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MANITOBA PUBLIC UTILITIES BOARD

Re: 2008/'09 GENERAL RATE APPLICATION  
MANITOBA HYDRO

Before Board Panel:

- Graham Lane - Board Chairman
- Robert Mayer - Board Member
- Susan Proven - Board Member

HELD AT:

Public Utilities Board  
400, 330 Portage Avenue  
Winnipeg, Manitoba  
March 10th, 2008  
Pages 691 to 929

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1 --- Upon commencing at 9:04 a.m.

2

3 THE CHAIRPERSON: Okay. Good morning,  
4 everyone. We're a little late, four (4) minutes. I  
5 guess they won't dock us too much for that.

6 Okay, Mr. Peters.

7 MR. BOB PETERS: Yes, thank you, Mr.  
8 Chairman. I'm going to defer and pass the microphone  
9 over to Ms. Ramage. One of her witnesses, I believe, Mr.  
10 Warden, wants to expand on an answer he's given the Board  
11 last week. Thank you.

12 MS. PATTI RAMAGE: I would just ask Mr.  
13 Warden if he could comment on his comments of Friday,  
14 with respect to the new building.

15

16 MANITOBA HYDRO REVENUE REQUIREMENT AND DEMAND SIDE  
17 MANAGEMENT PANEL RESUMED:

18 VINCE WARDEN, Resumed

19 WILLY DERKSEN, Resumed

20 IAN PAGE, Resumed

21 HAROLD SURMINSKI, Resumed

22 LLOYD KUCZEK, Resumed

23

24 MR. VINCE WARDEN: Yes, good morning,  
25 everyone. If I could just refer back to Tab 24 of the



1 book of documents for a moment, please. There is a  
2 couple of points I would like to make with respect to  
3 Manitoba Hydro's new head office.

4                   And you may recall that Mr. Peters and I  
5 were in a bit of a discussion with respect to the twenty-  
6 two point eight (22.8) and as to whether or not that  
7 would be incremental to the costs that we're currently  
8 incurring for office space.

9                   I did agree that 22.8 million was  
10 incremental, however, I think I did agree a little bit  
11 too quickly. I should have taken a little more time to  
12 review this -- the summary that was put together. While  
13 the 22.8 million is the correct number for the very first  
14 year it is only for the first year, because the annual  
15 depreciation of 4.6 million is cash that's available to  
16 Manitoba Hydro and results in a drawdown in the finance  
17 expense that would be incurred in subsequent years.

18                   So the -- the more appropriate number to  
19 use for the -- the schedule that's provided at the top of  
20 -- of that summary, equivalent to the twenty-two point  
21 eight (22.8) or -- or that is equivalent to the eighteen  
22 point three (18.3) and the four point six (4.6) that's  
23 included in that schedule, the more appropriate number is  
24 over on the flip page and that is the response to PUB/MH-  
25 2-42(d) in which we calculated an updated amount of 18.75



1 Centra Gas, we did launch a study at that time as to what  
2 we could do for -- for staffing requirements, which were  
3 long overdue then. And we did -- were looking for a  
4 facility on Wilkes Avenue -- a building and facility on  
5 Wilkes Avenue. The cost of that facility at the time --  
6 this is in 1999 -- for a 300 square foot facility on  
7 Wilkes was 40 mill --

8 MS. PATTI RAMAGE: 300 square feet?

9 MR. VINCE WARDEN: 300,000 square feet.  
10 Sorry -- 300,000 square foot facility at that time was  
11 \$40 million, and that's before the huge escalation in  
12 prices that we've seen in those intervening years.

13 So, if we were to consider some kind of a  
14 baseline, which I don't think is really a good idea, it  
15 would have to be some kind of an adjusted baseline for  
16 the eighteen point six (18.6) number that I previously  
17 referenced.

18

19 (BRIEF PAUSE)

20

21 MR. VINCE WARDEN: Yes, so thank you, Mr.  
22 Peters. Thank you, Mr. Chairman. I think those are the  
23 points I wanted to make with respect to the new head  
24 office facilities. Thank you.

25 THE CHAIRPERSON: Thank you, Mr. Warden.

1 Back to Mr. Peters.

2

3 CONTINUED CROSS-EXAMINATION BY MR. BOB PETERS:

4 MR. BOB PETERS: Yes, thank you. Mr.  
5 Warden, I take from -- from your answer this morning that  
6 the annual savings that Manitoba Hydro will seek to  
7 realize through efficiencies would need -- would need to  
8 be the approximate \$18.6 million to cover the ongoing  
9 incremental costs for the new headquarters?

10 MR. VINCE WARDEN: To make the -- the  
11 eighteen point six (18.6) totally cost-neutral, yes, we  
12 would have to realize productivity savings in that order  
13 of magnitude. Again, though, I do caution that that's  
14 not the correct baseline because -- for the reasons I --  
15 I just mentioned, with respect to new facilities being  
16 required by Manitoba Hydro in any event.

17 MR. BOB PETERS: Are you suggesting a  
18 different or a new baseline number, then, for the Board  
19 to consider?

20 MR. VINCE WARDEN: Well, I'm suggesting  
21 no baseline, really. I mean, we're -- we always try to --  
22 - and I think we're very successful in keeping costs as  
23 low as they possibly can be. That's what we will be  
24 doing going forward.

25 The head office downtown was part of the



1 it's -- it's something that was a -- we did require a new  
2 facility; we did require as part of the Winnipeg Hydro  
3 agreement to construct that facility downtown. We have  
4 just gone through what we think will be the incremental  
5 costs of \$18.6 million going forward. I think that those  
6 costs should be tested as all our other costs are in the  
7 future.

