'm sorry, no, I'm sorry, that was
18 something --

19 MR. OULTON: Q: Not purchasing power.

20 MR. ELTON: A: No, I was having a flashback to a
21 different series of conversations. I'm sorry. I'm
22 sorry, could you then repeat the question?

23 MR. OULTON: Q: You agree with me that power from the
24 market can and is used to displace Burrard's -- the
25 capability that's assumed for planning purposes for
26 Burrard and its actual operation.

1 MR. ELTON: A: Well, I think as I've said, as I said
2 last week and as we were discussing earlier, there was
3 a need for us to bear in mind on the one hand what we
4 rely on for planning purposes, which is subject to
5 various practical limitations around, you know,
6 technical limitations and permitting limitations. And
7 then we need to -- and then we also look at, in doing
8 out day-to-day operations, we look at what would be
9 the most economic thing to do that day. They're two
10 separate but important things.

11 MR. OULTON: Q: Right, and in choosing what to do on
12 any given day, power from the market is one of the
13 sources of power that can and is used to displace
14 Burrard's power that has been assumed for planning
15 purposes, correct?

16 MR. ELTON: A: Yes.

17 MR. OULTON: Q: And you're aware that there's a forward
18 or a futures market for electricity?

19 MR. ELTON: A: Yes.

20 MR. OULTON: Q: And you're aware -- or are you aware
21 that recently the price for a five-year forward firm
22 contract delivered at mid-C was approximately 63 to 64
23 dollars per megawatt hour in Canadian dollars?

24 MR. ELTON: A: I'd have to check that. I mean, I'm
25 generally aware of those prices but I have to check
26 that.

1 MR. GODSOE: I think the IR is Exhibit B-12, response to
2 BCCR 3.278.1.

3 MR. OULTON: Q: Mr. Godsoe is correct, as usual.

4 MR. ELTON: A: And the number again was 3.270.1?

5 MR. OULTON: Q: Yes.

6 MR. ELTON: A: Okay.

7 MR. OULTON: Q: It's page 3 of 4.

8 MR. ELTON: A: Yes, this was a December 2008 quote.

9 Yes.

10 MR. OULTON: Q: And 63 to 64 dollars per megawatt hour
11 that's listed there, that includes losses and is for
12 delivery to the B.C. border, is that correct?

13 MR. ELTON: A: Yes.

14 **Proceeding Time 1:36 p.m. T39**

15 MR. OULTON: Q: And that's a price that's considerably
16 lower than the average price set under the IPP
17 contracts awarded under the F2006 Call, correct?

18 MR. ELTON: A: Yes.

19 MR. OULTON: Q: And do you expect the prices under the
20 Clean Call to be considerably lower than those awarded
21 under the F2006 Call?

22 MS. VAN RUYVEN: A: Well, as I think I stated this last
23 week. We don't know what those prices are going to be
24 yet in the Clean Power Call, so I can't answer that.

25 MR. OULTON: Q: You have considerable experience doing
26 -- implementing and obtaining contracts through the

1 Call process for B.C. Hydro, do you not?

2 MS. VAN RUYVEN: A: We do. We were fairly successful
3 in the 2006 Call, in awarding 38 electricity purchase
4 agreements, but we're not at that part of the process
5 in the Clean Power Call where we have certainty of
6 prices, because it's a Request For Proposal, and
7 there's a negotiation stage. We haven't done the
8 interconnection cost study. So we really don't have
9 certainty on the costs.

10 MR. OULTON: Q: Right. I appreciate you haven't nailed
11 down the numbers yet, but does B.C. Hydro have any
12 expectation of what prices it may be looking at in the
13 Clean Call?

14 MS. VAN RUYVEN: A: Not that we're prepared to talk
15 about at this point in time.

16 MR. OULTON: Q: Do you have any expectation of how
17 those may measure up in relation to the current prices
18 that you're paying under the F2006 Call?

19 MS. VAN RUYVEN: A: Again, it would be too early to
20 speculate on a range or how that's going to stack up.

21 MR. OULTON: Q: It's fair to say that recent Calls have
22 delivered higher prices than Calls in previous years.
23 Is that fair to say?

24 MS. VAN RUYVEN: A: Well, the 2006 Call, the average
25 adjusted bid price was \$88. The 2003 Call, they were
26 all under \$55, because we had set a cap. So that was

1 obviously a difference, and also three years later, so
2 costs had gone up.

3 MR. OULTON: Q: But you'll agree with me that at
4 present there is uncertainty as to what price you will
5 be able to achieve in the Clean Call.

6 MS. VAN RUYVEN: A: Yes, I'd agree, we're not at that
7 point in the process where we have certainty of what
8 prices we potentially will be paying.

9 I would point out, though, that the
10 comparison you made in the last IR was comparing a
11 five-year contract to, on average, the 2006 Call was
12 worth -- those were 31-year contracts. So those are
13 not necessarily comparable products, 5-year versus 31
14 years. You've got a lot more certainty on a longer-
15 term contract.

16 MR. OULTON: Q: And in the Clean Call, is it -- it's
17 intended to have long-term contracts coming out of
18 that Call.

19 MS. VAN RUYVEN: A: Well, again, in the Clean Power
20 Call, they can choose the term of their contract. I
21 believe it's anywhere between 15 and 40 years.

22 MR. OULTON: Q: Would you agree with me that 63 to 64
23 dollars per megawatt hour is a reasonable price for
24 electricity at present?

25 MS. VAN RUYVEN: A: Well, again, that's a five-year
26 contract. So I don't think you can compare a five-

1 year contract to a 31-year contract.

2 MR. OULTON: Q: I'm not asking you to. I'm asking you
3 whether you think a 63 to 64 dollars cost per megawatt
4 hour is a reasonable price, in view of B.C. Hydro's
5 current resource portfolio.

6 MS. VAN RUYVEN: A: It's probably a reasonable price to
7 pay for a five-year contract.

8 **Proceeding Time 1:39 p.m. T40**

9 MR. OULTON: Q: What efforts has B.C. Hydro made to
10 take advantage of this -- or first let me ask, to your
11 knowledge, is 63 to 64 dollars for this type of
12 contract a low price in -- like is this a low market
13 price at present, compared to recent?

14 MS. VAN RUYVEN: A: B.C. Hydro generally doesn't
15 procure five-year contracts, so we don't have a lot of
16 experience knowing -- I certainly don't have
17 experience knowing whether \$63 is a good price to pay
18 for a five-year contract. Most all of our electricity
19 purchase agreements that we have, we have about 86 of
20 them at present, are significantly longer term than
21 five years.

22 MR. ELTON: A: Is your question -- if you could repeat
23 your question again because I need to understand or we
24 need to understand the context for it. Because
25 obviously it's a -- I mean, I assumed that on that
26 date, that was the market price for a five-year

1 contract. Therefore that is what -- that is a fair
2 price if you want to buy five years' worth of
3 electricity delivered to there. But I'm not sure that
4 was your question.

5 MR. OULTON: Q: No. My instructions are that this is
6 an unprecedented low price for this type of power on
7 the market in a future --

8 MR. GODSOE: With all due respect, that's giving
9 evidence, and I would suggest that maybe you go to
10 Panel 2 -- sorry. Start with Panel 3 in the
11 electricity price forecast, and then complete with
12 Panel 4 on how the 63 to 64 per megawatt hours
13 compare.

14 MR. OULTON: I take Mr. Godsoe's point that dealing the
15 particulars of the price is appropriate for the other
16 panels.

17 MR. OULTON: Q: What efforts has B.C. Hydro made, if
18 any, to take advantage of the current prices available
19 on the forward or futures market for electricity.

20 MR. ELTON: A: I think, again, if you're talking mainly
21 about shorter-term contracts -- so we run our business
22 in looking at a zero to three-year range and a longer-
23 term range. The person with responsibility for
24 running the business on the longer-term range is Ms.
25 Van Ruyven with respect of the long-term acquisition
26 plan. We make operational decisions in a zero to

1 three-year range. Those decisions are actually made
2 by -- or under the supervision of Mr. O'Riley who's on
3 Panel 2. I'm not sure whether Panel 2 is there to
4 cover that kind of issue, but certainly he's equipped
5 to answer those kinds of questions.

6 MR. GODSOE: Q: All right, I'll defer that question to
7 Mr. O'Riley.

8 Turning back to Special Direction No. 10
9 and the self-sufficiency requirement that comes into
10 play in 2016, would you agree with me that there's
11 nothing in Special Direction 10 that changes B.C.
12 Hydro's ability to displace Burrard's capabilities for
13 planning purposes with other more economic sources of
14 power on an operational basis?

15 **Proceeding Time 1:42 p.m. T41**

16 MR. ELTON: A: I think I read Special Direction 10 in
17 context of the Energy Plan, and the Energy Plan as we
18 discussed last week, does include some references to
19 Burrard. So there is nothing on the face of Special
20 Direction 10 in itself that refers to Burrard. But I
21 do believe that the Energy Plan statements with
22 respect to Burrard should be taken into account.

23 MR. OULTON: Q: So let's turn to the Energy Plan for a
24 moment. You'll agree with me that certain elements of
25 the Energy Plan have been legislated, like Special
26 Direction 10, correct?

1 MR. ELTON: A: Well, legislated, which includes putting
2 them in Special Directions. So either enacted in
3 legislation or put into Special Direction, yes.

4 MR. OULTON: Q: Yes. Special Direction 10, the changes
5 to the *Utilities Commission Act* relating to DSM, those
6 are examples of government action taken to create a
7 legal obligation on B.C. Hydro.

8 MR. ELTON: A: Yes.

9 MR. OULTON: Q: And those -- or a certain --

10 MR. ELTON: A: A legal obligation either on B.C. Hydro
11 or on the Commission, or both, yes.

12 MR. OULTON: Q: Yes. Yes. And that there are other
13 elements of the Energy Plan where no such steps have
14 been taken. Is that correct?

15 MR. ELTON: A: Yes.

16 MR. OULTON: Q: And those elements of the Energy Plan
17 remain policy only.

18 MR. ELTON: A: Yes.

19 MR. OULTON: Q: And there's a level of uncertainty in
20 these. I believe you indicated, I think it was on
21 Thursday, that you never know what policies a future
22 government may adopt or implement or change.

23 MR. ELTON: A: Well, that's true. But that's also true
24 of legislation and directions as well. I mean, I --
25 we have to deal -- I think we all deal with what is
26 here already, and so legislation, directions and

1 policies can all change.

2 MR. OULTON: Q: Would you agree with me that it's
3 easier for a government to change its policy than it
4 is to actually change its legislation?

5 MR. ELTON: A: Yes.

6 MR. OULTON: Q: Now, Burrard is one of the elements of
7 the Energy Plan where there has been no legislative
8 action or Special Direction or the like. Is that
9 correct?

10 MR. ELTON: A: Yes.

11 MR. OULTON: Q: If we turn to the Energy Plan, which is
12 Appendix B-1 to Exhibit B-1, as I understand, Burrard
13 is dealt with in two places. The first is at page 17
14 of 84.

15 MR. ELTON: A: In my version, which is this version,
16 it's page 14, I think.

17 MR. OULTON: Q: Yes, it's page 14, sorry, but at the --
18 the copy that I have has a page reference of page --
19 whatever number it is of 84, and I believe that's a
20 reference to the aggregate page numbers in Appendix B-
21 1, which includes covering pages and the like.

22 MR. ELTON: A: Yes. You -- yes, yes, that's correct.

23 MR. GODSOE: You're both right.

24 MR. ELTON: A: You're right, yes.

25 MR. OULTON: Q: But it's -- I take your point, it is
26 page 14 of the actual Energy Plan.

1 MR. ELTON: A: Right. But you --

2 MR. OULTON: Q: And there's a heading, "Burrard Thermal
3 Generating Station," and this is where the government
4 just outlines what Burrard is and what its thoughts
5 are with respect to Burrard. Is that a fair way to
6 say -- this isn't the policy direction that's coming
7 out of the plan, correct? That comes later.

8 MR. ELTON: A: Yes.

9 MR. OULTON: Q: But in this part, in the first
10 paragraph under the heading "Burrard Thermal
11 Generating Station," the Energy Plan says:

12 "A decision regarding the Burrard Thermal
13 Natural Gas Generating Station is another
14 action that's related to environmentally
15 responsible electricity generation in
16 British Columbia."

17 And would you agree with me that it's the actual
18 operation of Burrard that may or may not have
19 environmental impacts, not how it's used for planning
20 purposes?

21 MR. ELTON: A: The -- it's an interesting question. As
22 I understand the permitting of Burrard, and this is
23 something that Panel 2 will be addressing, the people
24 who handle environmental permits are interested not
25 only in how a plant is expected to operate but also
26 how it may operate. In other words, permits are

1 handed out based on what could happen as well as just
2 what you and I may probably expect to happen.

3 MR. OULTON: Q: To your knowledge, B.C. Hydro currently
4 has all the permits that it needs to operate the
5 Burrard Thermal Station.

6 MR. ELTON: A: I believe it does. And again, Panel 2
7 could give you more detail on that, just as to what
8 those permits mean.

9 MR. OULTON: Q: But without getting into the details of
10 that, to your knowledge, those permits aren't
11 currently in jeopardy. They're not up for expiry, or
12 the -- I guess it's Metro Vancouver hasn't advised
13 B.C. Hydro that they intend to withdraw those permits
14 or anything of the like?

15 MR. GODSOE: I do think that's better directed to Panel
16 2, where we have Dr. Preston and Chris O'Riley,
17 experts on this.

18 MR. OULTON: All right.

19 THE CHAIRPERSON: I think in general terms, as Mr. Elton
20 is responsible for this piece of equipment, I mean --

21 MR. OULTON: That was my the purpose of my question.

22 MR. GODSOE: Well, with all due respect, it was
23 "jeopardy", which is a broad term.

24 THE CHAIRPERSON: I think if Mr. Oulton makes the
25 question more policy-related, I would let it stand.

26 MR. OULTON: Q: To your knowledge, Mr. Elton, has B.C.

1 Hydro received any indication from Metro Vancouver
2 that its permit is going to be revoked or anything to
3 that effect, based on the decisions made in the LTAP?

4 **Proceeding Time 1:48 p.m. T42**

5 MR. ELTON: A: Not to my knowledge. I mean, so, let me
6 answer the question from a policy perspective, and
7 again, you may need to follow up with Panel 2.

8 As I understand it, the question of
9 environmental permitting with respect to Burrard is
10 not just a question of what I expect or what Mr.
11 O'Riley expects the probable operational limits to be.
12 In other words, my understanding, as I would expect,
13 is that Metro Vancouver, as like any permitting body,
14 would look at, you know, what you could use it for.
15 In other words, they're permitting on the basis that
16 you might decide for whatever reason to use it at a
17 certain level. That's what they'll permit. You may
18 decide to use it for less, and you of course can't
19 decide to use it for more.

20 So the discussion of environmental
21 permitting is a very important one. I believe again
22 the IR that we were looking at, or one of the IRs that
23 we were looking at earlier, refers to that, and I
24 think it's 2.215.2, where I think there is a reference
25 there to Lower Mainland Social Licence. I think that
26 discussion, you know, could then be elaborated on in

1 Panel 2.

2 MR. OULTON: Q: And that again is something for Panel
3 2?

4 MR. ELTON: A: Yes. Broadly speaking, my sense of this
5 is that were we arguing for a higher level of planning
6 purpose reliance, that that would -- I'm not saying
7 that it would threaten our existing permits, but that
8 would lead into a much more vigorous debate about the
9 possible environmental impacts of the plant, and that
10 will be a concern. In other words, if we went much
11 above 3,000, my understanding is that we would be
12 saying, albeit for planning purposes, that we could be
13 the largest emitter of greenhouse gases in the
14 province. To me that is a different type of debate.
15 And it isn't just a question of what a particular
16 regulatory body might have done in the past. It's
17 also a discussion of what kind of public debate there
18 might be around the facility that might lead there to
19 be more pressure.

20 So maintaining the flexibility in the
21 operation of Burrard is an important policy issue for
22 us, and I believe that the 3,000 figure that we've got
23 is the right way to do that. And I think I discussed
24 that on Thursday or Friday with one of your
25 colleagues.

26 MR. OULTON: Q: I think you agreed with me earlier, but

1 based on B.C. Hydro's models and forecasts, the actual
2 operation of Burrard is expected to be substantially
3 the same in most years, regardless of whether a firm
4 capability of 3,000 or 6,000 gigawatts is assumed for
5 planning purposes, is that correct?

6 MR. ELTON: A: Yes, there is a fair amount of -- again,
7 we had a discussion earlier about -- for economic
8 dispatch purposes and for other purposes. I think,
9 again I think we've filed evidence to the effect that
10 there is a fair amount of variation on the other
11 purposes, you know, other than economic dispatch, but
12 still that it would still fall below levels of, for
13 example, 3,000.

14 MR. OULTON: Q: Yes. Now, you'll agree with me that
15 the Energy Plan recognizes that Burrard provides
16 significant benefits to B.C. Hydro, correct?

17 MR. ELTON: A: Yes.

18 MR. OULTON: Q: And if we stick with page 14 where we
19 were looking earlier, the plan states that while it
20 supports B.C. Hydro's efforts to replace Burrard with
21 other firm sources by 2014, it suggests that B.C.
22 Hydro can continue to retain Burrard for reliability
23 insurance. Is that a fair characterization of what it
24 says in the last paragraph under Burrard Thermal?

25 MR. ELTON: A: Yes.

26 MR. OULTON: Q: And this is carried forward to the

1 actual policy direction that is included in the plan,
2 which is Policy No. 22 with respect to Burrard, which
3 is at page 57 of 84 which I believe is page 6 of the
4 latter portion of the Energy Plan.

5 MR. ELTON: A: Yes, I have policy -- yes. I have
6 Policy Action 22. And the wording is slightly
7 different. Rather than the word "reliability
8 insurance" it specifically refers to capacity purposes
9 having in the earlier paragraph on page 14 defined --
10 basically said that extra capacity or reliability
11 insurance are equivalents. So, yes, it's the same
12 statement basically.

13 MR. OULTON: Q: As I read this, what it says is that
14 the government supports B.C. Hydro's approach, but
15 it's not making any stipulations on what B.C. Hydro
16 ought to do or has to do with respect to Burrard, is
17 that correct?

18 **Proceeding Time 1:53 p.m. T43**

19 MR. ELTON: A: I think it is. I mean, I think I
20 covered this on Thursday or Friday. It's one of those
21 areas where I believe that government has -- I mean, I
22 always believe, first of all, that these things are
23 written very carefully. I believe that government has
24 deliberately allowed for some flexibility here, and
25 we've chosen to provide what I believe is a flexible
26 solution. It's stated an intent that it would -- that

1 it supports our decision to phase out, but -- sorry,
2 to replace the firm energy supply. But by putting it
3 in that way, and referring to "our decision", I
4 believe it's given us some freedom and flexibility to
5 figure out what is the right thing to do. And so,
6 what we decided to do, as I explained last week, was
7 to get some studies done, to get some facts, so that
8 we would come up with a number that is supported by
9 some facts, and that's what we've tried to.

10 MR. OULTON: Q: And B.C. Hydro has availed itself of
11 this flexibility insofar as it intends to retain
12 Burrard for capacity purposes after 2014, is that
13 correct?

14 MR. ELTON: A: Yes, and again, Panel 2 can expand on
15 this, but I think -- I hope that everyone will agree
16 that the longer we can retain Burrard for capacity
17 purposes, that is likely to be a benefit to everyone.

18 MR. OULTON: Q: I'm fairly confident my clients would
19 agree with that. And I -- we covered this earlier,
20 but unlike the self-sufficient requirement, there's no
21 legislative requirement obliging B.C. Hydro to cut
22 back or curtail Burrard on any specific timetable or
23 anything to that effect.

24 MR. ELTON: A: No, I answered that already. There is
25 no legislative requirement, therefore it's one of
26 those areas where you -- I think you seek to be in the

1 right -- in the same direction as government policy,
2 and you seek to use the flexibility that they've
3 offered.

4 MR. GODSOE: However, there are curtailment provisions in
5 the permit that my friend can explore with Panel 2.
6 So, he said "legislated" and "curtailment". There
7 absolutely are some, but they're in the permit -- the
8 air emission permit. And you can explore that with
9 Panel 2. I don't want to blind-side you, but the fact
10 is, there are those provisions.

11 MR. OULTON: Q: And it's fair to say that the targets
12 set in the LTAP for Burrard are a function of B.C.
13 Hydro's judgment, not any government direction,
14 correct?

15 MR. ELTON: A: Primarily, B.C. Hydro's judgment. I
16 mean, again, we -- subject to the -- our view of the
17 environmental and social licence issues that we
18 already have referred to. And to the technical issues
19 that we've referred to earlier.

20 I agree that it's not a government-derived
21 number.

22 MR. OULTON: Q: Thank you. If we turn to your opening
23 statement for a moment, Mr. Elton, at page 3, I
24 believe this is where you talk about Burrard in the
25 first full paragraph, the bulleted paragraph at the
26 top of page 3. And you state, midway through that

1 paragraph, that Burrard plays a critical role in B.C.
2 Hydro's system with its capacity in the Lower
3 Mainland/Vancouver Island region. You stand by that
4 today, correct?

5 MR. ELTON: A: Yes.

6 MR. OULTON: Q: And it's a critical resource, in B.C.
7 Hydro's resource stack, particularly in light of the
8 fact that 5L83 isn't coming on line for some years.

9 MR. ELTON: A: Yes.

10 MR. OULTON: Q: And then you go on to state that:

11 "...reliance upon Burrard for energy should
12 not risk its role as a capacity resource."

13 When you say "its role as a capacity resource", are
14 you referring to its use in the planning process?

15 MR. ELTON: A: I'm actually referring to its physical
16 existence and the role it plays. There aren't too
17 many other -- I mean, on the one hand, we have an
18 increasing focus on greenhouse gases and green energy,
19 renewable energy and so on. We also have, as I think
20 I mentioned last week, an increasing tendency around
21 all of our plants for people that live near those
22 plants to say, "Look, you know, I'm not sure I want to
23 live near an industrial plant," and for there to be
24 increasing challenges to the flexibility of operating
25 them. If you look at the existence of Burrard, a
26 large relatively mature plant with relatively old

1 technology, in the middle of a built-up area, it's
2 unusual to have something like that still around.
3 There are cities where people have tried to build
4 plants in those kinds of places in the last few years,
5 and it's proved impossible to do so. So, we don't
6 want a situation where people look at planning targets
7 and start to get nervous about whether they want to
8 see the plant there at all.

9 So in other words, I think the first thing
10 is, it's very important that as many people as
11 possible understand the value of Burrard to people in
12 the Lower Mainland and, you know, southern Vancouver
13 Island and so on. And second, that they also
14 understand that in setting these targets for planning
15 purposes as well as relying on it for capacity, that
16 we're acting responsibly and that we're taking into
17 account the environmental concerns that they would
18 have. And I believe that's what we've done. So I
19 think that's what that sentence means.

20 **Proceeding Time 1:58 p.m. T44**

21 MR. OULTON: Q: When you're referring to the
22 environmental concerns and the like that will factor
23 into the decision that you're considered in coming up
24 with the targets in the LTAP, are you referring to
25 social licence here?

26 MR. ELTON: A: Yes. I mean, another example, I mean, I

1 gave you the example of a -- I was thinking actually
2 of our proposed gas plant in Montreal. That was the
3 example I was thinking of. There's also the example
4 near our home, the project near Sumas, which is
5 clearly a cleaner technology, a more efficient plant
6 from a GHG point of view than Burrard, but where
7 because of airshed concerns there were many public
8 concerns. I won't get into the question of whether
9 those -- you know, what are the actual environmental
10 concerns compared with other things in the air shed.
11 But the point was that there was a lot of public
12 opposition to that plant, and the plant ultimately was
13 shelved.

14 So what I'm saying is that there is the
15 actual environmental rules that affect us and affect
16 other operators of plants. There's also the question
17 of public perception of, you know, us as an emitter
18 and of high polluting plants and so on. I'm just
19 saying that it's important that we get the balance
20 right and that we manage the plant in a way that
21 increases our ability to operate it flexibly, and that
22 includes having it available for capacity purposes.

23 MR. OULTON: Q: You may have covered this a bit in your
24 last answer, but you go on in your opening statement
25 to say,

26 "B.C. Hydro believes that it's achieved an

1 appropriate balance between the competing
2 pressures."

3 I take it the competing pressures that you're
4 referring to there are the factors that you just
5 outlined, the social licence versus the regulatory
6 requirements versus the need for energy and its use as
7 a capacity resource.

8 MR. ELTON: A: Yes, and I'll add to that. I mean, you
9 know, the fact that in a previous election campaign
10 the government, which became the government that was
11 elected in 2001, looked like it might be looking at
12 closing Burrard. I mentioned this last week as well.
13 In other words, there is a -- you know, there's
14 pressure -- there has long been pressure to look at
15 just the idea of closing this plant completely. So
16 that is another -- again, in terms of achieving an
17 appropriate balance, you look at all the things I
18 mentioned, including potential public, including
19 potential regulatory -- environmental regulatory
20 pressures and so on, and you also look at where the
21 government might be at if they felt there was a lot of
22 public pressure against the plant.

23 MR. OULTON: Q: Now, that paragraph in your opening
24 statement concludes with a reference to
25 "Burrard will continue its role as providing
26 reliable back-up power to the province at

1 least until 2019."

2 The long-term plan, is it fair to say, for Burrard is
3 to keep it as a reliable back-up resource for B.C.
4 Hydro?

5 MR. ELTON: A: Yes.

6 MR. OULTON: Q: And its use as back-up resource would
7 be unrelated to the capability level assumed from
8 planning purposes, is that correct?

9 MR. ELTON: A: No, I don't think so. I mean, I can
10 understand why somebody would make that argument. But
11 again, for example in the last few years, and Mr.
12 O'Riley can talk about this, we've invested money in
13 making this plant more available to run. The work we
14 had AMEC do was about what would we have to do
15 physically to make sure that it could run at certain
16 levels? So it's not just a question of can it run for
17 two or three days? It's a question of, you know, can
18 it actually run to produce a reasonable amount of
19 energy? So it's not unconnected.

20 In the end, whatever we show as our amount
21 for planning purposes, in my view, should be backed up
22 by some physical ability to produce. Physical ability
23 and social ability, whatever the term is to describe
24 social licence.

25 MR. OULTON: Q: If I take your last comment, what
26 you're saying is Burrard needs to be capable of

1 producing whatever level of power you set for planning
2 purposes.

3 MR. ELTON: A: Yes.

4 MR. OULTON: Q: And capability is physical and
5 technical. Can the plant actually do what you want it
6 to do? And also, you have to have the necessary
7 permits to do so, is that correct?

8 MR. ELTON: A: The permits, and again this concept of
9 social licence. In other words, there's risk, there's
10 risk -- if you suddenly started operating Burrard at a
11 certain level, and suddenly people looked at it every
12 day and realized that it was operating, that could
13 lead to a different type of public debate about it
14 than there is today.

15 MR. OULTON: Q: I think we have your evidence on that
16 debate. But you'll agree that it's the actual
17 operation of Burrard that would have the biggest
18 impact, from an environmental perspective. Leaving
19 aside social licence, I appreciate the public can
20 perceive what it wants to perceive. But when it comes
21 to compliance with a permit level, and the
22 environmental emissions, it's the actual operation of
23 Burrard that's relevant, correct?

24 **Proceeding Time 2:03 p.m. T45**

25 MR. ELTON: A: It's true that it's the actual operation
26 of Burrard that actually emits whatever it emits.

1 MR. OULTON: Q: And I expect Mr. Godsoe may tell me
2 this is a question for Panel 2, but the models that
3 have been done by B.C. Hydro in connection with the
4 LTAP show that even if Burrard was operated at 6,000
5 gigawatt hours per year, it would still be in
6 compliance with its current permit.

7 MR. GODSOE: I think that is to Panel 2, because that's a
8 complications on what background level were used to
9 determine that. There's 98, 99 and 100th background
10 level, and I think Dr. Preston on Panel 2 can explore
11 that. I also would urge my friend to explore actual
12 operations versus planning and limits, because I think
13 there's some evidence there on Metro Vancouver's
14 approach to permitting. So, both questions, I think,
15 should go to Panel 2.

16 MR. OULTON: There will undoubtedly be overlap between my
17 questions.

18 THE CHAIRPERSON: I'm sure you --

19 MR. OULTON: Q: I'm looking for the broad brushstrokes
20 from this panel.

21 Would you agree with me that reliance on
22 Burrard for 3,000 gigawatt hours per year, as opposed
23 to 6,000 gigawatt hours per year, has the effect of
24 creating a notional need for B.C. Hydro to make up
25 that 3,000 gigawatt hours' difference?

26 MR. ELTON: A: Sorry, of creating a what?

1 MR. OULTON: Q: I'd refer to it as a "notional need" or
2 it may be an actual need, in B.C. Hydro's mind, but it
3 -- the downgrade from 6,000 to 3,000 for planning
4 purposes for Burrard, or the reduction in the amount
5 that's used for planning purposes, creates a need of
6 -- for B.C. Hydro to find that 3,000 gigawatt hours
7 from other sources. Is that correct?

8 MR. ELTON: A: Yes.

9 MR. OULTON: Q: All right. And one of those sources is
10 the Clean Call?

11 MR. ELTON: A: Yes.

12 MR. OULTON: Q: All right. And the new facilities, and
13 I acknowledge you don't know the particulars of them,
14 but in general terms, the new generation facilities
15 that would be contemplated in the Clean Call will
16 carry with them certain costs. Is that fair to say?
17 Economic costs to B.C. Hydro?

18 MS. VAN RUYVEN: A: Yes, through the electricity
19 purchase agreements.

20 MR. OULTON: Q: Yeah. And there will also be non-
21 economic developmental costs associated with those?

22 MS. VAN RUYVEN: A: What do you mean by that?

23 MR. OULTON: Q: For example, there will be land and
24 resource costs if the -- say, for wind, you have to
25 have a tract of land that you have to put the turbines
26 on. That land can no longer be used for other

1 purposes.

2 MS. VAN RUYVEN: A: Well, that is all done through the
3 independent power producer that is developing the
4 project, and they are required to get the proper
5 permits from government for that land use, or water
6 use, or whatever their potential project is.

7 MR. OULTON: Q: Right. But you would agree that there
8 are non-economic developmental issues associated with
9 those.

10 MS. VAN RUYVEN: A: Yes. The IPPs, when they're
11 developing a project, have to go through exactly the
12 same process that we do around consultation with First
13 Nations and permitting and land use requirements.

14 MR. OULTON: Q: Right. They have to consider social
15 licence and the like.

16 MS. VAN RUYVEN: A: For -- yes, as part of their risk
17 assessment of actually getting the project built.

18 MR. OULTON: Q: Now, would you agree with me that if
19 Burrard were maintained at 6,000 gigawatt hours per
20 year, there would be no need for additional resources
21 to be added to the B.C. Hydro resource stack before
22 2016?

23 MS. VAN RUYVEN: A: Could you repeat the question?

24 MR. OULTON: Q: Would you agree with me that if Burrard
25 were maintained at 6,000 gigawatt hours per year,
26 there would be no need for B.C. Hydro to acquire

1 additional resources, at least within the short term,
2 to be added to the resource stack before 2016?

3 MS. VAN RUYVEN: A: Yes, if you added -- if you look on
4 page 29 of our evidentiary update, Table 2-10, if you
5 added back 3,000 gigawatt hours on the Heritage
6 thermal, and then you took it right down to the bottom
7 line, of the mid-load forecast surplus deficit, you
8 would end up in a larger surplus if everything else
9 was -- remained equal. So you just add 3,000 to the
10 bottom line there.

11 MR. GODSOE: And it's done so in Exhibit B-12, COPE --
12 response to COPE IR 3.1.4. I'm sure that's where you
13 were going.

14 **Proceeding Time 2:08 p.m. T46**

15 MR. OULTON: Q: Yes. My friend has anticipated where
16 I'm going, as he is want to do.

17 The response given to COPE IR 3.1.4, if we
18 could turn there for a moment, it's in Exhibit B-12.
19 I apologize. I've left it.

20 I think this is consistent with what you
21 just said, Ms. Van Ruyven, but Table 2, which shows
22 the energy load resource balance with Burrard at 6,000
23 and no purchases from the Clean Power Call, shows that
24 there would be a surplus in every scenario up to
25 fiscal 2016, other than a modest shortfall in 2014 and
26 2015. Do you see that?

1 MS. VAN RUYVEN: A: The modest shortfall would be in
2 the high load forecast, is it --

3 MR. OULTON: Q: Yes.

4 MS. VAN RUYVEN: A: Yes, I see that.

5 MR. OULTON: Q: And would you agree with me that in the
6 years 2014-2015 there would be no legal restriction on
7 B.C. Hydro acquiring power from the market to cover
8 any modest shortfall that existed if it was a high
9 load year?

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

11 MR. OULTON: Q: And Special Direction 10 doesn't kick
12 in until after that, correct?

13 MS. VAN RUYVEN: A: It's legally required by 2016.

14 MR. OULTON: Q: Now, am I correct that B.C. Hydro did
15 not perform any social cost analysis to evaluate the
16 non-economic development impacts of the initiatives
17 captured by the 2008 LTAP? Or is that a question that
18 I should put to another panel?