8 I might also mention, I think the -- the  
9 head office is a -- is a good example of how Manitoba  
10 Hydro doesn't spend a capital dollar before it absolutely  
11 needs to. And whenever we've been looking at the head  
12 office facility in the past, there were always other  
13 higher priorities that kept bumping the office facility  
14 back. That's why staff have had to endure the  
15 substandard facilities for as many years as they have.

16 But if you go down our -- any of our  
17 capital programs, each and every one of them is  
18 absolutely required, and this head office has now finally  
19 come to the point where it is required as well.

20 MR. BOB PETERS: Mr. Warden, I want to  
21 turn back to Wuskwatim which we discussed the last day of  
22 evidence.

23 It's my understanding that the needs and  
24 justification as well as the environmental issues for  
25 Wuskwatim went before the Clean Environment Commission in

1 approximately April of 2003?

2 MR. VINCE WARDEN: Yes.

3 MR. BOB PETERS: As a result of the Clean  
4 Environment Commission review, there was a recommendation  
5 from the Clean Environment Commission that the Government  
6 of Manitoba grant the Public Utilities Board jurisdiction  
7 to review, on an ongoing basis, the actual revenues and  
8 costs of the Wuskwatim project relative to forecast.

9 Do you recall that?

10 MR. VINCE WARDEN: I do, yes.

11 MR. BOB PETERS: And that recommendation  
12 from the Clean Environment Commission was that there be  
13 ongoing reviews as part of Manitoba Hydro's General Rate  
14 Application, such as the one that we're presently in,  
15 correct?

16 MR. VINCE WARDEN: Yes.

17 MR. BOB PETERS: Would it be correct for  
18 the Board to understand the evidence to date about  
19 Wuskwatim to the -- essentially as -- as a new generating  
20 station, Manitoba Hydro considers it would be profitable  
21 and financially advisable based on the forecast of  
22 variables that they are making relative to Wuskwatim?

23 MR. VINCE WARDEN: Yes, that's the  
24 position of Manitoba Hydro.

25 MR. BOB PETERS: Would Manitoba Hydro

1 proceed with a new major capital project such as  
2 Wuskwatim if Manitoba Hydro believed there was a risk of  
3 eventual negative returns on such a project?

4 MR. VINCE WARDEN: Well of course returns  
5 isn't the only justification for building Wuskwatim;  
6 Wuskwatim is required to serve Manitoba load.

7 MR. BOB PETERS: But not for some period  
8 out into the -- into the future, correct?

9 MR. VINCE WARDEN: Not very far into the  
10 future. We can review that schedule with you again, Mr.  
11 Peters, if you like, but it's -- it's required for the  
12 Manitoba load.

13 MR. BOB PETERS: The forecast presently,  
14 is it 2020, Mr. Surminski?

15

16 (BRIEF PAUSE)

17

18 MR. HAROLD SURMINSKI: Mr. Peters, it  
19 was 2020 as recently as the 2006 load forecast, but with  
20 the 2007 load forecast having significantly increased  
21 energy requirements, deficits and our dependable energy  
22 are occurring as early as 2009. So at 2012 this would  
23 indicate -- and deficits would continue past 2009/'10.  
24 At Tab 15 our resource plan dependable energy numbers,  
25 Table 81, shows the -- the deficits in -- in early years.



1 MR. BOB PETERS: Mr. Surminski, the  
2 assumptions Manitoba Hydro is making in this General Rate  
3 Application before the Public Utilities Board, relative  
4 to Wuskwatim, are in essence the same ones that it made  
5 before the Clean Environment Commission in 2003.

6 Would that be correct?

7 MR. HAROLD SURMINSKI: I'm not sure what  
8 you mean by assumptions. Conditions have changed since  
9 that time, in terms of load growth.

10 MR. BOB PETERS: All right. Load -- okay  
11 let's talk. One (1) of them you say is load growth.  
12 Your forecasts, particularly in the -- in the short term,  
13 you see some industrial load growth expansion which may  
14 drive the need for additional generating facilities.

15 That's what you're telling the Board?

16 MR. HAROLD SURMINSKI: Mr. Kuczek might  
17 be able to better define where and what sector, but  
18 industrial combined with -- with other sectors all  
19 contribute to increased load growth, yes.

20 MR. BOB PETERS: In terms of capital  
21 costs you would agree with me that the capital costs of  
22 Wuskwatim have increased significantly from when Manitoba  
23 Hydro put its assumptions before the Clean Environment  
24 Commission?

25 MR. HAROLD SURMINSKI: Yes, that's

1 correct.

2 MR. BOB PETERS: And as part of your  
3 information before the Clean Environment Commission,  
4 Manitoba Hydro made some assumptions in terms of capital  
5 costs and ran some sensitivities against the assumptions  
6 being made, correct?

7 MR. HAROLD SURMINSKI: Yes, that's  
8 correct.

9 MR. BOB PETERS: And one (1) of the  
10 assumptions that was made was a long-term expected  
11 economics of the Wuskwatim project, and then when those  
12 assumptions were made the Corporation calculated an  
13 internal rate of return of approximately 10.3 percent  
14 based on the then assumptions, correct?

15 MR. HAROLD SURMINSKI: Subject to check,  
16 that sounds correct.

17 MR. BOB PETERS: And what we do know. Mr.  
18 Surminski, is that Manitoba Hydro also did a capital  
19 forecast increase of a 15 percent on the capital cost for  
20 Wuskwatim, and that caused the internal rate of return to  
21 drop from 10.3 percent down to 9.2 percent, correct?

22 MR. HAROLD SURMINSKI: Subject to check  
23 but that sounds correct.

24 MR. BOB PETERS: But we do also know from  
25 what we've heard in this Hearing that the capital costs

1 of Wuskwatim have increased perhaps as much as 75 to 80  
2 percent over what was forecast back in 2003, and may be  
3 as much as \$1.6 billion for both the generation and  
4 transmission.