19 MR. GODSOE: I think probably that Panel 3 can explain
20 what was done in the portfolio analysis.

21 MR. OULTON: Thank you, Mr. Godsoe.

22 MR. OULTON: Q: I'd like to turn now to a different
23 topic building on where we just were, and that's the
24 Clean Call. B.C. Hydro originally sought 5,000
25 gigawatt hours per year, correct, approval for that
26 size a call?

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

2 MR. OULTON: Q: And then that was reduced in Exhibit B-
3 10 to 3,000 gigawatt hours per year.

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

5 MR. OULTON: Q: And B.C. Hydro has also advised
6 subsequently that it may purchase more than the 3,000
7 if it considers it cost-effective to do so, is that
8 correct?

9 MS. VAN RUYVEN: A: Yes, that was the letter that has
10 been referenced a couple of times last week.

11 MR. OULTON: Q: And that's Exhibit B-11. Just for the
12 record. We don't need to go there.

13 THE CHAIRPERSON: Mr. Oulton, I don't want to be picky
14 but you said you sought approval. I think what they
15 sought was the Commission's endorsement. I don't --

16 MR. OULTON: I stand corrected, Mr. Chairman.

17 THE CHAIRPERSON: Okay.

18 MR. OULTON: Q: Indeed what you sought was the
19 Commission's endorsement of the Clean Call of the
20 sizes that we spoke of.

21 MS. VAN RUYVEN: A: That's the effect. Maybe we should
22 even look at the wording in the order sought, but I'm
23 pretty sure --

24 THE CHAIRPERSON: I can assure you it says "endorsement".

25 MR. OULTON: Q: And has B.C. Hydro considered deferring
26 the Clean Call at all to cover any projected

1 from the Clean Call?

2 MS. VAN RUYVEN: A: Well, part of the criteria we use
3 is running a competitive Call. So that, by the very
4 virtue of running a competitive market-driven process,
5 should get you a good outcome. So that's one area we
6 look at. We also look to see that there's lots of
7 robustness within that competition, and this Call
8 certainly has lots of proponents competing. Sixty-
9 eight projects proposed for 17,000 gigawatt hours,
10 competing for 3,000 should create a pretty healthy
11 competitive process within the Call.

12 MR. OULTON: Q: I take from your answer you're planning
13 on using market forces as one of the primary drivers.

14 MS. VAN RUYVEN: A: That's one of the primary drivers
15 to get a cost-competitive result.

16 MR. OULTON: Q: All right. Does B.C. Hydro have any
17 plans to limit its acquisitions of energy delivered
18 prior to 2016 under the Clean Call?

19 MS. VAN RUYVEN: A: Could you maybe elaborate on that a
20 little bit?

21 MR. OULTON: Q: Does B.C. Hydro intend to limit any
22 such acquisitions to sources that have costs less than
23 what's forecast for, for example, the forward market
24 price that could be used to fulfill the same need?

25 MR. ELTON: A: Is what you're saying that because the
26 self-sufficiency direction requires us to get there by

1 a certain date, 2016, therefore if you had something
2 that you would get in theory in 2015, but you felt was
3 more expensive than something else, you would
4 therefore ask for it to be delivered only from 2016?
5 Because only in 2016 that you legally need it? Is
6 that what the question is?

7 MR. OULTON: Q: That's a fair summary. I mean, there's
8 a couple of undertones, obviously, to my question.
9 But yes. I'm trying to ascertain whether B.C. Hydro
10 has any intention, if it has other more cost-effective
11 resources available to it prior to 2016, to limit its
12 acquisitions under the Clean Call to only those
13 contracts that would provide service at a lower cost
14 than those. Prior to 2016.

15 MS. VAN RUYVEN: A: Well, theoretically I think we
16 could look at that. However, we will be awarding
17 these contracts in the summer of this year. So, once
18 we've awarded those contracts, entered into the EPAs,
19 applied to the Commission and, if accepted, we are now
20 contractually obligated to those proponents that we've
21 awarded those contracts to. So in that time frame,
22 from the time they get -- start construction,
23 basically, to the time they complete, there is not
24 really an ability to exit out of those contracts
25 without Hydro and our ratepayers paying some probably
26 significant liquidated damages.

1 MR. OULTON: Q: Would you agree that it was open to
2 B.C. Hydro to put in the RFP, or whatever the
3 appropriate document is, the request for a Call -- or
4 tenders, a requirement that power not be delivered
5 till 2016?

6 MS. VAN RUYVEN: A: Well, in a perfect world, it would
7 be great if every single IPP delivered on December
8 31st, you know, at midnight of 2016. But that's not
9 how, generally, these projects get built. They -- you
10 know, they go through permitting and construction, and
11 the larger projects certainly those -- if we award
12 larger projects, they will take longer, and I suggest
13 that the larger ones will be delivered closer to the
14 2016 date as opposed to potentially some smaller
15 projects could be delivered sooner.

16 MR. OULTON: Q: I take it, Ms. Van Ruyven, that B.C.
17 Hydro hasn't put any express limits on any such
18 acquisitions. When the contracts are awarded, once
19 the power is available, B.C. Hydro will start taking
20 that power.

21 MS. VAN RUYVEN: A: That's right. That's correct.

22 MR. ELTON: A: I think a lot of our experience on all
23 of this to date, is -- and this is not unusual, is
24 that things take longer than people think they will.
25 Projects -- our projects and IPP projects take longer
26 than people think they will. Permitting processes

1 take longer than people expect.

2 So I don't think, frankly, as Ms. Van
3 Ruyven is saying, that we have looked to artificially
4 delay people bringing power on stream, because we need
5 the power, whatever power it is that we're trying to
6 get to meet our self-sufficiency targets. So that our
7 general approach has not been to encourage delay, or
8 to try and get things precisely to the point, as Ms.
9 Van Ruyven is saying, to December 31st, 2016.

10 **Proceeding Time 2:17 p.m. T48**

11 MS. VAN RUYVEN: A: And certainly that's our experience
12 in the '06 Call. We awarded those electricity
13 purchase agreements in 2006, and we expect that those
14 projects will predominantly be on line by 2013.
15 That's a seven-year cycle. So if the Clean Power Call
16 follows a similar kind of period of time, you'd be
17 expecting those projects to be delivered more on the
18 latter part towards the 2016 date.

19 MR. OULTON: Q: But there are, for example, in the
20 fiscal 2006 Call, there are projects that have come
21 online earlier, as early as fiscal 2009.

22 MS. VAN RUYVEN: A: I think there's only one that I
23 could think of, for a very small amount.

24 MR. OULTON: Q: And more in 2010, correct?

25 MS. VAN RUYVEN: A: Yes. And again, that's certainly a
26 question that Mr. Scouras on Panel 4 would be able to

1 answer in detail as to the timing of all of '06
2 awards.

3 MR. OULTON: Q: And you referred earlier to a cap that
4 was put in place on one of the prior Calls implemented
5 by B.C. Hydro. Does B.C. Hydro plan to put any price
6 limit on the purchase it makes under the Clean Call?

7 MS. VAN RUYVEN: A: We did not put the price cap on
8 this Call.

9 MR. OULTON: Q: I'd like to turn to another topic now,
10 and again ask Mr. Godsoe to tell me when I'm getting
11 to too much detail for this panel. But you're
12 familiar with the term "dispatchability"?

13 MR. ELTON: A: Yes.

14 MR. OULTON: Q: And as I understand it, it means you
15 can choose to run or not run a generation asset in
16 order to optimize its ability to access or use the
17 market for economic benefit. Is that a fair --

18 MR. ELTON: A: Broadly speaking, yes.

19 MR. OULTON: Q: In particular, hydroelectric facilities
20 you can choose to retain water or release water in
21 order to either take advantage of a high price by
22 selling surplus power, or take advantage of a low
23 market price by importing power. Is that --

24 MR. ELTON: A: Certain hydroelectrolic projects,
25 depending on their characteristics.

26 MR. OULTON: Q: And dispatchability is of particular

1 value for -- or a particularly value of B.C. Hydro's
2 Heritage Assets, is that correct?

3 MR. ELTON: A: Yes. Some of those assets that we have
4 are among the ones where dispatchability is of
5 particular strength.

6 MR. OULTON: Q: Sorry?

7 MR. ELTON: A: Some of the hydroelectric facilities we
8 have are among those where they have a particular
9 strength of dispatchability, notably the ones around
10 the -- in the Peace, and to some extent those in the
11 Columbia.

12 MR. OULTON: Q: And is it fair to say that when
13 considering the resource options available in the
14 current LTAP, no specific adjustment was made by B.C.
15 Hydro for the differences in dispatchability among the
16 resource types?

17 MR. GODSOE: So I think we are getting into Panel 3 very
18 quickly on the unit energy costs versus what was done
19 on portfolio modelling, which has been asked and
20 answered in several IRs. But certainly that is for
21 Panel 3.

22 MR. OULTON: Q: Ms. Van Ruyven, to your knowledge, was
23 any adjustment for dispatchability -- or is any
24 adjustment for dispatchability in your evaluation of
25 the bids under the Claim Call?

26 MS. VAN RUYVEN: A: I don't believe so. However, we do

1 have proponents bid in on a firm energy on a high
2 load/low load seasonal basis, so that we are getting a
3 higher value, firmer product out of the proponent's
4 bids. But again, I think you'd have to ask Mr.
5 Scouras that question directly.

6 MR. OULTON: Q: And we've heard some reference to Site
7 C. Site C is also a dispatchable resource, is that
8 correct?

9 MR. ELTON: A: Again, largely, and it doesn't have the
10 storage capability of some of the other projects that
11 we already have. But again, that can be -- you can
12 discuss that more with either Mr. O'Riley or Mr.
13 Savidant, Panels 2 or 4. Sorry, it has, you know, it
14 is better than some projects, but it is not as good
15 as, for example, GMS.

16 MR. OULTON: Q: All right. I'll start with Panel 2 on
17 that, and if there's any lingering things I'll take it
18 to Panel 4.

19 I believe one last area before I conclude,
20 and that's -- I have a few questions regarding Special
21 Direction 10. And is it your understanding -- and I'm
22 not looking for your legal opinion here, just -- that
23 can be for Mr. Godsoe and I to debate later, the legal
24 side of things.

25 But is it your understanding that B.C.
26 Hydro is still able, post-2016, to displace Burrard

1 with market power if required to do so for operational
2 needs? Or if it makes sense from an economic
3 perspective.

4 **Proceeding Time 2:23 p.m. T49**

5 MR. ELTON: A: Based on Special Direction 10 and
6 current government policy as we understand it?

7 MR. OULTON: Q: Yes.

8 MR. ELTON: A: Yes. With, you know, with all of the
9 kind of commentary along that that I already
10 delivered.

11 MR. OULTON: Q: Yes, I think you've spoken about that
12 before. And is it your understanding that any
13 displacement of Burrard power by in-province
14 resources, that would still be consistent with Special
15 Direction 10, would it not?

16 MR. ELTON: A: Explain the question again, because all
17 -- I mean, all generating facilities within the
18 province are treated equally, I think, in this
19 context. In other words, if there are enough of them,
20 then we've met the Special Direction targets.

21 MR. OULTON: Q: But if you're using -- it's only firm
22 power that counts --

23 MR. ELTON: A: Right. Right.

24 MR. OULTON: Q: -- for Special Direction 10, correct?

25 MR. ELTON: A: Yes. Yes.

26 MR. OULTON: Q: So if Burrard is displaced with non-

1 firm power from another in-province resource, that
2 doesn't fall offside any concerns regarding self-
3 sufficiency or anything?

4 MR. ELTON: A: I'm not sure that I'm clearly
5 understanding it. It may just be my mental state.

6 MR. OULTON: Q: No, it's most likely my question. When
7 I get going for an hour, I tend to get a little punch-
8 drunk. But maybe I'll turn to another question and I
9 can come back to this with another panel.

10 MR. GODSOE: You can come to that one on Panel 2 for
11 sure.

12 MR. OULTON: Yeah, that was my expectation.

13 MR. OULTON: Q: Just one last question. It's my
14 understanding that it's the 3,000 gigawatt hours per
15 year of firm energy capability that is -- that would
16 be used for assessing self-sufficiency under Special
17 Direction 10. Is that correct?

18 MR. ELTON: A: You mean, you're now talking about the
19 3,000 -- the Burrard 3,000?

20 MR. OULTON: Q: Yes.

21 MR. ELTON: A: So, the amount that we're relying on for
22 planning purposes --

23 MR. OULTON: Q: Planning purposes. Yes.

24 MR. ELTON: A: -- that we would talk about with respect
25 to self-sufficiency. Yes, that's my understanding.

26 MR. OULTON: Q: So, if that was 6,000, if you were

1 relying on Burrard for 6,000, you would count 6,000
2 gigawatt hours per year.

3 MR. ELTON: A: I believe that relates to the question
4 you asked earlier about the effect on Table 2-9. In
5 other words, the -- yes.

6 MR. OULTON: Those are my questions.

7 THE CHAIRPERSON: Thank you, Mr. Oulton.

8 MR. FLETCHER: Good afternoon, Mr. Chairman. My name is
9 Richard Fletcher. I wasn't here last week. Well, I
10 was, but I wasn't here, if you see what I mean. So,
11 I'll just introduce myself. I'm chair of Texada
12 Action Now. We're a community organization based on
13 Texada, and we have about 1200 residents, commercial
14 establishments, all part of our organization.

15 And the reason that I'm here, I only have
16 three sheets of paper, I'm a bit like a back-bencher.
17 The reason that I'm here is that we intervened in the
18 hearing because we were opposed to gas-fired
19 generation -- new gas-fired generation, and the
20 movement of LNG tankers in B.C. inland waters, in the
21 Georgia Strait.

22 Now, when -- I think, Mr. Fulton filed an
23 exhibit -- not an exhibit, an opening statement of
24 mine, last week, but if you just bear my indulgence
25 slightly -- your indulgence, I should ask for, I'll
26 just reiterate some of that as I go through the

1 material with the panel, if I might.

2 I've also got a stinking cold, of course.

3 Sorry.

4 THE CHAIRPERSON: Sorry to hear that.

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

6 MR. FLETCHER: Q: Now, that position, opposed to LNG
7 tankers and new fired-gas generation, is shared by
8 municipalities along both sides of the Georgia Strait,
9 and I refer to the opening statement which I made,
10 which was filed as Exhibit C33-6. I don't know
11 whether -- do you have a copy of that?

12 MR. ELTON: A: No, I don't.

13 MR. FLETCHER: Does the panel have a copy of that?

14 THE CHAIRPERSON: Is that mine?

15 MR. FLETCHER: Do you have a copy of that? I can read
16 from it, in any event.

17 THE CHAIRPERSON: Please do, Mr. Fletcher.

18 MR. FLETCHER: Yeah.

19 MR. GODSOE: We have it now.

20 MR. FLETCHER: Q: So, C33-6. It refers to resolutions
21 passed by the Powell River Regional District of May
22 the 22nd, 2008, and the chairman of that district wrote
23 a letter to the Premier, which is dated June 25th,
24 2008. And I commend that letter to your reading.
25 It's part of the evidence, incidentally.

26 The Powell River Regional District

1 evidence you've put so far in the LTAP, there are no
2 plans to use new gas-fired electricity generation
3 within the planning environment of the 2008 LTAP, is
4 there?

5 MS. VAN RUYVEN: A: Well, there's no -- the Call that
6 we're running to procure new supply is a Clean Call,
7 and gas would not qualify.

8 MR. FLETCHER: Q: Right. Right. But if gas -- I mean
9 you say gas does not qualify, or --

10 MS. VAN RUYVEN: A: Just for this Clean Call, we've --

11 MR. FLETCHER: Q: Right. Okay, I'll leave it there.

12 MS. VAN RUYVEN: A: And I think in the longer term of
13 the LTAP, we're not precluded from adding new gas-
14 fired generation in the 20-year horizon. However, we
15 are required to maintain a 90 percent clean supply.

16 MR. FLETCHER: Q: Right. And Burrard, what percentage
17 of Burrard would that take within that 10 percent?

18 MS. VAN RUYVEN: A: Well, Burrard is predominantly the
19 largest portion. I don't know the exact percentage.

20 MR. FLETCHER: Q: Right, so what sort of margin would
21 be available for new gas-fired, if you ran to Burrard
22 to say 6,000?

23 MS. VAN RUYVEN: A: I don't know the answer to that.

24 MR. FLETCHER: Q: Well, it's probably very small
25 anyway.

26 Now, within the mechanics of your costings,

1 you don't accept carbon risk, is that correct? Any
2 producer selling power to you accepts the risk of
3 carbon. I mean, if the government were to increase
4 the carbon tax to 20-30 dollars a tonne, it's the
5 producer selling the power to you that pays that, not
6 B.C. Hydro?

7 MS. VAN RUYVEN: A: Well, again we -- right now the
8 only producer we're purchasing from that is a gas-
9 fired producer is the Island Cogen plant, and we
10 actually take the risk on that because we're procuring
11 the fuel.

12 MR. FLETCHER: Q: Right.

13 MS. VAN RUYVEN: A: So we actually take the carbon risk
14 on the Island Cogen plant.

15 MR. FLETCHER: Q: But going forward, if ever a
16 situation should arise, is it B.C. Hydro's policy that
17 you accept the carbon cost, the customers accept that
18 carbon cost? Or should the producer of that energy?

19 MS. VAN RUYVEN: A: Well, that's a good question, since
20 we don't have gas bidding into this.

21 MR. FLETCHER: Q: Right.

22 MS. VAN RUYVEN: A: Again I think it would depend on
23 the nature of the contract that we would have with
24 that producer. We could end up in a situation like
25 the Island Cogen plant where we are taking the carbon
26 risk on that. If we put it to the IPP, they just

1 build that cost into their bid price. So regardless,
2 the ratepayer pays for it.

3 MR. FLETCHER: Q: Right. But the problem is nobody
4 knows what the carbon price will be in the future,
5 depending on the contract. I'll get to the contracts
6 in a minute. But presumably you are contracting on a
7 long-term basis on these IPPs, or -- I know this
8 doesn't apply because we're talking about Hydro here,
9 but --

10 MS. VAN RUYVEN: A: Yes. We do try to make an estimate
11 of what the cost of the greenhouse gas liabilities
12 will be into the future.

13 MR. FLETCHER: Q: Right.

14 MS. VAN RUYVEN: A: And then when we compare resources,
15 if we're comparing a gas-fire plant to a clean
16 resource, we do actually add in an amount for
17 greenhouse gas costs going forward, and there is an
18 expert on Panel 2 that can talk to that.

19 MR. FLETCHER: Q: Right, okay, we'll get to that.

20 MS. VAN RUYVEN: A: Panel 3, sorry.

21 MR. FLETCHER: Q: But as far as -- so you haven't
22 precluded the basis that you -- that B.C. Hydro will
23 actually be paying the carbon tax on behalf of the
24 customers, and sheltering the producers from the
25 escalating costs of carbon.

26 MS. VAN RUYVEN: A: Well, whether the producer pays the

1 carbon tax or we do, the ratepayer still pays the
2 carbon tax because the independent power producer
3 would just flow that risk into the cost.

4 MR. FLETCHER: Q: Well, not if the contract is a firm
5 contract, and the politicians decide to say double or
6 triple the carbon tax, then it's the producer that
7 pays the carbon tax. It's the carbon producer's risk.
8 In other words, when he's committing to building a
9 plant, he accepts the carbon risk. I mean he'd love
10 to offload it onto B.C. Hydro. It's a perfect deal.
11 And I submit to you that's something that you should
12 not do under any circumstances. But that's the view.

13 **Proceeding Time 2:34 p.m. T51**

14 MR. ELTON: A: I think actually that when you get onto
15 the question of valuing GHGs, which is Panel 4 --

16 MS. VAN RUYVEN: A: Three, I think.

17 MR. GODSOE: Well, it depends. Let me help my friend at
18 it. If you wanted to test our price forecasting, that
19 is definitely Panel 3. If you wanted to test what we
20 would do in a contracting situation, I think that's
21 probably Panel 4.

22 MR. FLETCHER: No, actually I did digress slightly on
23 that, we just got -- sorry. Okay.

24 MR. FLETCHER: Q: Now, there was an interesting
25 response from B.C. Hydro, and I think my predecessor
26 referred to Special Direction No. 10. Now, we ask the

1 question, would it be possible to buy electricity from
2 a gas-fired plant that sourced its feed stock via LNG
3 from Pacific Rim countries? In other words, would you
4 meet this self-sustainability test? And I thought
5 that was just a pretty straight "no", but the answer
6 came back.

7 "In its response, B.C. Hydro indicated that
8 it would be possible under the B.C. Energy
9 Plan for B.C. Hydro to enter into a power
10 purchase contract with a supplier that
11 sourced its feed stock from oceanic Pacific
12 Rim regions, and still be able to meet the
13 B.C. Hydro requirement of 100 percent self-
14 sufficiency in electrical generation by
15 2016."

16 And that's an actual quote from the response that you
17 gave to that IR.

18 MR. ELTON: A: Yes.

19 MR. FLETCHER: Q: Now, you explained -- you then went
20 and gave us the benefit of the explanation, and thank
21 you for that. You explained that

22 "...as long as the electrical purchase
23 agreement was with respect to an electricity
24 generating facility located "within the
25 province" under paragraph 3 of Special
26 Direction No. 10..."

1 And that gives directions on self-sufficiency,
2 "...the B.C. government does not require that
3 natural gas-fired electricity facilities
4 source their natural gas from B.C."

5 So, it seems to me that -- in other words,
6 we could be buying gas from Indonesia, and you could
7 be -- this could be, like, 8 percent of the B.C. load
8 on a firm basis, we could be buying from Russia. In
9 other words, where is the self-sufficiency equation in
10 relation to B.C.? Anyways.

11 MR. ELTON: A: But I think it's a matter of government
12 policy, sir.

13 MR. FLETCHER: Q: Yeah.

14 MR. ELTON: A: In other words, the area of --

15 MR. FLETCHER: Q: Well, I'm not going to debate that
16 with you.

17 MR. ELTON: A: Okay.

18 MR. FLETCHER: Q: But what I would ask you, and the
19 Commission, incidentally, is to bring this particular
20 matter, because it seems to be a bit of a loophole.
21 One can see why it was written in the Act, simply
22 because we might, at some stage, be buying Alberta
23 gas. I'm suggesting that the overriding aim of
24 Special Direction No. 10 is to achieve energy and
25 capacity self-sufficiency in B.C. So can I ask the
26 BCUC and B.C. Hydro to address this issue as part of

1 their decision, and seek further guidance from the
2 B.C. government? And that electricity generating
3 facilities as defined in Special Direction No. 10 be
4 defined to eliminate this loophole. I'll move on.

5 Now, I want to -- we haven't used that word
6 "political". When do you take coffee, by the way?

7 THE CHAIRPERSON: When you've finished.

8 MR. FLETCHER: I've only got two more pages. Right.

9 MR. FLETCHER: Q: Political risk. Now, I was a bit
10 surprised, when you said -- well, Mr. Godsoe said,
11 that you're not going to bother talking to Dr. Jaccard
12 and Dr. Shaffer concerning the cost of self-
13 sufficiency on the basis it's not relevant pursuant to
14 Special Direction No. 1 -- Special Direction No. 10,
15 because that is the binding obligation on the
16 Commission and on this hearing. Therefore, anything
17 they say about self-sufficiency doesn't make any
18 different. Is that said?

19 MR. GODSOE: Well, I think that's pretty close to what I
20 said. I'm not sure that I should be giving evidence
21 here, though. We're getting into legal
22 interpretation.

23 MR. FLETCHER: Okay.

24 MR. GODSOE: And of course, what I said, I think, is on
25 the record in transcript Volume 3.

26 MR. FLETCHER: Right. Okay.

1 MR. FLETCHER: Q: Now, that seems to me like it was
2 black and white. But surely some bit of what they
3 said made sense to you. I mean, you're a -- I mean,
4 you guys are utility professionals, and you're dealing
5 with politicians in Victoria. So I'm assuming that
6 some of their stuff made sense.

7 MR. ELTON: A: Some bit of what who said made sense?

8 MR. FLETCHER: Q: What Shaffer said.

9 MR. ELTON: A: Mr. Godsoe, or the politicians, or Dr.
10 Shaffer?

11 MR. FLETCHER: Q: Sorry, Shaffer. Yeah, we'll get to
12 that in a minute. But Shaffer and Dr. Jaccard, if I
13 can pronounce it right. Well, some of their evidence
14 would have rung quite true to you. Is that so, or
15 not?

16 **Proceeding Time 2:39 p.m. T52**

17 MR. ELTON: A: Well, I think as Mr. Godsoe was saying
18 what we don't do, I don't believe we do here, is
19 discuss whether or not we agree with government
20 policy, and what the financial impacts of that policy
21 are. If, you know, that's -- that is what I
22 understand Mr. Godsoe to have said.

23 MR. FLETCHER: Q: Right, okay. But, I mean, I take it
24 that there was -- I'm not asking for you to describe
25 the discussions. I'm just asking you say -- to at
26 least indicate to the Commission and to us who are the

1 ratepayers, that there were pretty lengthy discussions
2 in terms of how the whole Green Energy Plan was to be
3 pushed forward, I'm assuming.

4 MR. ELTON: A: Yes.

5 MR. FLETCHER: Q: It was between you and the B.C.
6 Government. And I'm -- maybe I'm putting words in
7 your mouth. Well, before we get to that, there's
8 another observation to be made too, actually.

9 MR. ELTON: A: Sorry, just to be clear.

10 MR. FLETCHER: Q: Yes.

11 MR. ELTON: A: There were discussions between the B.C.
12 Government and many people, including B.C. Hydro, in
13 the formulation of that policy.

14 MR. FLETCHER: Q: Right, okay. Now, it seems to me,
15 looking at this Energy Plan, the present value of your
16 megawatt hours is a lot lower, simply because they're
17 non-firm. And that's two sides of the equation, (a)
18 on the independent power producing because you can't
19 rely on that power, the run of the river plants, and
20 (b) also on your demand-side management. None of that
21 is firm. In other words, it can be firm in one year
22 but it can be reversed in the following year, with
23 demand-side management. None of it's permanent. It's
24 not like building a power plant, not like a Bennett or
25 a Site C, where you know what the resources are, you
26 know what storage is, and you know how many gigawatt

1 hours you're going to get out from that plant in a
2 year.

3 MS. VAN RUYVEN: A: Well, quite a bit of the demand-
4 side management that we are looking for in this plan
5 and that we have gotten in past years is actually very
6 firm. It's actual capital investments by customers
7 that we meter, monitor and verify --

8 MR. FLETCHER: Q: Right, okay.

9 MS. VAN RUYVEN: A: -- over potentially 10-15-year
10 periods of time.

11 MR. FLETCHER: Q: Right.

12 MS. VAN RUYVEN: A: So a lot of the DSM is firm.

13 MR. FLETCHER: Q: Okay, so they're locked into water
14 heaters, they're locked into equipment, where it just
15 doesn't make economic sense for them to come out. Is
16 that what you're saying?

17 MS. VAN RUYVEN: A: Yeah, they've made a capital
18 investment --

19 MR. FLETCHER: Q: Right.

20 MS. VAN RUYVEN: A: -- to reduce energy over a period
21 of time, and we actually meter that and verify that
22 that --

23 MR. FLETCHER: Q: And what percentage of your demand-
24 side savings?

25 MS. VAN RUYVEN: A: I would say in the past it's been
26 probably three-quarters of the demand-side savings.

1 MR. FLETCHER: Q: Right.

2 MS. VAN RUYVEN: A: I don't know going forward the
3 percentage of this plan, because we are relying a lot
4 more on rates --

5 MR. FLETCHER: Q: I was going to get to that, yeah.

6 MS. VAN RUYVEN: A: -- and elasticity and some
7 behavioural changes.

8 MR. FLETCHER: Q: Right.

9 MS. VAN RUYVEN: A: So it's probably smaller than that.

10 MR. FLETCHER: Q: So going forward there will be the
11 softer demand-side management gains rather than the
12 harder ones you had to date.

13 MS. VAN RUYVEN: A: Harder to measure.

14 MR. FLETCHER: Q: Right. And also perhaps more
15 variable?

16 MS. VAN RUYVEN: A: Again it depends. It depends on
17 which programs you're talking about.

18 MR. FLETCHER: Q: Anyway, what I'm coming back to is,
19 I'm making the suggestion that the present value of
20 demand-side management savings going forward, and your
21 generation from IPPs on run-of-the-river plants, the
22 present value of those sums is not as high as firm
23 energy from a Bennett Dam or any of your traditional
24 stewardship plants.

25 MR. ELTON: A: The firmness or otherwise of IPP power
26 should be taken into account in the way we evaluate

1 those bids and in the way that we describe what power
2 it is that we get. So there is a panel that could
3 help you with that, which Mr. Godsoe is about to tell
4 me who it is.

5 MR. FLETCHER: Q: Well, I was coming to -- in your
6 discussions with government, you must have been
7 perfectly aware of that scenario. And I might be
8 putting words in your mouth, but you were only
9 prepared to go along with what they suggested so long
10 as you could retain Burrard for future capacity and
11 energy, and running it up to whatever the shortfall is
12 on the program. Is that so?

13 MR. ELTON: A: So I think -- can you repeat that or
14 maybe have it read back?

15 MR. FLETCHER: Q: No, I'll repeat it. You're a utility
16 professional and I've dealt with many of those over
17 the years, and you know that you've got to keep the
18 lights on. So when it comes to political pressures
19 that you're subjected to, and the obligations you've
20 got with the customers and the businesses and the
21 industry, you know only as far as you can go.
22 Therefore the one side of -- you could accept what
23 they were proposing in terms of demand-side management
24 and energy plans and all the rest of it. Self-
25 sustainability, self-sufficiency. But on the other
26 hand, you needed a firm backstop, just in case the

1 staff didn't come through. We're taking a bit of a
2 chance, but you wanted to have that hard asset in
3 Burrard available that you could use to meet any
4 shortfall.

5 MR. ELTON: A: So I have already explained the
6 importance of Burrard.

7 MR. FLETCHER: Q: Yes.

8 MR. ELTON: A: And yes, the belief that not against
9 government policy but in line with government policy,
10 we were given some flexibility which we've tried to
11 use.

12 In respect of your general comment, I mean,
13 they write the Energy Plan down. It's our job to come
14 up with a plan that we believe will work. So, that's
15 what we've done.

16 **Proceeding Time 2:45 p.m. T53**

17 MR. FLETCHER: Q: Right.

18 MR. ELTON: A: So in other words, all of the comments
19 you've made about, you know, the possible lack of
20 firmness in some IPP energy, or the difficulty of
21 always relying on DSM in an era where we're expanding
22 it, all of that must be taken into account in our
23 plans. Because in the end, sir, we have to put
24 together a plan that we believe is right.

25 MR. FLETCHER: Q: So it's a package, yeah?

26 MR. GODSOE: It is. And just for your benefit, Mr.

1 Fletcher, so Panel 2 can discuss the firm energy load-
2 carrying capability studies we've done to show what
3 non-firm IPP energy is in our stack now. And Panel 4
4 can address the contracting provisions that deal with
5 non-firm versus firm in terms of pricing, et cetera.
6 So I would urge you to take that up with Panels 2 and
7 4.

8 MR. FLETCHER: Yeah, that's it. I'll go there, yeah.

9 MR. FLETCHER: Q: Okay. Okay, can I just ask something
10 about demand-side management? Now, Mr. Andrews tested
11 you somewhat on Friday, I think. Ms. Van -- sorry. I
12 forgot --

13 MS. VAN RUYVEN: A: Van Ruyven.

14 MR. FLETCHER: Q: Van Ruyven, yeah. On the
15 deliverability risk associated with demand-side
16 management. Now, historically, as most of the people
17 know, it's been pretty much hit and miss. But I was
18 quite --

19 MS. VAN RUYVEN: A: No, we -- in actual fact, we've --
20 in almost every year that I certainly can remember,
21 we've made our demand-side management target.

22 MR. FLETCHER: Q: Right, okay. And I'm pleased to hear
23 that. But we did make the observation that perhaps
24 going forward, it might be more difficult to achieve.

25 MS. VAN RUYVEN: A: Well, we're significantly
26 increasing our reliance on demand-side management.

1 MR. FLETCHER: Q: Right. And could you -- yes, when
2 you say "significantly increasing", can you just give
3 -- run me over the numbers again? Is it 96 --
4 MS. VAN RUYVEN: A: Our target to 2020 is 9600 gigawatt
5 hours.
6 MR. FLETCHER: Q: And what percent of the --
7 MS. VAN RUYVEN: A: 72 percent of the resource gap will
8 be met through demand-side management.
9 MR. FLETCHER: Q: Right. Okay. To your knowledge, has
10 any utility in the world ever done that? Achieved
11 that?
12 MS. VAN RUYVEN: A: Again, I -- we haven't done a
13 survey of every utility in the world.
14 MR. ELTON: A: There is an IR which has a table.
15 THE CHAIRPERSON: And Mr. Godsoe was about to give us its
16 number.
17 MR. GODSOE: Or, just as easily, and I can give you the
18 IR, but just as easily you can discuss that with Mr.
19 Hobson on Panel 4, because we have looked at that
20 issue.
21 MR. FLETCHER: Q: Okay. And can you just give me an
22 inkling of what it says? I mean, what the conclusion
23 is?
24 MS. VAN RUYVEN: A: Generally, I would say we're
25 leading the way in reliance on DSM.
26 MR. ELTON: A: Particularly in what we would describe

1 as a low-cost jurisdiction.