5 MR. HAROLD SURMINSKI: Yes.

6 MR. BOB PETERS: And because of that the  
7 internal rate of return would decrease from 9.2 percent  
8 in the -- in the sensitivity analysis of a 15 percent  
9 increase in capital costs, would it not?

10 MR. HAROLD SURMINSKI: Yes, that's right.

11 MR. BOB PETERS: Have -- has the  
12 Corporation recalculated what the internal rate of return  
13 will be, based on the latest capital cost forecast?

14

15 (BRIEF PAUSE)

16

17 MR. HAROLD SURMINSKI: Yes, we have  
18 investigated what the internal rate of return would have  
19 been -- would be reducing to.

20 MR. BOB PETERS: Can you indicate to the  
21 Board what that amount would be?

22

23 (BRIEF PAUSE)

24

25 MR. HAROLD SURMINSKI: No, we don't have

1 it. We don't have that calculation with us. We know  
2 it's quite low but I can't even venture a guess exactly  
3 where it was and where -- where it's ending up at right  
4 now.

5 MR. BOB PETERS: All right. Is that  
6 something you could undertake to file with the Board, Mr.  
7 Surminski, for the Board to review at a subsequent time?

8 MR. HAROLD SURMINSKI: Yes, we could  
9 undertake to do that.

10

11 --- UNDERTAKING NO. 19: Manitoba Hydro to indicate to  
12 Board the internal rate of  
13 return based on latest  
14 capital cost forecast, as  
15 well as recalculate what that  
16 levelized cost of energy  
17 would be today, based on the  
18 assumptions MH now makes

19

20 CONTINUED BY MR. BOB PETERS:

21 MR. BOB PETERS: And that undertaking,  
22 Mr. Surminski, is appreciated but would that be in  
23 essence an update to Appendix C of the Clean Environment  
24 Commission report?

25 MR. HAROLD SURMINSKI: If you could

1 remind me what Appendix C was?

2 MR. BOB PETERS: It was just the  
3 financial data that the Corporation had. And perhaps I  
4 can show a copy to your counsel and you can consider that  
5 when responding to the undertaking?

6 MR. HAROLD SURMINSKI: Yes, we can look  
7 at that.

8 MR. BOB PETERS: Thank you, sir. What we  
9 also know, Mr. Surminski, is that before the Clean  
10 Environment Commission Manitoba Hydro was calculating a  
11 levelized cost of energy in the neighbourhood of 6.6  
12 percent (sic).

13 Do you recall that, sir?

14

15 (BRIEF PAUSE)

16

17 MR. HAROLD SURMINSKI: Yes. Did you say  
18 "cents" or "percent"?

19 MR. BOB PETERS: six point six (6.6)  
20 cents per kilowatt hour.

21 MR. HAROLD SURMINSKI: Yes.

22 MR. BOB PETERS: And have you  
23 recalculated what that levelized cost of energy would be  
24 today based on the assumptions you now make?

25 MR. HAROLD SURMINSKI: I do not have that

1 information but it could easily be calculated.

2 MR. BOB PETERS: Could you then please  
3 calculate that and file it with the Board as an  
4 undertaking, sir?

5 MR. HAROLD SURMINSKI: Yes, it could be  
6 together with the previous one; it's -- it's related.

7 MR. BOB PETERS: All right. Thank you.  
8 Another assumption that's changed since you've been  
9 before the Clean Environment Commission with the  
10 Wuskwatim project is that the foreign exchange rate has  
11 also changed, correct?

12 MR. HAROLD SURMINSKI: Yes, correct.

13 MR. BOB PETERS: Now, there was some  
14 discussion with Mr. Page and I think with Mr. Derksen on  
15 that last week, but back before the Clean Environment  
16 Commission the assumed exchange rate was probably in the  
17 range of eighty-five (.85) cents, Canadian dollar  
18 relative to American dollar?

19 MR. HAROLD SURMINSKI: Sounds right. It  
20 may have been even lower than that.

21 MR. BOB PETERS: All right. And would I  
22 conceptually be correct to say the weaker the Canadian  
23 dollar, the more profitable the Wuskwatim Project would  
24 be?

25 MR. HAROLD SURMINSKI: Yes, that's right.

1                   MR. BOB PETERS:    And what we've seen is  
2 the Canadian dollar hasn't stayed weak or weaker, it's  
3 gotten stronger relative to the American dollar.

4                   MR. HAROLD SURMINSKI:   Yes, that's right.

5                   MR. BOB PETERS:    And Mr. Page may  
6 disagree, but he's going to be developing a new forecast  
7 going forward, but parity has been achieved for some  
8 period of time now, and in terms of -- of the short-term  
9 and the long-term forecasts, there may be some changes  
10 forthcoming, with respect to the foreign exchange rate.

11                  MR. HAROLD SURMINSKI:   Yes, that will be  
12 reviewed.

13                  MR. BOB PETERS:    Would it be correct, in  
14 -- in a ballpark figure, Mr. Surminski, that at parity of  
15 the Canadian and US dollars, there's a loss of  
16 approximately one (.01) cent a kilowatt hour on the  
17 Wuskwatim Project?

18                  MR. HAROLD SURMINSKI:   Yes, that sounds  
19 reasonable.

20                  MR. BOB PETERS:    All right.  Another  
21 assumption, Mr. Surminski, that the Board heard last week  
22 was that the interest rates have -- have changed  
23 somewhat, and in -- would it be correct that the interest  
24 rates are lower than what they were when you were before  
25 the Clean Environment Commission?

1 MR. HAROLD SURMINSKI: I am informed that  
2 that's correct.

3 MR. BOB PETERS: And Mr. Rainkie is  
4 smiling, I'm sure, because the prime rate has dropped  
5 almost in half since the Corporation was before the Clean  
6 Environment Commission, from approximately 6 percent down  
7 to maybe as low as 3 1/2 percent?