2 MR. FLETCHER: Q: Yeah. So, untested. It's untested.

3 MS. VAN RUYVEN: A: Yeah, I think it's fair to say that
4 that 9600 gigawatt hour target is untested.

5 MR. FLETCHER: Q: Right.

6 MS. VAN RUYVEN: A: It's certainly higher than anything
7 we've ever strived to reach before.

8 MR. FLETCHER: Q: Okay. And you won't -- and I think
9 you said, and I read the transcript, it won't be until
10 we get to about year five where we know how effective
11 it is.

12 MS. VAN RUYVEN: A: I said three to five years.

13 MR. FLETCHER: Q: Yeah.

14 MS. VAN RUYVEN: A: And I think it will differ
15 depending on which program or rate it is.

16 MR. FLETCHER: Q: Okay. And Mr. Elton, I guess we can
17 slot Mica 5 and 6 in quite quickly, can we, if things
18 go wrong?

19 MR. ELTON: A: I mean -- you mean physically? Or -- I
20 mean, it's not that straightforward. I mean, they're
21 very big pieces of equipment.

22 MR. FLETCHER: Q: Yeah. Right. But I mean, if we got
23 just a few dry years, and you know, we were looking at
24 brown-outs, we've got this self-sufficiency
25 legislation, you know -- I mean, how quickly can you
26 get those things on-stream?

1 MR. ELTON: A: Well, again, I think there's another
2 panel that can talk about the potential timelines
3 there.

4 MR. FLETCHER: Q: Right.

5 MR. ELTON: A: The -- I mean, as always, there's
6 several aspects to it. There is, you know, physically
7 can it be done fairly quickly? Yes. There are
8 permitting and First Nations issues, as there are with
9 any kind of project.

10 MR. FLETCHER: Q: Right.

11 MR. ELTON: A: And then there's the financial question.

12 MR. FLETCHER: Q: Okay. So --

13 MR. ELTON: A: But Mica 5 and 6 don't deliver energy.

14 MR. FLETCHER: Q: Right. No, just capacity.

15 MR. ELTON: A: Or very little. Yes.

16 MR. FLETCHER: Q: Yes. Turning -- how much of your
17 demand-side management is based on price? Going
18 forward? In other words, raising rates?

19 MS. VAN RUYVEN: A: So what do you mean, based on
20 price?

21 MR. FLETCHER: Q: Well, you've got -- Hydro's always
22 had flat rates, the best rates in the world. A
23 wonderful place to live, you know, six cents a
24 kilowatt-hour, you know. Now, you've got a -- we've
25 trailed the rates slightly, yeah? We're at seven and
26 a half, are we, on residential rates? So you're block

1 rating now the tariff structure.

2 MS. VAN RUYVEN: A: That's right. We have a
3 residential inclining block rate.

4 MR. FLETCHER: Q: Yeah, right. Okay. And is it your
5 -- is it within the -- you know, the sort of
6 principles of this LTAP application that you'll be
7 doing rate design to meet those demand savings?

8 **Proceeding Time 2:49 p.m. T54**

9 MS. VAN RUYVEN: A: Not within this LTAP hearing.

10 MR. FLETCHER: Q: No.

11 MR. GODSOE: Well, it just might be helpful to have the
12 breakdown between rates and programs and codes, which
13 is where I think you're going in Table 6-2, page 6-3.

14 MR. FLETCHER: Q: Okay. But are we going to see what
15 trailing rates -- when I say "trailing rates" I mean
16 escalating rates with a -- yeah.

17 MS. VAN RUYVEN: A: Inclining blocks, yes.

18 MR. FLETCHER: Q: Both for residential, commercial,
19 industrial?

20 MS. VAN RUYVEN: A: Yes, we have -- or we already have
21 it for industrial and residential customers, and we
22 are in the middle of designing the large general rate
23 service group.

24 MR. FLETCHER: Q: Right.

25 MS. VAN RUYVEN: A: And that application would be
26 coming before the Commission sometime this year. And

1 you may or may not know --

2 MR. FLETCHER: Q: Okay.

3 MS. VAN RUYVEN: A: -- but the commercial customers in
4 that class are actually on a declining block rate. So
5 we'll be bringing forward a proposal to change that
6 over time.

7 MR. FLETCHER: Q: Okay. But it's likely, presumably
8 the escalating rate is likely to increase in the
9 future to curtail demand, if you're --

10 MS. VAN RUYVEN: A: Yes. So one of the Energy Policy
11 items was to design rates that supported conservation.

12 MR. FLETCHER: Q: Right. Okay. Now, if the Commission
13 approve this particular LTAP in the way it's presented
14 by B.C. Hydro to B.C. Utilities Commission, the role
15 of the Commission then would be more or less committed
16 into the rate design proposals, you come forward
17 within two years?

18 MS. VAN RUYVEN: A: No, each of those rate design
19 proposals, as I understand it, are standalone
20 applications to the Commission that then have to have
21 a process.

22 MR. FLETCHER: Q: Right, but the Commission will have
23 agreed on this LTAP, you know, demand-side management
24 saving of X gigawatt hours per year. And you come and
25 tell them, "Well, the only way I can do that is if I
26 jack these rates up to X." What can they do then?

1 MS. VAN RUYVEN: A: Well, what we're asking the
2 Commission to approve is actually the three-year
3 expenditure for the plan, not the whole 20-year plan.
4 MR. FLETCHER: Q: Right, but once they start on the
5 path, on this trail, it's very difficult to get out of
6 it quickly. Would you agree?
7 MS. VAN RUYVEN: A: The whole DSM path?
8 MR. FLETCHER: Q: Well, yeah, once you start. Once you
9 defer plant expenditures, it takes a long time to get
10 them back on track.
11 MS. VAN RUYVEN: A: I would argue the opposite.
12 THE CHAIRPERSON: I'm not quite sure what plant
13 expenditures. I mean --
14 MR. FLETCHER: Well, look at Escom, I mean, they --
15 THE CHAIRPERSON: No, no, Mr. Fletcher, remember that
16 this document --
17 MR. FLETCHER: Okay.
18 THE CHAIRPERSON: -- instructs the utilities to look for
19 innovative rate structures.
20 MR. FLETCHER: Sorry.
21 THE CHAIRPERSON: Something the witnesses yet overlooked
22 to tell, forgotten to tell you, so I will.
23 MR. FLETCHER: I'll move on, yeah.
24 THE CHAIRPERSON: I can give testimony just as well as
25 Mr. Godsoe.
26 MR. FLETCHER: Right, it's almost always coffee time.

1 Okay.

2 MR. FLETCHER: Q: But there is a point to be made here.
3 Some poor folks in B.C. don't have access to natural
4 gas. I mean, we want to be on natural gas if it was
5 affordable, but we are not. I mean, Texada is one of
6 those places where there is no natural gas.

7 Now, your rates have made no exclusion for
8 those poor folks that actually have no access to space
9 heating in terms of natural gas. This is particularly
10 a burden for commercial businesses actually, because
11 they have to heat the premises. And some of these
12 people are actually, you know, on hardship conditions.

13 So what I would ask if you could do, and
14 also maybe if the Commission could consider as part of
15 the decision, is to think about the possibility of a
16 hardship space heating rate when you design your rate
17 tariffs, for those communities in B.C. that are not on
18 natural gas. Could you please look at that?

19 MS. VAN RUYVEN: A: Well, the residential inclining
20 block rate is already -- taken effect, so --

21 MR. FLETCHER: Q: Yes, I see that. But I'm saying
22 anything in the future.

23 MR. ELTON: A: I think a fair way of putting it is
24 that, as Ms. Van Ruyven says, the residential
25 inclining block rate is in effect. There was going to
26 be a proposal on large commercials. We will learn as

1 we go about what the impact of the residential
2 inclining block rate was. We do have a low income
3 program and we didn't propose a program with respect
4 to specifically electric space heating. I'm sure
5 that, as with the industrial two-tier rate, that as we
6 gain experience there will be proposals coming from
7 people in that rate class, which would probably
8 include the kind of proposals you're making, that we
9 should all discuss.

10 MR. FLETCHER: Q: Right. Okay. All right, I'm on my
11 last page. We should be finished by 3:00, Mr.
12 Chairman.

13 Now, I understand the main concern of B.C.
14 Hydro is capacity and not energy. Is that -- you
15 know, the next five to ten years, the problems are
16 more accurate in capacity than they are in energy. We
17 had that discussion last --

18 MR. ELTON: A: I think they are both, actually.

19 MR. FLETCHER: Q: Okay. Now, how does demand-side
20 management measures that you're proposing, how will
21 they fit that curve in terms of --

22 MS. VAN RUYVEN: A: They provide both. They provide
23 energy and capacity savings.

24 **Proceeding Time 2:54 p.m. T55**

25 MR. FLETCHER: Q: And the same with IPPs?

26 MS. VAN RUYVEN: A: IPPs don't bring a lot of capacity,

1 depending on the actual technology. For example, a
2 bio-energy project would have more capacity than a
3 run-of-the-river or a wind project.

4 MR. FLETCHER: Q: Right.

5 MS. VAN RUYVEN: A: But you have energy.

6 MR. FLETCHER: Q: But you have to have -- yeah. And
7 you have to have back-up facilities for the IPPs, your
8 run-of-the-river plants?

9 MR. ELTON: A: Well, the projects like Revelstoke 5 and
10 Mica 5 and 6 are projects that would help the fact
11 that IPPs don't have a lot of capacity.

12 MR. FLETCHER: Q: Right. Actually one thing I did --
13 forgot to mention. When we talked about the Burrard
14 and the actual use of Burrard as a stop-gap, there was
15 mention in the evidence of the building of a
16 transmission line. I forget the number now, Mr.
17 Godsoe. There's a line that's going to --

18 MR. ELTON: A: L5-83.

19 MR. GODSOE: Are you referring to 5L83?

20 MR. FLETCHER: Q: Yeah. I don't think we've seen
21 anything on the record about it yet. But I wondered,
22 what's the probability of that being built on time?

23 MR. GODSOE: So that was looked at through Chapter 5, and
24 I would urge you to take that up with Panel 3, that
25 it's --

26 MR. FLETCHER: Q: Right. But I just wanted to hear,

1 you know, Mr. Elton's views on the feasibility of it
2 being built on time.

3 MR. ELTON: A: Building any large transmission line is
4 difficult, and there have not been very many built in
5 the last few years in this part of the world or in
6 North America generally.

7 MR. FLETCHER: Q: Right.

8 MR. ELTON: A: Therefore, it's hard to say. There are
9 obviously a lot of permitting issues. There are
10 significant First Nations issues. And you know, it's
11 wise for all of us to recognize that it could be
12 delayed.

13 MR. FLETCHER: Q: Right. And what is it -- what year
14 does it come in on the plan?

15 MS. VAN RUYVEN: A: So, the earliest in-service date is
16 2014, and we have built in a five-year risk-adjusted
17 date for just the very reasons you're talking about.

18 MR. FLETCHER: Q: Okay. Now, the other thing that I
19 always thought was quite interesting is the discussion
20 that you had with Terasen on the right fuel for the
21 right activity at the right time. Meaning, natural
22 gas and space heating. I mean, you seem to be less
23 than enthusiastic about the prospect of actually
24 growing the gas load for residential commercial space
25 heating. In other words, you'd have a free lunch,
26 because they'd be taking away a huge great chunk of

1 your load, and the figures that we've got is that 20
2 percent of B.C. Hydro's residential customers use
3 electric space heating, and 35 percent use electricity
4 for hot water. Surely they are the easiest target to
5 take out in terms of meeting your resource plan.

6 MR. ELTON: A: I think the questions that were asked
7 were whether we should be incenting people to do that,
8 and I think the answers we gave were around the -- you
9 know, in particular there was a lively discussion
10 about what government policy is in this area.

11 MR. FLETCHER: Q: Right.

12 MR. ELTON: A: And we were fairly clear that government
13 policy in this area is attempting to reduce greenhouse
14 gases within the province of British Columbia, and
15 that if we were to encourage people to stop consuming
16 electricity and start consuming more natural gas, as
17 distinct from letting the market take care of that --

18 MR. FLETCHER: Q: Right.

19 MR. ELTON: A: -- then we would be incenting people to
20 increase greenhouse gas emissions within the province
21 of British Columbia.

22 MR. FLETCHER: Q: Right. I'll come back to that
23 greenhouse, but -- okay. So, yeah, I mean, I took the
24 view that because you weren't necessarily fussed about
25 the whole thing, that you felt the problem would solve
26 itself, because your electricity rates would go up so

1 much that people would all switch to gas. I mean,
2 that's the way -- that's why I thought you weren't
3 pursuing it that much, because you felt that you were
4 going to lose that load anyway.

5 MR. ELTON: A: That's not what we said.

6 MR. FLETCHER: Q: Right. Okay. Good. Okay. Now,
7 have you ever costed --

8 MR. ELTON: A: What we said was that we couldn't easily
9 predict --

10 MR. FLETCHER: Q: Right.

11 MR. ELTON: A: -- the changes there would be in the
12 market, you know, as between gas and electricity. And
13 that was something that we would keep monitoring
14 through our load forecasting.

15 MR. FLETCHER: Q: Okay. Now, have you actually costed
16 what it would be in terms of -- because you've got \$41
17 a megawatt hour, I think or -- for DSM. Have you
18 actually costed what it would be if you provided
19 incentives for residents and commercial businesses to
20 actually install, you know, gas boilers? Gas
21 furnaces? And what the payback would be?

22 MS. VAN RUYVEN: A: No, we haven't costed that.

23 MR. FLETCHER: Q: And yet the Commission, I think,
24 asked you to do something like -- a couple of years
25 ago. I think they were quite keen on gas space
26 heating? And you haven't done anything on it. No.

1 MS. VAN RUYVEN: A: And we generally know the capital
2 and life-cycle costs of all of the various fuels,
3 including geothermal, whether somebody has a
4 geothermal, or solar, or gas versus electricity.

5 MR. FLETCHER: Q: Right. But, so, clearly, in your --
6 anyway, and I won't go into it. But it's -- okay. So
7 is it something you think you should look at, if it's
8 a win-win-win situation?

9 MS. VAN RUYVEN: A: Well, again, Mr. Elton has said
10 that we really don't see ourselves able to support a
11 program that sees customers switching from electricity
12 to gas, because that would contribute to greenhouse
13 gases within the province --

14 **Proceeding Time 2:59 p.m. T56**

15 MR. FLETCHER: Q: Okay.

16 MS. VAN RUYVEN: A: -- and we have a legislated
17 reduction target.

18 MR. FLETCHER: Q: Well, I'm not -- I mean, would you
19 ever contemplate buying from a new gas-fired plant
20 that runs at 50 percent efficiency, and not promote
21 residential space heating that runs at 90 percent
22 efficiency at the burner tip?

23 MR. ELTON: A: That's not in our plan at the moment, to
24 buy from such a new gas-fired --

25 MR. FLETCHER: Q: No. But I put it to you that under
26 no circumstances would you ever commit to gas-fired --

1 new gas-fired purchases if there were -- if the 20
2 percent of B.C. residential households still run
3 electricity to heat their houses.

4 MS. VAN RUYVEN: A: I don't think we can agree to that.
5 We can agree that if you are a predominantly gas-fired
6 jurisdiction, and you're making electricity and then
7 delivering electricity to a home who's heating with
8 electricity, it's much more efficient to heat with gas
9 at the source.

10 MR. FLETCHER: Q: Okay. And you --

11 MS. VAN RUYVEN: A: But we're not in that jurisdiction.

12 MR. FLETCHER: Q: All right. And you're going on about
13 greenhouse gases, is how efficient electricity is.
14 But Burrard will only run at 30 percent efficiency. I
15 mean, if you take out some of that Burrard use by
16 having residences, commercials, using space heating in
17 their home, that would be a much more efficient use of
18 gas.

19 MR. GODSOE: So, that was addressed in Exhibit B-12,
20 response to BCUC panel IR 1.22.2. We went into the
21 GHG implications of those two sources. Asked and
22 answered.

23 MR. FLETCHER: Right. And do I get an answer, or I've
24 already had an answer?

25 MR. GODSOE: I've referred you to the IR where it is.

26 MR. FLETCHER: Right.

1 MR. GODSOE: I think I have referred you to the IR where
2 that has been asked and answered.

3 MR. FLETCHER: Okay. Well, it's -- okay. So I'm not
4 going to get an answer.

5 MR. ELTON: A: Well, would you like us to look at it,
6 and we'll look at it, and you can repeat your
7 question, and we can --

8 MR. FLETCHER: Q: Yeah. Please. Yeah. Yeah.

9 MR. ELTON: A: -- yes, if you'd like to do that.

10 MR. FLETCHER: Q: Yeah. Because I think logically it
11 doesn't make sense. From a greenhouse gas
12 perspective. I'll come -- now finally, I want to just
13 touch on stewardship. Now --

14 MR. GODSOE: Did you want us to look at that IR first
15 before you go to the next question?

16 MR. FLETCHER: Q: No. No, it's not -- we can -- we can
17 do it now. Yeah, we'll do it now.

18 THE CHAIRPERSON: Panel, 123-1, was it?

19 MR. GODSOE: 1.22.2, I believe, was the reference.

20 THE CHAIRPERSON: Oh, yes.

21 MR. GODSOE: And the GHG implications start at Section
22 1.3 on page 3 of 9.

23 MR. ELTON: A: So, yes, I think the -- under 1.3, it
24 makes the point that Burrard's generation must be
25 offset by 2016.