8 MR. IAN PAGE: Mr. Peters, just remind  
9 you that prime rate changes don't necessarily translate  
10 into long-term debt rates.

11 MR. BOB PETERS: I understand that, and I  
12 know Mr. Rainkie is working hard to see if there is a  
13 better correlation for that, but would it be correct that  
14 the lower the interest rate, the more profitable the  
15 Wuskwatim Project?

16 MR. IAN PAGE: Yes, that would be the  
17 case.

18 MR. BOB PETERS: But you're telling the  
19 Board last week, Mr. Page, that you don't expect the  
20 interest rate to -- to stay low for the long term.  
21 You're forecasts haven't changed, at least in terms of  
22 long-term forecasts.

23 MR. IAN PAGE: Our long-term forecast is  
24 -- is slightly lower than it was. Each year for the last  
25 few years it's gone down a little bit, but, generally, it



1 -- it hasn't seen the same level of swings that we've  
2 seen in the short-term rates.

3 MR. BOB PETERS: So you're not  
4 forecasting any significant gains in terms of the  
5 financial viability of the Wuskwatim Project related to  
6 interest rate changes.

7 MR. IAN PAGE: There would be mod --  
8 modest improvements from -- from interest rates.

9 MR. BOB PETERS: All right. We'll call  
10 it "modest improvement," but that has to be factored  
11 against the increase in construction costs, as well as  
12 the change in the foreign exchange rate, correct?

13 MR. IAN PAGE: Yes. And to -- just to  
14 complete that, you'd also have to look at the change in  
15 the US doll -- US export rate.

16 MR. BOB PETERS: Okay. Well, let's --  
17 let's have a quick peek at that, because one (1) of the  
18 assumptions before the Clean Environment Commission is  
19 that you'd be able to sell the output of Wuskwatim,  
20 essentially mostly, you know, as firm energy at mostly  
21 peak prices.

22 MR. HAROLD SURMINSKI: Yes, that was an  
23 assumption.

24 MR. BOB PETERS: And from what we heard  
25 last week, Mr. Surminski, it's not likely that the output

1 of Wuskwatim will now be sold as firm energy and mostly  
2 at peak prices due to a variety of reasons, including  
3 interconnection issues.

4 MR. HAROLD SURMINSKI: I would not  
5 characterize it that -- to that extreme a direction as  
6 you're going. We will still be able to -- to sell our  
7 product as -- as a long-term export sale.

8 MR. BOB PETERS: Well, let's then look at  
9 the point Mr. Page was making in his second-last answer.  
10 Would it be correct, Mr. Surminski, that the average  
11 export price for the Wuskwatim output has probably  
12 dropped from somewhere in the neighbourhood of six (.06)  
13 cents a kilowatt hour, maybe down to five (.05) cents a  
14 kilowatt hour, on average today?

15

16 (BRIEF PAUSE)

17

18 MR. HAROLD SURMINSKI: You're -- you're  
19 using some short term indicators of -- of export prices  
20 and extending that into the longer term. We -- we expect  
21 export prices to be higher by the time Wuskwatim's in  
22 service. And we had just done a calculation for that 94  
23 million that we expect in the first year; that works out  
24 to be a unit price of six point eight (6.8) cents a  
25 kilowatt hour.

1                   So that is based on -- on the combination  
2 of long term on-peak product and opportunity products.  
3 But that is our -- our forecast. It's more like six  
4 point eight (6.8) cents a kilowatt hour, as opposed to  
5 the six (6) of five (5) that you're talking about here.

6                   MR. BOB PETERS: Thank you for that, Mr.  
7 Surminski. Mr. Chairman, Board Members, at Tab 46, page  
8 13 of the book of documents is a graph or a chart that I  
9 discussed briefly with Mr. Surminski last week.

10                  And, Mr. Surminski, the -- the chart in  
11 response to PUB/Manitoba Hydro Second Round Question 38  
12 found at Tab 46 of the PUB book of documents on page 13,  
13 contains high export price assumptions as well a low  
14 export price assumptions, correct?

15                  MR. HAROLD SURMINSKI: Yes, that's right.

16                  MR. BOB PETERS: And perhaps cleverly,  
17 Manitoba Hydro has an expected value somewhere between  
18 those two (2) ranges and you don't want to disclose that  
19 to the Board or on the public record, correct?

20                  MR. HAROLD SURMINSKI: Yes, that's right.

21                  MR. BOB PETERS: Would you be prepared to  
22 acknowledge to the Board that wherever Manitoba Hydro's  
23 fore -- expected values of export prices was in that  
24 continuum between the low and the high, it is probably a  
25 little bit lower today than it was back before the Clean

1 Environment Commission?

2 MR. HAROLD SURMINSKI: No. The -- we've  
3 had some significant increases in our export price  
4 forecast which essentially offset the reductions due to  
5 the currency exchange rate.

6 MR. BOB PETERS: I'm sorry, I -- I didn't  
7 understand that answer. There are -- there have been  
8 some circumstances that have lead to an increase in the  
9 expected export prices for Wuskwatim generation?

10 MR. HAROLD SURMINSKI: Yes, in US  
11 dollars. I -- I -- we do our forecast of export prices  
12 in US dollars because that is the market that we're in,  
13 and then we convert that into Canadian dollars. So if  
14 the export prices went up 30 percent since then and the  
15 currency exchange rate changed by 30 percent we're in the  
16 same position in Canadian dollars.

17 MR. BOB PETERS: One (1) of the matters  
18 the Board heard from you last week on was that included  
19 in your export price assumptions is an assumed carbon tax  
20 or an equivalent penalty for greenhouse gas emissions.

21 MR. HAROLD SURMINSKI: Yes. We include  
22 consideration of -- of carbon and greenhouse gas  
23 emissions.

24 MR. BOB PETERS: And you told the Board  
25 last week that that hasn't yet come to fruition, correct?

1                   MR. HAROLD SURMINSKI:    Yes.  We are --  
2   are basing that on assumptions that there will be  
3   increasing recognition of environmental emissions in our  
4   marketplace.