26 MR. FLETCHER: Q: Right.

1 MR. ELTON: A: Whereas GHG emissions generated by
2 burning natural gas to heat homes are not currently
3 required to be offset. So therefore, you know, the
4 way that GHGs are counted, it would mean that we would
5 be increasing GHGs.

6 Now, as I said the other day, you know,
7 government policy around GHGs will evolve. And I made
8 that clear the other day, that we're dealing with
9 today's policy, and that in a few years you may see a
10 different type of policy that would allow -- that I
11 think I described as more complex in nature than
12 perhaps it is today. That could lead to a different
13 set of circumstances and solutions.

14 MR. FLETCHER: Q: Yeah. But at the moment, we have two
15 different sets of efficiencies. One vastly superior
16 to another, and the one that's inferior is actually
17 the one that's supported by the B.C. Energy Plan.

18 MR. ELTON: A: Well, again, what I'm trying to say is
19 that I think the policy is designed to be simple. And
20 again, I don't mean that disrespectfully.

21 MR. FLETCHER: Q: Right.

22 MR. ELTON: A: And that it's designed to be something
23 that people could understand. And whether or not
24 there are theoretically superior policies, there may
25 be, but I think it's designed to be simple.

26 MR. FLETCHER: Q: Thanks. Stewardship. Now, I've just

1 come back from a country -- I mean, natural gas and
2 electricity prices gone up by 40 percent in one year.
3 And that's a privatized system, and that's both the
4 gas and electricity. It's something, you know, that
5 us folks in B.C. would just -- couldn't ever imagine.

6 Now, over the years, B.C. Hydro has run a
7 wonderfully successful system, in terms of its
8 stewardship assets, you know, and it's actually part
9 of the legacy of being a B.C. citizen is that we have
10 cheap power. We always have had, thanks to good old
11 W.O.C. -- W.C. Benefit [sic] back in the 1960s. And I
12 think what worries many of us in the province is that
13 these stewardship assets are being eroded as the new
14 IPPs come on-stream and other incremental loads, and
15 of course B.C. Hydro is not involved in any way.

16 So the questions I've got really, I mean,
17 are you trying your best to defend B.C. stewardship
18 rights when it comes to your dealings with these IPPs?
19 And I'm particularly concerned about residual
20 provincial rights after a certain time period. Is
21 that predetermined, or whether that would be
22 negotiated, or is it so well in the future that plants
23 won't be worth anything when they do come back, if
24 they do? What are the length of the contracts that
25 you've agreed with these plants? Are they renewable
26 after 10-15 years, or are they embedded over the life,

1 physical life of the plant? I mean, these will make
2 -- because we've, you know, us B.C. residents have
3 benefited actually from people that have gone before.
4 I mean, the legacy has been the assets that we've
5 actually got. The fact that we only pay 6 cents a
6 kilowatt hour.

7 Now, if we haven't nailed down these
8 arranged correctly with the IPPs, there won't be a
9 legacy to give to our children. So.

10 MR. ELTON: A: So a two-part answer. I'll start and
11 then Ms. Van Ruyven will fill you in on the IPP
12 contracts. So first of all you refer specifically to
13 the Heritage Assets, and I think I will argue strongly
14 that we have indeed been taking care of them, that we
15 have indeed been increasing the capital and
16 maintenance on those assets in an effort to make we
17 leave them better than we find them. It isn't
18 necessarily a big part of this hearing because I think
19 somebody mentioned the other day, it's something that
20 people tend to take for granted in the resource stack.
21 But it's something that we ignore at our peril.

22 Now maybe Ms. Van Ruyven can talk about the
23 IPP contracts.

24 MS. VAN RUYVEN: A: So the length of the contracts
25 varies, but in 2006 Call the average of those 38
26 contracts we signed is 31 years. But it can be as

1 long as 40, and we did have several IPPs who bid in
2 40-year purchase contracts.

3 MR. FLETCHER: Q: Okay, and at the end of term that
4 residual right comes back to the Heritage Assets?

5 MS. VAN RUYVEN: A: No, there is not a mandatory
6 residual right with those contracts. We did consider
7 residual rights, but then we realized, well, a couple
8 of things. One is that we don't think Hydro is
9 necessarily in the business of owning hundreds of
10 potentially smaller projects. That's not our core
11 competency. We also thought if we made residual
12 rights mandatory in this Call, it would necessarily
13 increase bid prices for projects that we quite frankly
14 might not want to own at the end of the contract
15 period.

16 So we have allowed a negotiating process in
17 this RFP, where if there are projects that we're keen
18 on having the residual rights, we would negotiate with
19 the proponents.

20 MR. FLETCHER: Q: All right, but do you have options
21 for residual rights?

22 MS. VAN RUYVEN: A: We have options. We can have right
23 of first refusal for an extension of the contract. We
24 can buy or purchase the asset in --

25 MR. FLETCHER: Q: But in each of the contracts, do you
26 have the option to acquire the asset?

1 MS. VAN RUYVEN: A: Not a mandatory term and condition
2 in the existing contract.

3 MR. FLETCHER: Q: Right.

4 MS. VAN RUYVEN: A: It would be negotiated part of the
5 contract.

6 MR. ELTON: A: Sorry, we should probably add that many
7 of these contracts are run-of-the-river hydro
8 projects, that in order to get these projects in the
9 first place, the proponent has to get a water -- you
10 know, a licence.

11 MR. FLETCHER: Q: Right.

12 MR. ELTON: A: And that once that licence expires, the
13 proponent does not have the right to continue. And so
14 if government in its wisdom decides that it doesn't
15 want the IPP, somewhere down the road, to have control
16 of that project, it wouldn't renew its water licence.

17 MR. FLETCHER: Q: And the water licence extended the
18 same period of time as the purchase power contracts?

19 MS. VAN RUYVEN: A: I believe the water licences are 40
20 years.

21 MR. FLETCHER: Q: Right, okay. And you're aware of the
22 NAFTA legislation. Would that swing in terms of
23 expropriation in terms of the NAFTA legislation in
24 terms of not renewing the water licence?

25 MR. GODSOE: I think I'm going to object to that IR. I
26 think that clearly is a legal issue.

1 MR. FLETCHER: Okay.

2 MR. GODSOE: NAFTA's interplay with --

3 MR. FLETCHER: Q: All right, I'm not going to -- okay,
4 going back to the contract, now when you say 30-year,
5 40-year terms, presumably they're inflated. I mean,
6 are they fixed prices?

7 MS. VAN RUYVEN: A: No, they escalate at half of CPI
8 over the term of the contract.

9 MR. FLETCHER: Q: Right. Over 40 years. Do you
10 realized what the indexation factor is over 40 years?

11 MR. ELTON: A: Half of CPI.

12 MS. VAN RUYVEN: A: Half.

13 MR. FLETCHER: Q: Yeah. No, I mean, you know, I mean,
14 compound interest is the ninth wonder of the world,
15 you know, as the bankers are now finding out. So
16 there won't be Heritage Assets to be passed on to our
17 kids in their IPPs, the contracts that we're signing
18 at the moment.

19 **Proceeding Time 3:09 p.m. T58**

20 MS. VAN RUYVEN: A: Well, they're --

21 MR. FLETCHER: Q: Not if the prices are escalating at
22 half the CPI. Because the embedded cost of the
23 Heritage assets, they're actually going down in real
24 terms, in nominal terms. So -- okay.

25 MR. GODSOE: Was there a question there? I just heard a
26 statement, Mr. Chairman.

1 MR. FLETCHER: Yeah. I've finished, actually.

2 THE CHAIRPERSON: Thank you, Mr. Fletcher.

3 MR. FLETCHER: Thank you.

4 THE CHAIRPERSON: We'll break for 15 minutes.

5 **(PROCEEDINGS ADJOURNED AT 3:10 P.M.)**

6 **(PROCEEDINGS RESUMED AT 3:25 P.M.)** **T59/60**

7 THE CHAIRPERSON: Please be seated.

8 Mr. Austin, you're palely loitering by the

9 microphone.

10 MR. AUSTIN: Well, that's one way to describe it. I've

11 got a preliminary matter, Mr. Chairman. For the

12 purposes of our panel, I've spoken to Mr. Godsoe, and

13 our preference would be to schedule our witnesses for

14 March the 4th. We've got availability problems, and

15 Mr. Godsoe would be willing to split his panel insofar

16 as it's necessary to accommodate us.

17 THE CHAIRPERSON: Is that all right with you, Mr. Godsoe?

18 MR. GODSOE: It is. I, generally speaking, don't like to

19 split panels --

20 THE CHAIRPERSON: I know you don't.

21 MR. GODSOE: -- because sometimes it can be prejudicial

22 to Hydro's case. But in this case, we do very much

23 want to cross-examine the IPPBC panel, and we would be

24 prepared to split our case to ensure that that does

25 happen.

26 THE CHAIRPERSON: So, March the 4th?

1 MR. AUSTIN: That's correct.

2 THE CHAIRPERSON: Thank you. Mr. Fulton, I seem to have
3 misled you once again to think that we were sitting
4 till four. We're not, we're sitting till four-thirty.
5 Or until you finish, whichever is sooner, how's that?

6 MR. FULTON: So much for the redemption that I thought
7 that I'd obtained this morning, Mr. Chairman.

8 THE CHAIRPERSON: I'm sorry, Mr. Fulton, I do apologize.

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

10 MR. FULTON: Q: Good afternoon. I'd like to begin with
11 some clarification of one part of the Order sought,
12 and the present Order sought is found at Exhibit B1-
13 11. And then the second reference that I have for
14 you, in terms of the clarification, is in Exhibit B1-
15 1, Appendix C, which contains the directions from the
16 2006 IEP/LTAP decision, and in particular if I could
17 take you to page 6 of 10 of Appendix C of Exhibit B1-
18 1.

19 MR. ELTON: A: Which page again, please?

20 MR. FULTON: Q: Six of ten. And taking you to
21 Directive number 16. As part of the Order being
22 sought in the third bullet from the bottom of page 3
23 of 4 of the December 23rd revision number 3, an
24 amendment of Directive 16 of the Commission's decision
25 concerning B.C. Hydro's 2006 integrated electricity
26 plan LTAP to provide that DSM performance reports as

1 described in Directive 16 will be filed with the
2 Commission on an annual basis.

3 And if you look at Directive 16, I take it
4 that everything above the last sentence is captured by
5 that request for endorsement, and I'm wondering
6 whether or not, then, it's B.C. Hydro's position that
7 it will continue to employ the three DSM tests in the
8 manner consistent with Directive 70, included in Order
9 number G-96-04, or there was an oversight in terms of
10 deleting that?

11 MR. GODSOE: There was not an oversight, and there is two
12 Information Requests that deal with our position on
13 the RIM test. It's a legal issue, but in our view,
14 because of the DSM regulation that has overtaken both
15 the underlying F05/F06 RRA directive and Directive 16
16 with respect to RIM, and I can get those IR references
17 if it helps, or I can just agree to deal with that in
18 argument.

19 MR. FULTON: Thank you.

20 **Proceeding Time 2:30 p.m. T61**

21 MR. FULTON: Q: The next question I have relates to a
22 comment, Ms. Van Ruyven, you made the other day at
23 Transcript Volume 4, page 479, beginning at line 26
24 over to 480, line 3, and it related to the
25 electrification of the Vancouver Port at Canada Place.
26 I assume that's what you were talking about there. So

1 479, line 26, over to 480, line 3.

2 MS. VAN RUYVEN: A: Yes, I see it.

3 MR. FULTON: Q: And so you were speaking there of the
4 electrification of the Vancouver Port at Canada Place.

5 MS. VAN RUYVEN: A: That's right, the shore power.

6 MR. FULTON: Q: Right.

7 MS. VAN RUYVEN: A: Correct.

8 MR. FULTON: Q: Are there any other new tariffs that
9 B.C. Hydro is contemplating for other electrification
10 initiatives beyond the shore power rate?

11 MS. VAN RUYVEN: A: There are none that I'm aware of at
12 this time. However, we know that truck-stop
13 electrification was contemplated in the climate change
14 government plan, so there could be other applications
15 at future dates. But at this time we are not working
16 on a tariff specific to truck-stop electrification.

17 MR. FULTON: Q: Thank you. Next if I could take you to
18 Exhibit B-10, the update, and if we begin at page 46,
19 lines 1 to 3, where B.C. -- I'll wait for you to catch
20 up to me. So B-10.

21 MR. ELTON: A: Thank you.

22 MR. FULTON: Q: Page 46, lines 1 to 3. There on a go-
23 forward basis B.C. Hydro is proposing to continue to
24 file capital plans biannually as a part of future
25 RRAs, and the information provided in the future
26 capital plan will be consistent with the capital plan

1 filed in the fiscal '09-10 RRA.

2 Now, I'd like to try and clarify what it is
3 that will be filed, and how these filings will
4 interact with CPCN applications, if I might. So first
5 of all, I take it that the filings that are being
6 spoken of at the top of page 46 are filings made
7 pursuant to Section 44.2 of the Act. And Mr. Godsoe
8 can help you.

9 MR. ELTON: A: I think that's -- well, I believe that's
10 true, yes.

11 MR. FULTON: Q: Thank you. If you turn back to page
12 45, the first bullet under Section 4.2 refers to a
13 description of the capital expenditures by business
14 function. Is it B.C. Hydro's intention that for each
15 of the business functions it will file, first of all,
16 the aggregate -- the annual aggregate of capital
17 expenditures that are less than \$2 million?

18 MR. ELTON: A: I think the intention here is to explain
19 that what we did, what we submitted to the BCUC as
20 part of the last RRA represented the kind of form and
21 level of detail that we thought was appropriate. And
22 I mean this is just a -- the three bullets here are
23 just summaries, really, of what was done, but I think
24 if you take what was done, we're saying we think that
25 is the standard that we -- you know, that we're
26 intending to provide unless we hear otherwise.

1 MR. FULTON: Q: Okay. So if I drop down to the second
2 bullet, B.C. Hydro will be filing for each business
3 function the list of capital expenditures that are
4 greater than 2 million. Is my interpretation of that
5 bullet correct?

6 MR. ELTON: A: Well, it just says a list of all
7 projects. So all projects where the gross estimated
8 costs are greater than 2 million across the company.

9 MR. FULTON: Q: Right, and then a project description,
10 if I drop down to the next bullet, of capital
11 expenditures that are greater than 55 million?

12 MR. ELTON: A: Greater than 5 million.

13 MR. FULTON: Q: Five million, sorry.

14 MR. ELTON: A: Right. So in other words, the first one
15 is just a list, and then the second one is above 5
16 million -- so above 2 million it's a list. Above 5
17 million it's an actual projection description for each
18 one.

19 **Proceeding Time 3:35 p.m. T62**

20 MR. FULTON: Q: And then if turn back to page 44, there
21 will be also -- and I'm looking at the paragraph --
22 first full paragraph on the page it has the number 20
23 beside it, that B.C. Hydro will also file a detailed
24 CPCN-like business case for all major threshold
25 projects as per item 20 in the fiscal '07/'08
26 negotiated settlement agreement.

1 MR. ELTON: A: Yes.

2 MR. FULTON: Q: And is it also intended that B.C. Hydro
3 will file the total annual expenditure for the
4 business function?

5 MR. GODSOE: Yes, and I can confirm that in argument.

6 MR. FULTON: Thank you.

7 MR. FULTON: Q: Then if we turn back to the last
8 paragraph on page 46 --

9 MR. ELTON: A: Last paragraph of 4.2?

10 MR. FULTON: Q: Actually it's 4.3 on page 46.

11 MR. ELTON: A: Right, thank you.

12 MR. FULTON: Q: B.C. Hydro there states it will bring
13 forward all capital projects, be it generation,
14 distribution or other projects such as properties or
15 information technology where B.C. Hydro plans to seek
16 or has obtained B.C. Hydro Board of Director's
17 approval of a project expenditure of \$50 million or
18 more. When the project is a generation project, where
19 the driver is growth, and the project permits, the
20 filing will be part of the LTAP filing, correct?

21 MR. ELTON: A: Yes.

22 MR. FULTON: Q: And that carries over on page 47.

23 MR. ELTON: A: Yes, the top of page 47, yes.

24 MR. FULTON: Q: And can you tell us whether this means
25 that the section 44.2(1)(b) expenditure schedules for
26 those generation major capital projects may be filed

1 then in either the RRA application or an LTAP
2 application?