5                   MR. BOB PETERS:    And as -- as you  
6   testified before the Board today, sir, you're not able to  
7   tell the Board with any certainty as to whether that will  
8   in fact occur and if it will occur, when it would occur?

9                   MR. HAROLD SURMINSKI:    Yeah, certainly we  
10  use our -- our consultants to -- who are quite close to  
11  the situation to guide us and timing and magnitude of --  
12  of those carbon taxes, if you will call them that.

13                  MR. BOB PETERS:    Did you assume a carbon  
14  tax of fifteen dollars (\$15) a ton, related to Wuskwatim,  
15  when you were before the Clean Environment Commission?

16                  MR. HAROLD SURMINSKI:    I don't remember  
17  exactly, but we had -- we had a weighting -- we had about  
18  three (3) scenarios and we weighted the scenarios, so the  
19  weighted scenario may have been in that ballpark.

20                  MR. BOB PETERS:    Whatever the ballpark  
21  was then back before the Clean Environment Commission,  
22  Mr. Surminski, those numbers for carbon tax appeared to  
23  have diminished as time has gone on.

24                  Would that be a fair statement?

25                  MR. HAROLD SURMINSKI:    They may have --

1 they had diminished in our forecast for a year or two  
2 (2), but they increased again. And so we're -- we're  
3 pretty well back to where we were at that time period.

4 MR. BOB PETERS: And that's based on the  
5 waiting of the consultants reports that you've been given  
6 as to where -- what to expect for a carbon tax or  
7 equivalent?

8 MR. HAROLD SURMINSKI: Yes, that's right.

9 MR. BOB PETERS: If you were weighting an  
10 estimate of about fifteen dollars (\$15) a ton back before  
11 the Clean Environment Commission, would Manitoba Hydro  
12 now need as much as thirty dollars (\$30) a ton to get the  
13 required export prices that it's assuming?

14 MR. HAROLD SURMINSKI: No -- no, I don't  
15 know why you're making that assumption.

16 MR. BOB PETERS: Well, I'm just in -- I'm  
17 just wondering if in light of all the negative variables  
18 that have impacted whether an increased carbon tax is now  
19 needed to sustain the assumed export values that you did  
20 before the Clean Environment Commission.

21 MR. HAROLD SURMINSKI: No, I indicated  
22 the -- our assumption for carbon is -- is relatively  
23 similar to where it was and that's what we are currently  
24 using.

25 MR. BOB PETERS: Another assumption, Mr.

1 Surminski, from the Clean Environment Commission was, to  
2 the effect, that you would be able to market your output  
3 from Wuskwatim presumably to predominantly the United  
4 States if not to some fellow Canadian provinces, correct?

5 MR. HAROLD SURMINSKI: Yes, correct.

6 MR. BOB PETERS: And we've heard last  
7 week that that's going to be dependent on the building of  
8 interconnections or transmission capabilities across the  
9 borders, correct?

10 MR. HAROLD SURMINSKI: Interconnections  
11 help us, but we -- not for Wuskwatim -- we needed  
12 interconnections for Keeyask or Conawapa.

13 MR. BOB PETERS: And at this point in  
14 time, you don't have any counterparties who appear to be  
15 willing to agree to build interconnections to allow more  
16 of the Wuskwatim output to come off at peak times?

17 MR. HAROLD SURMINSKI: We -- we could  
18 always utilize interconnections. Interconnections always  
19 assist in -- in getting more product at better prices,  
20 but it's not required for -- for Wuskwatim. I mean, our  
21 early years till about 2020.

22 MR. BOB PETERS: The benefit of having  
23 those interconnections is Manitoba Hydro would be able to  
24 sell its Wuskwatim output at -- as peak energy and higher  
25 prices than if it was off-peak, correct?

1                   MR. HAROLD SURMINSKI:    Correct.  Not only  
2  Wuskwatim energy.  All our export energy would receive  
3  higher prices with greater interconnection capability.

4                   MR. BOB PETERS:     Why is it that your  
5  counterparties don't want to build increased  
6  interconnection capabilities at this point in time?

7

8   (BRIEF PAUSE)

9

10                  MR. HAROLD SURMINSKI:    Our counterparties  
11  have difficulty in -- in building interconnections, so  
12  it's not until -- until there's a -- a good reason, and a  
13  need.  They have been over-installed.  They've been able  
14  to -- to install and -- fossil-fuelled resources without  
15  too much difficulty.  I think the -- the recent move to -  
16  - to avoid greenhouse gases, and they restrictions in the  
17  future, that is the reason for -- for looking at then and  
18  more interest from them in the future.  It -- it has been  
19  in the past very difficult to -- to site new transmission  
20  lines.

21                  MR. BOB PETERS:     Would another reason,  
22  Mr. Surminski, be that the more interconnection  
23  capabilities they have the more exposure they face to  
24  having to pay peak prices for electricity from Manitoba  
25  Hydro?



1                   MR. LLOYD KUCZEK:    You know, let -- let  
2 me help out here.  In terms of their desire to -- or  
3 willingness to build an interconnection or upgrade an  
4 existing interconnection -- I think I talked about this a  
5 bit last week -- but they need a business case to do.  
6 And most of the upgrades and the existing transmission  
7 lines that have been constructed are usually constructed  
8 or negotiated as part of a long-term purchase sale  
9 agreement between ourselves and the parties to the US.

10                   And, so, going forward, will another  
11 transmission line be built?  On the interest of the US  
12 parties, it will depend on the business case -- cases  
13 that come forward.

14                   So if there's existing transmission and  
15 they can get the power that way, there's no real business  
16 case to build additional transmission.  If we build  
17 another generating station and there's more power that we  
18 have for sale and they can negotiate an agreement that  
19 require -- that could justify extra transmission  
20 capability, then possibly a transmission line will be  
21 built.

22                   MR. HAROLD SURMINSKI:   And back to your  
23 question about peak prices, they would be to -- to higher  
24 peak prices in any case.  It is the market that -- that  
25 determines the -- the prices of power in the peak hours.

1                   So whether we're supplying or whether  
2 they're in the market, essentially, the prices will be  
3 high to them in any case.

4                   MR. BOB PETERS:    Mr. Surminski, one (1)  
5 of the other assumptions that was made back in 2003 was  
6 that there might be competition to get the green  
7 electrons that are resulting from the Wuskwatim  
8 generation; correct?

9                   MR. HAROLD SURMINSKI:    Yes.

10                  MR. BOB PETERS:    And, basically, you were  
11 assuming that your counter parties in the United States,  
12 and maybe other provinces, would be valuing the green  
13 electricity from Manitoba and that would allow them to  
14 displace thermal generated electricity in their own  
15 jurisdictions; correct?

16                  MR. HAROLD SURMINSKI:    Yes.

17                  MR. BOB PETERS:    But we now understand  
18 from your evidence last week that there's a new, fairly  
19 large coal-generating facility in South Dakota planned.

20                                Is that called "Big Stone II"?

21                  MR. HAROLD SURMINSKI:    I have heard of  
22 that; I'm not thoroughly familiar with it.

23                  MR. BOB PETERS:    Is it at least as large  
24 as Wuskwatim, if not larger?

25                  MR. HAROLD SURMINSKI:    Yes, it's

1 significantly larger -- up to 700 megawatts.

2 MR. BOB PETERS: So, to that extent, the  
3 premium or the desire to have green electricity appears  
4 to be not coming through as assumed, as evidenced by the  
5 fact that there's going to be some thermal generation  
6 competing with the Wuskwatim output.

7

8 (BRIEF PAUSE)

9

10 MR. LLOYD KUCZEK: Maybe you can repeat  
11 the question?

12 MR. BOB PETERS: I'm sure it was  
13 brilliant at the time I asked it, which also means I've  
14 forgotten it.

15 But, Mr. Surminski, I think where I was  
16 going with that was there was an expectation when  
17 Manitoba Hydro was before the Clean Environment  
18 Commission that its Wuskwatim output would have an  
19 attractiveness to counter parties because it was,  
20 essentially, green electricity.

21 And you agreed with me, correct?

22 MR. HAROLD SURMINSKI: Yes, and -- yes,  
23 and now I -- I recall where we were a little more.

24 MR. BOB PETERS: Well, where we were was  
25 that that assumption doesn't appear to hold true anymore,

1 because we hear of a 700 megawatt project in South Dakota  
2 based on a coal plant coming on-stream to compete with  
3 Wuskwatim, and that will, therefore, depress the market  
4 prices for the Wuskwatim energy.

5 Would you agree with that?

6 MR. HAROLD SURMINSKI: Somewhat, but  
7 there's significant load growth in the US also, and that  
8 plant will serve a wide area. So it's -- it's not --  
9 it's not that large an addition to -- to the entire area.

10 MR. LLOYD KUCZEK: Yeah, and just to add  
11 to that, when we -- when we go out and sell the power  
12 from Wuskwatim, if we make a firm sale, we'll be pricing  
13 that against alternative new generation with the party  
14 most likely.

15 So, in that sense, the coal plant has no  
16 impact -- the coal plant will have impact in terms of  
17 selling in the short-term market where we displace  
18 existing generations.

19 So there's two (2) different types of  
20 markets. One (1) is displacing new generation which  
21 isn't constructed yet, and the other is displacing gen --  
22 or existing generation.

23 MR. BOB PETERS: Is that coal plant in  
24 South Dakota going to be up and running at the same time  
25 Wuskwatim is now planned to be on -- in service?

1                   MR. LLOYD KUCZEK:    I'm informed that --  
2   that plant has not had all approvals.

3                   MR. BOB PETERS:    So you're not sure when  
4   it will become on -- on-stream?

5                   MR. LLOYD KUCZEK:    Maybe a couple of  
6   years after Wuskwatim.

7                   MR. BOB PETERS:    And, Mr. Kuczek, if  
8   you're pricing your Wuskwatim product in that market, you  
9   don't agree that the coal plant in South Dakota will  
10  depress the market price available for Wuskwatim energy?

11                  MR. LLOYD KUCZEK:    Well if I was out  
12  there selling power and negotiating it, the -- the fact  
13  that another plant has come on-stream over a number of  
14  years would have no impact on the price that I'd be  
15  negotiating against because I'd be negotiating against  
16  new generation.  And that's if I wasn't allowed to sell  
17  the entire output of that plant.

18                  Having said that, we -- we never sell the  
19  entire output of the plant, we sell only what's firm.  So  
20  it would impact -- possibly impact the price I might get  
21  for short-term sales.

22                  But even then, the load grows over time  
23  and so whether or not that generating station would have  
24  much impact or not is kind of questionable because it  
25  just goes into the base -- base case in terms of

1 providing our median demand in the market.

2 MR. BOB PETERS: You'd expect the coal-  
3 generated electricity in South Dakota to be priced  
4 cheaper than your hy -- your hydro-generated electricity?

5 MR. LLOYD KUCZEK: It depends whether  
6 you're talking long-term firm, short term.

7 MR. BOB PETERS: Well let's start with  
8 firm.

9 MR. LLOYD KUCZEK: Would it be priced  
10 cheaper than our electricity? Our -- our electricity on  
11 a firm basis is priced against what we view as the  
12 alternative cost for our counter-parties.

13 So it really depends what that alternative  
14 cost is and if the -- the lowest cost alternative is coal  
15 generation, generally, we try to sell against that. And  
16 if it's gas, we sell against that.