3 MR. GODSOE: Or on a stand-alone basis. And I can
4 address all three in argument.

5 MR. FULTON: Thank you.

6 MR. FULTON: Q: And then on page 47, B.C. Hydro states
7 that it expects to file individual project
8 applications for other major threshold projects. Do I
9 take it that these will be filed either under
10 44.2(1)(b) or sections 45 and 46 of the Act?

11 MR. GODSOE: So generally speaking under Section
12 44.1(2)(b) and again I'll confirm that in argument.

13 MR. FULTON: Thank you.

14 MR. FULTON: Q: And this again may be something that
15 Mr. Godsoe may need to address in argument, but can
16 you tell me what's contemplated in terms of if there
17 are any differences contemplated in the filings if the
18 major threshold project is filed under 44.2(1)(b) or
19 under Sections 45 or 46.

20 MR. GODSOE: I will address that in argument, but
21 generally speaking it will be the same level of detail
22 and that's why we refer to filings under Section
23 44.2(1)(b) as CPCN-like filings.

24 MR. FULTON: Q: And does B.C. Hydro contemplate that
25 the choice of the nature of the application it makes
26 will have an impact on the manner in which the

1 Commission may consider the project?

2 MR. GODSOE: I think I'll address that in argument, but
3 generally speaking if you are speaking to whether the
4 process would differ, I think my answer would be no,
5 but there are differences in the legal effects, which
6 I can address in argument.

7 MR. FULTON: Thank you. And also in addressing that
8 point of legal effects, Mr. Godsoe, if you could
9 address whether the choice of approach impacts the
10 nature of the determination that the Commission may
11 make at the end of its review. I'm assuming that
12 that's what you mean when you made your last
13 statement.

14 **Proceeding Time 3:40 p.m. T63**

15 MR. GODSOE: There might be a bit more than that, but I
16 will certainly address what you're posing to me in
17 argument.

18 MR. FULTON: And also if you could address an assumption
19 that if the Commission approves a project, would there
20 be any difference that the approval under Section
21 44(2), rather than under Sections 45 and 46, would
22 have with regard to the effect of the approval going
23 forward?

24 MR. GODSOE: I will address that as well in argument.

25 MR. FULTON: And finally, if you could address in
26 argument -- and this is more work for Mr. Godsoe than

1 this panel, but he is -- it would be helpful to have
2 these addressed in argument in any event, and that's
3 the proper forum for them, Mr. Chairman.

4 Whether there is any reason that the
5 Commission should not, under Section 45(5), direct
6 that all applications for major threshold projects
7 must be filed under Sections 45 and 46.

8 MR. GODSOE: I will address that in argument.

9 MR. FULTON: Thank you.

10 MR. FULTON: Q: Next, I'd like to turn to the topic of
11 long-term electricity rate forecast, and I just want
12 to look at it in the context of the BCTC capital plan
13 application, and I provided your counsel on Friday
14 with Exhibit B-1, or excerpts from B-1 of the capital
15 -- BCTC capital plan for fiscal 2010/2011.

16 MR. ELTON: A: Yes.

17 MR. FULTON: Q: And I wanted to focus in on Table 8-2
18 at page 8-3.

19 So if I could ask that that excerpt from
20 the BCTC transmission system capital plan, fiscal
21 2010/2011, be marked Exhibit A2-1, Mr. Chairman.

22 THE CHAIRPERSON: Certainly.

23 THE HEARING OFFICER: A2-1.

24 (ONE-PAGE LETTER DATED 21 NOVEMBER, 2008 FROM BCTC TO
25 BCUC, WITH ATTACHED EXCERPTS FROM BCTC F2010 AND T2011
26 TRANSMISSION SYSTEM CAPITAL PLAN, MARKED EXHIBIT A2-1)

1 MR. FULTON: Q: And can either of you tell me whether
2 the long-term retail price forecasts filed by B.C.
3 Hydro included an explicit forecast of the
4 transmission revenue requirement from BCTC?

5 MR. ELTON: A: Sorry, could you repeat the question?

6 MR. FULTON: Q: Yes. Did the long-term retail price
7 forecasts filed by B.C. Hydro include an explicit
8 forecast of the transmission revenue requirements from
9 BCTC?

10 MR. ELTON: A: I believe it reflected the most recent
11 BCTC such forecast that was available at the time the
12 long-term rate impact forecast was made.

13 MR. FULTON: Q: Are you able to say whether that
14 forecast is consistent with the transmission revenue
15 requirement forecast that was filed by BCTC and
16 appears at Table 8-2?

17 MR. ELTON: A: I believe that the BCTC forecast you're
18 referring to, the most recent one, was after the long-
19 term rate increase forecast, and therefore it was not
20 reflected in the long-term rate increase forecast.

21 MR. FULTON: Q: Can I ask you by way of undertaking to
22 provide the forecast that B.C. Hydro relied on from
23 the transmission revenue requirement, before the
24 transmission revenue requirement?

25 MR. ELTON: A: Yes.

26

Information Request

1

2 MR. FULTON: Q: And can you tell us in terms of order
3 of magnitude approximately how much of B.C. Hydro's
4 total revenue requirement is driven on average by the
5 transmission revenue requirement?

6

Proceeding Time 3:45 p.m. T64

7 MR. ELTON: A: We can do that as part of the
8 undertaking. I mean, in general terms we don't think
9 it was material, we didn't think it was material
10 enough to consider restating this.

11 MR. FULTON: Q: All right, so if you would do that by
12 way of undertaking.

13 MR. ELTON: A: Yes.

14

Information Request

15 MR. FULTON: Q: Thank you.

16 Now, I have some questions on renewable
17 energy credits or RECs. And if I could ask you to
18 have before you Exhibit B-3, the response to BCUC IR
19 1.98.1. So B-3, response to BCUC IR 1.98.1. And also
20 Exhibit B-4, the response to BCUC 2.227.1. So B-4,
21 response to BCUC 2.227.1. So, and in terms of
22 sequencing then, I'll begin with the response to
23 1.98.1.

24

25

26

In that response, B.C. Hydro was responding
to the question of what it meant by market sales would
not be netted against actual generation, regardless of

1 whether B.C. is a net importer or exporter. And then
2 if you look down to the bottom of the page, the
3 statement appears:

4 "The 90 percent clean or renewable target is
5 with respect to the generation resource and
6 does not place requirements on the use of
7 electricity or its associated attributes."

8 And as well in the answer in the first
9 bullet, the statement appears:

10 "The target is independent of whether the
11 generation results in a surplus of energy
12 above the amount required to meet domestic
13 load, or whether there is a shortfall that
14 needs to be met by imports."

15 And then if I could ask you to just turn
16 back to the response to 1.92.2 in the same volume.
17 1.92.2. And there you were asked to provide examples
18 of the detailed methodology and assumptions for
19 estimating incremental revenues from the sale of
20 unbundled RECs for two or three portfolios modelled by
21 B.C. Hydro, including the amount of REC sold for the
22 portfolio, the calculation of revenue from sale of
23 RECs and the treatment of the revenue and the
24 portfolio analysis. And in the first paragraph you
25 say:

26 "The REC sales in any given year are

1 calculated by multiplying the net positive
2 GWh electricity exported by the
3 corresponding REC price forecast shown in
4 Figure 4-7 of the 2008 LTAP. Three REC
5 values are obtained by using low, mid and
6 high REC price scenario."

7 Now, the response on the 90 percent cleaner
8 renewable target in BCUC IR 1.98.1 requires a little
9 further explanation, in our view.

10 **Proceeding Time 3:50 p.m. T65**

11 So, can you describe how, in somewhat more
12 detail, the policy may affect B.C. Hydro's efforts to
13 market RECs in neighbouring jurisdictions? So that --
14 and I'm thinking more of the eligibility of B.C.
15 generation, and those generations -- or apart from the
16 eligibility of B.C. generation in those jurisdictions.
17 So, let me try that again.

18 Apart from the eligibility of B.C.
19 generation in those jurisdictions, can you describe in
20 more detail than you've provided in 1.98.1 how the
21 policy may affect B.C. Hydro's efforts to market RECs
22 in those neighbouring jurisdictions?

23 MS. VAN RUYVEN: A: Well, I'm definitely not the expert
24 on renewable energy credits, and we do have an expert
25 on Panel 3, but my understanding is, it does make a
26 difference whether or not you define it as a renewable

1 portfolio standard or if you define it as just simply
2 an operating standard, and for purposes of this IR,
3 we've said that we understand the 90 percent is
4 actually more of an operating standard, of how we
5 operate our existing assets, not a renewable portfolio
6 standard. And therefore, if we produce above that 90
7 percent operating standard, it's our understanding
8 that we actually do have renewable energy credits that
9 we can sell into other jurisdictions that have
10 renewable portfolio standards. So, I do believe it's
11 all related to how we define it, and then how that
12 plays out in other jurisdictions, and what their rules
13 and regulations are around renewable energy credits.

14 It all comes down to the premise that you
15 only have a renewable energy credit if you're going
16 above and beyond whatever target has been set for you.
17 We wouldn't be able to sell renewable energy credits
18 for the 90 percent of the clean generation that we
19 have today. It has to be shown as above and beyond
20 what you normally would have otherwise have done.

21 MR. FULTON: Q: Thank you. And then just turning to
22 the response to IR 2.227.1, page 2 of 2, bullet number
23 3, where it's stated:

24 "Surplus energy annual net imports from
25 portfolio scenario combinations that met the
26 90 percent clean generation target was

1 assumed to be clean energy and the
2 associated RECs were sold."

3 Can you tell us why B.C. Hydro considers the marketing
4 of RECs associated with surplus energy is consistent
5 with the policy, but the sale of RECs with domestic
6 energy is inconsistent with the policy?

7 MS. VAN RUYVEN: A: Again, I don't think I can answer
8 that question, but certainly Panel 3 can.

9 MR. FULTON: Q: Okay. Paragraph 1 on page 1 of that
10 response, and again, if this is for Panel 3, they can
11 take this as notice that I will ask them this
12 question. Why does B.C. Hydro intend only to sell
13 RECs associated with energy that is surplus to B.C.
14 Hydro's needs in a non-critical water year?

15 MR. GODSOE: I do think that's appropriately addressed by
16 Panel 3.

17 MR. FULTON: Q: All right. Well, let me try these
18 questions, then, which are of a more general nature.
19 Can you tell me who in B.C. Hydro will be -- or what
20 department in B.C. Hydro will be responsible for
21 marketing the RECs?

22 MS. VAN RUYVEN: A: Well, we have been doing a small
23 amount of marketing of the renewable energy credits,
24 but it's really very small and kind of around the
25 margin, and that has been a group in my customer care
26 organization who's been selling a small amount of

1 domestic renewable energy credits. And then Powerex
2 has been doing some deals in United States as well.

3 **Proceeding Time 3:55 p.m. T66**

4 Going forward, I'm not sure, as this
5 becomes quite a bit bigger potential revenue stream
6 for us and becomes more complicated when you overlay
7 the western climate initiative and cap and trade on
8 top of selling renewable energy credits. That may
9 move over into the environmental corporate group at
10 B.C. Hydro, but that's a decision we haven't made at
11 this point in time.

12 MR. ELTON: A: And the execution would be through
13 Powerex, I believe, on behalf of B.C. Hydro.

14 MR. FULTON: Q: Has B.C. Hydro formulated any type of
15 explicitly policy for the marketing of RECs at this
16 time over and above the representative scenarios that
17 it has provided in the LTAP?

18 MS. VAN RUYVEN: A: No, I think it's very early days at
19 this point in time. So we have an indication, as you
20 can see, in Chapter 4 of the LTAP, that these do have
21 some value depending on whether you believe the low,
22 mid or high forecast scenarios that's painted in
23 Chapter 4, and we actually do, through our clean power
24 Calls, we've kept the green attributes, so we own
25 them. So we feel that there is going to be an
26 emerging marketplace here where we can capture some

1 fairly significant value. But still early days and
2 too soon to really say, until that market really
3 starts to form and mature.

4 MR. FULTON: Q: Thank you. Would B.C. Hydro expect
5 that the total revenue from the renewable energy
6 credits would be applied to its revenue requirement as
7 an offset to revenues required from domestic
8 customers?

9 MS. VAN RUYVEN: A: I don't know the answer to that.

10 MR. FULTON: Q: Okay. Is that something Panel 3 would
11 know, or no one would know within the organization at
12 this point?

13 MR. ELTON: A: So the question is, is about the revenue
14 from renewable energy certificates relating to energy
15 that is being acquired for domestic purposes?

16 MR. FULTON: Q: No, it's how you are -- would the
17 revenues from the RECs be used to offset revenues
18 required from domestic customers for the purposes of a
19 revenue requirement application.

20 MR. ELTON: A: I'm going to take an undertaking on that
21 simply because I want to make sure I've understood the
22 question very clearly.

23 MR. FULTON: Q: All right, thank you.

24 **Information Request**

25 MR. FULTON: Q: And has B.C. Hydro given any
26 consideration at this point as to how the Commission

1 might review the sales of RECs from a prudence
2 standpoint?

3 MS. VAN RUYVEN: A: Well, I have not been involved in
4 any conversations where we've put our mind to that, I
5 think probably because it's still early days. That's
6 a conversation that's yet to happen in the near term.

7 MR. FULTON: Q: Thank you. Now, on Friday I also
8 provided your counsel with an extract from the
9 proposed decision of an administrative law judge for
10 the California Public Utilities Commission, and there
11 was attached a summary page headed, "Decision
12 Authorizing the Use of Renewable Energy Credits for
13 Compliance with the California Removable Portfolio
14 Standard." Is this a decision that you can talk
15 about -- a draft decision that you can talk about
16 generally or would it be Panel 3?

17 MS. VAN RUYVEN: A: Well, I've read it. So very high
18 level, I think what this says it supports the fact
19 that there will be a renewable energy marketplace, and
20 that jurisdictions in the United States, which would
21 potentially be one of our best markets, would be open
22 to allowing renewable energy credits from other
23 jurisdictions to count towards, for example,
24 California's renewable portfolio standards. So this
25 bodes well for a marketplace for us to sell those
26 renewable energy credits. I think that's the essence

1 of what this decision is saying.

2 MR. FULTON: Q: Yes. The draft decision, if it's
3 formalized into a final decision, it will be
4 beneficial from B.C. Hydro's perspective in terms of
5 the marketability of those RECs.

6 MS. VAN RUYVEN: A: That's our understanding.

7 THE CHAIRPERSON: Mr. Fulton, do you intend to mark that?

8 MR. FULTON: I do, indeed, Mr. Chairman. If that
9 document might be marked Exhibit A2-2.

10 THE HEARING OFFICER: Marked A2-2.

11 (DRAFT DECISION FROM CALIFORNIA PUBLIC UTILITIES
12 COMMISSION DATED OCTOBER 29, 2008, MARKED EXHIBIT A2-
13 2)

14 THE CHAIRPERSON: If nothing else, Mr. Fulton, I think
15 what this does is it introduces a whole new array of
16 acronyms that I'm completely unfamiliar with.

17 **Proceeding Time 4:01 p.m. T67**

18 MR. FULTON: Q: Now, I do next have a series of
19 questions on Special Direction 10, and I'm quite
20 content to have those matters which Mr. Godsoe feels
21 he would be more comfortable addressing in argument,
22 to do so. At this point I'm seeking your
23 understanding from a legal standpoint, legal
24 interpretation standpoint. Mr. Godsoe can address
25 them in argument.

26 And so if you had before you the Special

1 Direction which is in Exhibit B-1-1, Exhibit B-1. B-
2 2, I'm sorry. B-2 of Exhibit B-1-1. And also if you
3 could have before you Exhibit B-12, the response to
4 BCUC 3.262.1. And I note that this response was
5 identified for Panel 4, so I'm just asking you to
6 address it on a high level. So that's B-12, BCUC
7 3.262.1. And the response to BCUC 3.262.1 states in
8 part:

9 "Section 3 of Special Direction No. 10 (SD
10 10) provides that the BCUC in regulating
11 B.C. Hydro and its LTAPs must supply the
12 criterion that B.C. Hydro is to achieve
13 energy and capacity self-sufficiency by
14 becoming capable of meeting by 2060 and each
15 thereafter, its electricity supply
16 obligations solely from electricity
17 generating facilities within the province."

18 Is it your understanding that it is
19 ultimately for the Commission to determine, based on
20 its assessment of the facts in the application,
21 whether or not the tests required of it in Section 3
22 are met?

23 MR. ELTON: A: Yes.

24 MR. FULTON: Q: And Ms. Van Ruyven, you had a
25 discussion with Mr. Austin on Friday about
26 practicable, and it not being defined in the

1 in terms of the meaning of "capable" in the Special
2 Direction.

3 MS. VAN RUYVEN: A: Yes, I believe this -- the Special
4 Direction is to the Commission to interpret the self-
5 sufficiency --

6 MR. FULTON: Q: Right.

7 MS. VAN RUYVEN: A: -- and "capable" -- what "capable"
8 means. Yes, I would agree.

9 MR. FULTON: Q: Right. And it makes that determination
10 based on the facts -- its assessment of the facts that
11 are presented to it in the context of this
12 application.