17 MR. BOB PETERS: And an example I'm  
18 trying to work with you on, Mr. Kuczek, is that it will  
19 be -- it will be selling against coal which, generally,  
20 is cheaper than hydro -- hydro-generated electricity from  
21 Manitoba.

22 MR. LLOYD KUCZEK: I'm not sure how it's  
23 cheaper.

24 MR. BOB PETERS: When Manitoba Hydro  
25 exports its electricity, does it displace gas-generated

1 electricity or coal-generated electricity?

2 MR. LLOYD KUCZEK: If we in get into the  
3 short term market, we displace whatever's at the margin  
4 at the time, so, it varies from on-peak hours, off-peak  
5 hours, time of the day, time of year.

6 MR. BOB PETERS: Generally at the margin  
7 it's going to be natural gas generated electricity.

8 MR. LLOYD KUCZEK: That would be correct  
9 but I'm not sure that's correct in off-peak hours.

10 MR. BOB PETERS: All right, in off-peak  
11 hours then you're competing perhaps against coal because  
12 that's a baseline -- a base load of elec -- of  
13 electricity that's provided by the generating stations.

14 MR. LLOYD KUCZEK: Yes, that's correct.

15 MR. BOB PETERS: From our discussion, Mr.  
16 Surminski, many assumptions relative to Wuskwatim appear  
17 to have either turned a little bit to the negative or  
18 perhaps in the best case remain neutral from when you  
19 were before the Clean Environment Commission.

20 Do you agree with that?

21 MR. HAROLD SURMINSKI: That many factors  
22 have turned negative? Yes, I agree.

23 MR. BOB PETERS: And against those  
24 factors it's still Manitoba Hydro's expectation that its  
25 export price will remain as it forecast when Manitoba

1 Hydro was before the Clean Environment Commission?

2 MR. HAROLD SURMINSKI: Yes, and all  
3 indications are it will be even higher. We are looking  
4 at this year's forecast and there are indications we'll  
5 be increasing our forecast this year again.

6 MR. BOB PETERS: You'll be increasing the  
7 amount of your forecast for export energy?

8 MR. LLOYD KUCZEK: The price for -- in US  
9 dollars for -- for our energy for exports, yes.

10 MR. BOB PETERS: Yes, you worded it  
11 better than I did.

12 You're now telling this Board that in your  
13 next forecast for export prices, Manitoba Hydro expects  
14 to gain a greater price than it had forecast previously  
15 for its export production.

16 MR. HAROLD SURMINSKI: Yes, that's right.

17 MR. BOB PETERS: When the Board looks at  
18 Tab 47 of the book of documents and page 7 which --  
19 second last page in the entire book of documents, there's  
20 a projected income statement for the Wuskwatim Power  
21 Limited Partnership.

22 And would it be correct, Mr. Page, Mr.  
23 Surminski, that that operating statement probably now  
24 represents the best case scenario for Manitoba Hydro  
25 going forward with -- with Wuskwatim?





1 that built into this operating statement, do they contain  
2 the increase in capital construction costs?

3 MR. IAN PAGE: They contain the -- the  
4 capital cost estimate that was utilized in IFF-07, which  
5 -- which I believe is the -- the number -- I guess that's  
6 the number you're referring to is the increase?

7 MR. BOB PETERS: Yes, and in terms of  
8 this operating statement, two-thirds (2/3s) of the net  
9 loss will attach to Manitoba Hydro with one-third (1/3)  
10 going to TPC, provided TPC puts up its share of the  
11 equity?

12 MR. IAN PAGE: Yes, that's correct.

13 MR. BOB PETERS: And, Mr. Page, one (1)  
14 thing that's not shown on this operating statement is the  
15 \$300 million of debt that is used to fund the equity  
16 portion, correct?

17 MR. IAN PAGE: That's correct. That  
18 would show up on Manitoba Hydro's statements, as would  
19 the interest income from the loans to TPC and NCN.

20 MR. BOB PETERS: And that does show up in  
21 IFF-07-1, correct?

22 MR. IAN PAGE: That -- that's all  
23 embedded in the IFF.

24 MR. BOB PETERS: If one was to factor in,  
25 Mr. Page, the cost of the \$300 million of equity that is

1 financed by debt, for how many years is the project  
2 running at a loss in terms of net income?

3

4

(BRIEF PAUSE)

5

6 MR. IAN PAGE: Well, the -- the interest  
7 on that 300 million would be in the order of, say, \$20  
8 million a year. I don't think you can just simply deduct  
9 that off -- off these lines here, because as I've  
10 mentioned before, there's also interest income through  
11 the markups and so forth on the -- on the equity advances  
12 to NCN and TPC. So you'd have to look at those together.

13 It's also -- and this is where we get into  
14 a bit of awkwardness. Wuskwatim statements are showing  
15 it as if it's a standalone and it was under the same  
16 notion when it was -- when -- back when it was put  
17 forward to the CEC that it was going to be advanced for  
18 export uses -- export requirements.

19 Since then with -- as we mentioned the  
20 load forecast has changed a lot so that what you're --  
21 now it's being -- it's being required for domestic use.  
22 And in the rebuttal testimony, there was a graph of  
23 showing -- comparing the load forecasts, and just the  
24 load forecast from 2005 to 2006 alone exceeded the entire  
25 output of Wuskwatim.

1                   So with Wuskwatim being -- now being  
2 needed for domestic use, it's also -- from this -- when  
3 we're -- if we're looking at it from a Manitoba Hydro  
4 perspective, what we would also want to do is deduct the  
5 cost of the alternative supply options that we would have  
6 had that we were comparing Wuskwatim against.

7                   MR. BOB PETERS:    I thought you were going  
8 to take the Board to suggest that it may go out until at  
9 least 2020 then before the Wuskwatim turns the corner and  
10 becomes a profitable venture.