13 MS. VAN RUYVEN: A: Of the plan, that's correct.

14 MR. FULTON: Q: Now, in terms of "capable of", though,
15 in a definition, is B.C. Hydro aware of any other
16 specific factors that the Commission should take into
17 account in considering that phrase, other than the
18 firm energy capability from the assets that are
19 hydroelectric facilities?

20 MR. ELTON: A: I'm not sure that the firm energy --
21 sorry, I'm not sure that the firm energy capability
22 wording is necessarily intended to help with the
23 definition of "capable". So, I don't think there's
24 anything that I'm aware of that would help the
25 Commission to determine what the word "capable" means.
26 I think it's just something that's left to be

1 determined.

2 MR. FULTON: Q: Okay.

3 MR. GODSOE: But we will address that in argument.

4 MR. FULTON: Thank you.

5 MR. ELTON: A: Hopefully you'll say the same thing.

6 MR. FULTON: Q: On B.C. Hydro's understanding, can the
7 term "capable" apply to a situation where B.C. Hydro
8 has access to displaceable resources that are capable
9 of meeting demand, but may not be dispatched because
10 of more favourable market resources?

11 MR. GODSOE: That is addressed partially in Exhibit B-4
12 response to BCC IR 2.215.2, and I'm happy to follow up
13 that further in argument.

14 MR. FULTON: Thank you.

15 MR. FULTON: Q: If we turn back to the definitions in
16 the Special Direction, there is a definition provided
17 for electricity supply obligations that are referred
18 to in Section 3 of the Special Direction, and that
19 definition includes a reference to peak load in the
20 penultimate line of the definition.

21 MR. ELTON: A: Yes.

22 MR. FULTON: Q: And you'll agree with me that "peak
23 load" is -- the phrase "peak load" is not defined in
24 the definition.

25 MR. ELTON: A: Correct.

26 MR. FULTON: Q: And Mr. Godsoe, in his opening

1 statement on behalf of B.C. Hydro at transcript Volume
2 3, page 149, lines 6 to 9, addressed the issue of the
3 removal of the 400 megawatts of market reliance for
4 reserves from the capacity load resource balances
5 after 2015. Do you recall that part of his opening
6 statement?

7 MR. ELTON: A: I recall him addressing that. I'm not
8 sure of the reference.

9 MR. FULTON: Q: Okay. And can you tell us
10 approximately how often those market -- the 400
11 megawatts would be called upon? Or is that something
12 that I should ask the DSM --

13 **Proceeding Time 4:11 p.m. T69**

14 MS. VAN RUYVEN: A: Well, the 400 megawatts really
15 forms part of our operating reserve, our 14 percent
16 operating reserve. I think this Special Direction No.
17 10 is quite specific about -- if you go to section 3,
18 the middle part before you get to (d) and (e), it
19 says:

20 "The Commission must use the criterion that
21 the authority is to achieve energy and
22 capacity self-sufficiency."

23 So we do feel that it clearly addresses that we must
24 be self-sufficient both from a capacity and energy.
25 And that 400 megawatts, we were relying basically on
26 Alberta for that 400 megawatts that formed part of our

1 operating reserve stack.

2 MR. FULTON: Q: Right. But those reserves, I take it,
3 are rarely called upon.

4 MS. VAN RUYVEN: A: Well, they're for an important
5 reason, in case we do need them. Every utility has
6 operating reserves because you need to be able to meet
7 your peak under many different circumstances. And
8 that's how -- it's the flipside of planning to
9 critical water year on the energy, so planning to
10 critical water gives you a cushion. And having an
11 operating reserve is the equivalent on the capacity
12 side of the planning.

13 MR. FULTON: Q: No, and I accept that. But my question
14 was, are those reserves -- and I put it to you that
15 those reserves were rarely called upon. Would you
16 agree with that?

17 MS. VAN RUYVEN: A: And again, Mr. O'Riley can probably
18 answer that more clearly in that he's responsible for
19 the three-year operating window, which if we were
20 going to call him then on those capacity reserves it
21 would be within an operating regime.

22 MR. FULTON: Q: All right, then if I could next turn to
23 Canadian entitlements, and this is Table 2-10 of
24 Exhibit B-10, page 29, and you discussed this table
25 earlier this afternoon with Mr. Oulton.

26 MR. ELTON: A: Yes.

1 MR. FULTON: Q: And so we can agree that according to
2 this table, B.C. Hydro projects small energy deficits
3 under the mid-load forecast in 2013 and 2014.
4 Correct?

5 MR. ELTON: A: That's correct.

6 MR. FULTON: Q: And as I took the answer to one of Mr.
7 Oulton's questions, short-term market purchases to
8 address these short-term deficits would not be
9 inconsistent with the special direction prior to
10 fiscal 2016.

11 **Proceeding Time 4:14 p.m. T70**

12 MS. VAN RUYVEN: A: We believe that is correct, yes.

13 MR. FULTON: Q: And do I take it as well that the
14 energy allowance, the firm energy allowance from
15 Burrard could be increased to address these temporary
16 deficits as well?

17 MR. GODSOE: I'll just give the panel the benefit of, we
18 addressed that in the response to BCUC IR 3.270.1,
19 Exhibit B-12.

20 MR. FULTON: Thank you, Mr. Godsoe.

21 MR. ELTON: A: The premise of the question is what? Is
22 that we would need to do something about that deficit?

23 MR. FULTON: Q: That you could use the firm energy
24 allowance from Burrard to address the temporary
25 deficits in 2013 and 2014.

26 MR. ELTON: A: But there's no -- and I think an answer

1 is that there is no requirement to be self-sufficient
2 during those years, and that we will actually find
3 them -- you know, we can plan to find the most
4 efficient way of doing that which can include market
5 purchases.

6 MR. FULTON: Q: Or using Burrard.

7 MR. ELTON: A: Yeah, it would probably amount to the
8 same thing in that case.

9 MR. GODSOE: Can I just clarify. You are referring to
10 Burrard in the planning context or operational
11 context.

12 MR. ELTON: A: That's what I was not sure about, yeah.

13 MR. FULTON: Q: In the planning context.

14 MR. GODSOE: So I think that's asked and answered in the
15 response to BCIR 3.27.1, which is we would not
16 increase the planning requirement.

17 MR. ELTON: A: Right.

18 MR. FULTON: Q: Next I'd like to go to contingency
19 plans, and the references are Section 6 of the
20 Application and pages 6-57 to 6-58, and if any of
21 these questions should go to Panel 4, because I know
22 that you are responsible more for one and that panel
23 is more for six, but I'll try these at a higher level
24 and we can see where we get to.

25 **Proceeding Time 4:17 p.m. T71**

26 So, if we begin with Section 6-4.2 at page

1 6-57 of the application, beginning at line 7, and then
2 continuing over to 6-58, line 7, if you could read
3 those passages, and then I'll ask you some questions.

4 MR. ELTON: A: Yes.

5 MR. FULTON: Q: Okay. And in order for me to put some
6 context into these questions, I also need you to have
7 the draft Order before you, which is in B-1, Section
8 1, page 1-4. And this is the October 24th -- a
9 reference to the October 24th, 2008 revision 3.

10 And one of the items for approval is that
11 the Commission approves the submission of the LTAP
12 contingency reserve plans for inclusion in B.C.
13 Hydro's network integration transmission service
14 update. Correct?

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

16 MR. FULTON: Q: Okay, that's at lines 16 and 17 of 1-4.
17 If I could ask you, then, to turn to Exhibit B-3, BCUC
18 IR 1.140.1. So, B-3, 140.1.

19 And B.C. Hydro was asked to elaborate on
20 the statement that I referred you to, which begins
21 with the words "In a similar fashion," and asks
22 whether B.C. Hydro expected BCTC to build the CRP, or
23 build to the CRP or build to the base of the LTAP.

24 **Proceeding Time 4:20 p.m. T72**

25 And the answer was in part that B.C. Hydro would
26 expect BCTC to follow a process similar to that which

1 B.C. Hydro undertakes as described at page 657, lines
2 7 to 11, and page 658, lines 1 to 3 of the Exhibit B-
3 1. And then there's a reference to that statement.
4 And then the response ends with:

5 "Hence B.C. Hydro would expect BCTC to plan
6 to CRP, and then advance the projects
7 through construction as conditions warrant.
8 BCUC would have the opportunity to review
9 the need to advance the project at the time
10 the commitments to construction would be
11 made."

12 Now, B.C. Hydro is of the view that CRPs
13 are necessary and sufficient to require BCTC to
14 advance required projects through the definition
15 phase, correct?

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

17 MR. FULTON: Q: And can you tell us what the process is
18 that B.C. Hydro envisions for actually advancing a
19 CPCN application for the construction of a
20 transmission project for the CRPs?

21 MS. VAN RUYVEN: A: I think that would come through an
22 application that BCTC would make in a CPCN-like
23 process.

24 MR. FULTON: Q: So section 45 and 46 of the
25 application.

26 MS. VAN RUYVEN: A: Much along the lines of the

1 conversation you were having with Mr. Godsoe earlier.
2 It would be coming forth in that similar form.

3 MR. FULTON: Q: Okay, so it would be BCTC's
4 application. What responsibilities would you envision
5 that B.C. Hydro would have in connection with that
6 application?

7 MS. VAN RUYVEN: A: I think we would be the instigator
8 from a need perspective of BCTC bringing forth that
9 application, depending on changes to the load
10 forecast, to what we had in our resource stack,
11 earliest in-service dates of base plan supply
12 additions. So we would basically be setting the
13 context and the need for BCTC moving forward with any
14 transmission projects.

15 MR. FULTON: Q: All right, so it would be B.C. Hydro
16 then that provides BCTC with the information that it
17 needs to move the project beyond the definition phase.

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

19 MR. FULTON: Q: And then in terms of the CPCN
20 application, does B.C. Hydro then envision that it
21 would provide a panel that would give evidence in
22 terms of support of the need that it supply to BCTC?

23 MR. GODSOE: So I'm uncomfortable with that question.
24 We're getting into applications in the future and
25 whether Hydro will put a panel up in a particular
26 case. I don't anyone can address at this time.

1 **Proceeding Time 4:24 p.m. T73**

2 MR. FULTON: Q: Let me try it this way then. In the
3 event that there is an insufficient lead time, as I
4 understand it, B.C. Hydro -- if there's an
5 insufficient lead time in order to maintain the
6 contingency resource, and there is either a
7 sufficiently high likelihood the resource would be
8 required, or there was a high consequence of the
9 shortage, B.C. Hydro would identify to the Commission
10 it's plan to construct the resource with the
11 appropriate application initiating final
12 implementation including approvals. Is that correct?

13 MS. VAN RUYVEN: A: Yes, and we would do that through
14 an LTAP or through other applications.

15 MR. FULTON: Q: Okay.

16 MS. VAN RUYVEN: A: And hence you see -- I mean, you
17 see the Fort Nelson application in this LTAP we are
18 seeking because of the set of changed circumstances in
19 the Fort Nelson area, and so we are seeking approval
20 for that project in this LTAP.

21 MR. FULTON: Q: And once a CRP is accepted by the
22 Commission and included in a NITS application, can you
23 tell us how B.C. Hydro would communicate to BCTC the
24 likelihood that a resource in its CRP will be required
25 and whether or not there's sufficient time available
26 to maintain the resource or whether there was a high

1 consequence of the shortage?

2 MR. GODSOE: I do think that's better addressed to Panel
3 4.

4 MR. FULTON: Thank you.

5 MR. FULTON: Q: And then finally I want to turn to the
6 subject of electricity prices in the last ten years of
7 the forecast, and here if I could refer you to Exhibit
8 B-4, BCUC IR 2.174.1. So Exhibit B-4, BCUC IR
9 2.174.1. And I'll let you read the question and the
10 answer first and then I'll ask my questions.

11 **Proceeding Time 4:27 p.m. T74**

12 MR. GODSOE: I want to make sure the panel's got the
13 revised response as well, because to that one there's
14 Exhibit B4-3.

15 MR. FULTON: Yes.

16 MR. GODSOE: Thank you.

17 MR. ELTON: A: We do have the revised response, thank
18 you.

19 MR. FULTON: Q: All right. And, subject to whatever
20 comments you might wish to add in light of the revised
21 response, would you agree with me that the question
22 basically asks why B.C. Hydro assumed a zero percent
23 real rate increase in electricity prices in the last
24 ten years of the forecast?

25 MR. ELTON: A: Yes.

26 MR. FULTON: Q: And are you able to confirm that in the

1 previous LTAP filing, B.C. Hydro assumed zero percent
2 real price increases for the entire forecast period?

3 MR. ELTON: A: That sounds right.

4 MR. FULTON: Q: Subject to check?

5 MR. ELTON: A: Yes, sure, that would be better.

6 MR. FULTON: Q: And in the present application, B.C.
7 Hydro is assuming substantial increases in the first
8 ten years of the forecast, and zero in the last ten
9 years.

10 MR. ELTON: A: In real terms, yes. Again, I mean, the
11 word "substantial", I realize, depends on your
12 perspective, but I recognize that they are, so I'll
13 say yes.

14 MR. FULTON: Q: Thank you. And would you agree with
15 me, Mr. Elton, that there is a near-universal concern
16 about the subject of global warming at the present
17 time?

18 MR. ELTON: A: Yes.

19 MR. FULTON: Q: Okay. And as a result of that concern,
20 does B.C. Hydro believe that energy commodities will,
21 in general, experience zero real price growth in the
22 long term?

23 MR. ELTON: A: In general I don't think we know,
24 because it's like a lot of other things, it's a
25 function of supply and demand. I mean, for example,
26 you know, somebody showed me earlier the quote from

1 the meeting between the President of the United States
2 and the Prime Minister of Canada. I think they talked
3 about carbon capture and storage. Carbon capture and
4 storage today is not something that, as far as I know,
5 is that close to commercial reality. But if it became
6 close to commercial reality at a reasonable price,
7 that would change, significantly, the picture around
8 climate change, or could change the picture around
9 climate change. That's one thing.

10 Second, we've talked quite a bit here about
11 the DSM situation, and the prospect of creating a
12 conservation culture. When I talk to other energy
13 companies, both electric utilities, gas companies, or
14 oil companies, they are far more interested in demand-
15 side management than they were five years ago, and
16 that could be for a variety of reasons, but one of
17 them, I think, is the kind of pressures that they're
18 feeling from the public and from legislators. So, it
19 depends, I think, on how ingenious we all are in
20 finding solutions to the problem.

21 **Proceeding Time 4:30 p.m. T75**

22 MR. FULTON: Q: Over the longer term, does B.C. Hydro
23 believe that clean electricity resources can be found
24 at decreasing real costs, costs and real cost, or
25 increasing real costs?

26 MR. ELTON: A: It's a great question and a very hard

1 one. I think with DSM, which is, you know, we regard
2 as a clean energy resource, although I realize that
3 it's a demand-side resource, again, so much depends on
4 where the impetus, momentum, is. And we've been
5 sitting here for the last few days, Ms. Van Ruyven and
6 I, reflecting occasionally on the same kind of hearing
7 a few years ago, when everyone in the room was very
8 skeptical about the possibilities for demand-side
9 management. And we were at that time putting forward
10 plans that were far less aggressive than they are
11 today, and people were questioning whether they could
12 be done. There's been a change in the view that
13 people have towards it. So, just on the basis of that
14 resource -- at the same time, we keep finding
15 different ways of consuming electricity and of
16 consuming energy. So, does this mean that the people,
17 the generation that's leaving high school now or
18 leaving university now, in 20 years' time will they
19 become consumers like we did? I don't know. But that
20 will be an important question to answer in figuring
21 out whether the first of those choices will go up or
22 down in price.

23 In terms of renewable power, I think the
24 likelihood is more -- it's more likely that the costs
25 will go up rather than down, given difficulties in
26 permitting, given the fact that you're going further

1 and further to get it. On the other hand, if you look
2 at, for example, the cost of wind power over the last
3 few years, look at the way that the cost of turbines
4 has come down and so on. You know, you can see that
5 -- I'm pretty sure I'm right in saying that wind power
6 is cheaper now for us to buy than it was five years
7 ago, ten years ago.

8 So, it's a difficult question to answer.

9 MR. FULTON: Q: Thank you. Thank you, panel. Thank
10 you.

11 MR. ELTON: A: Thank you.

12 MR. FULTON: Those are my questions.

13 THE CHAIRPERSON: Thank you, Mr. Fulton. As it is 4:30,
14 it seems a reasonable time to call it a day. We sit
15 tomorrow from 8:30 in the morning until 4 in the
16 afternoon. I'll make that very clear to not cause Mr.
17 Fulton any more grief. Thank you.

18 **(PROCEEDINGS ADJOURNED AT 4:33 P.M.)**

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