11                  MR. IAN PAGE:    If I were to very simply  
12 lay that number on top, that would be the effect, but I  
13 was suggesting that that wouldn't be a -- a complete  
14 analysis.

15                  MR. BOB PETERS:    So, you're suggesting  
16 that if you did a complete analysis, it would be some  
17 time a year or two (2) earlier than 2020?

18                  MR. IAN PAGE:    I'm suggesting that it  
19 wouldn't be that simple, because the -- the hardest part  
20 is looking at what the -- what you would have built in  
21 the absence of Wuskwatim, and -- and that I don't have  
22 handy.  And so I don't know what the impact with that --  
23 of that would be on a year by year basis.

24                  MR. BOB PETERS:    All right, thank you,  
25 sir.

1                   Mr. Warden, from Manitoba Hydro's vantage  
2 point, does the Corporation believe that the climate is  
3 changing in Manitoba?

4                   MR. VINCE WARDEN:    Do -- are you talking  
5 the weather?

6                   MR. BOB PETERS:    Yes, yes.  I know you're  
7 happy these last few weeks with the cold temperature, Mr.  
8 Warden, but -- but is the climate in Manitoba -- the  
9 weather in Manitoba changing?

10                  MR. VINCE WARDEN:    I don't think, Mr.  
11 Peters, we have enough evidence to come to that  
12 conclusion.

13                  MR. BOB PETERS:    Manitoba Hydro is not  
14 prepared to acknowledge that there's a risk of less water  
15 and more drought in the watersheds that provide Hydro's  
16 power?

17                  MR. HAROLD SURMINSKI:    There have been --  
18 there has been no evidence that -- that warmer  
19 temperatures -- global warming -- necessarily results in  
20 increases or decreases of flows in Manitoba Hydro's  
21 system.

22                  There is some consensus on variability.  
23 There could be more years of highs and lows and more  
24 variability, but there's no clear indication in our  
25 system that -- that we'll have reduced flows, on average.

1                   MR. BOB MAYER:    Mr., sir, again I'm gonna  
2 go back to the Clean Environment Commission hearings,  
3 because I do have some recollection of that.  And if I  
4 recall the evidence of Mr. -- it starts with a "W", can't  
5 remember full name -- there was some indication that the  
6 Hydro had, in fact, done some significant studies with  
7 respect to that.

8                   And if I recall the conclusions that were  
9 made, and were delivered to the Commission, it was that  
10 global warming, in fact, over western Canada, may result  
11 in higher -- it may result in more precipitation.  But  
12 what they didn't know and couldn't determine, or had not  
13 as then determined, was how much effect the extra heat  
14 would have evaporation and, therefore, they could not  
15 come to a conclusion as to the results -- or to the  
16 results on Manitoba Hydro's production that global  
17 warming might have.

18                   I'm thinking I'm really reasonably close  
19 to the answer we had then, so I would of thought that --  
20 that was a few years ago -- that maybe we have some  
21 indication on what the effect of increased evaporation  
22 resulting from global warming may do on our production.

23                   Am I assuming that no further -- those  
24 studies haven't been done yet?

25                   MR. HAROLD SURMINSKI:    It's not at all as

1 simple as you're categorizing it as. It -- evaporation  
2 is -- is one (1) of the factors. Evapotranspiration,  
3 which is plants using up moisture -- there's many factors  
4 in relating precipitation to run-off in -- in our rivers  
5 in the end.

6                   So, you know, evaporation is one (1), but  
7 it's a very complex process. This is the hydro-logic  
8 cycle of -- of precip, temperature, and what finally  
9 results in -- in our rivers and lakes.

10                   So -- and -- and if you're thinking that  
11 since 2002 that there's any kind of progress being made  
12 in that clarifying or getting better information; no  
13 there has not been and that short time period.

14                   MR. BOB MAYER: I did get the impression,  
15 however, that Manitoba Hydro, at that time at least,  
16 appeared to assume that the science on global -- on -- on  
17 climate change -- won't call it global warming -- on  
18 climate change was no longer in doubt, and that Hydro  
19 accepted the fact -- accepted that climate change would  
20 be a fact, and Hydro was in fact doing what it could to  
21 see what effect that might have on Hydro's production.

22                   That I think I am correct on.

23                   MR. HAROLD SURMINSKI: Yes, you are,  
24 certainly. We -- we continue analysis. We -- we do it  
25 more from the sensitivity perspective.

1                   If, you know, what if we have a 15 of 20  
2 percent reduction in our stream-flows or a 15 of 20  
3 percent increase, what's the consequence of that?

4                   So we -- we test our development plans  
5 based on a range of possibilities of future stream-flows.

6                   MR. BOB MAYER:     Thank you.

7

8                   CONTINUED BY MR. BOB PETERS:

9                   MR. BOB PETERS:     But you're not prepared  
10 to tie those stream-flows in the future to climate change  
11 necessarily.

12                   MR. HAROLD SURMINSKI:   Yes, that's  
13 correct. We -- we do consider depletions, consumptive  
14 uses of water and we have some forecast and I think that  
15 was in our submissions that over time we expect  
16 consumptive uses to -- to keep increasing, particularly  
17 in our western provinces.

18                   MR. BOB PETERS:     Mr. Surminski, at Tab 16  
19 of the book of documents on page 8, it is the third last  
20 page I believe in Tab 16 of the book of documents, is a  
21 table about the total annual Manitoba Hydro hydraulic  
22 generation.

23                   You let me know when you've located that?

24                   MR. HAROLD SURMINSKI:   Yes, I have that.

25                   MR. BOB PETERS:     And -- so Tab 16, page



1 8, this figure 1, sir, you were saying in a previous  
2 answer to me that there may be more variability in the  
3 hydraulic generation capabilities.

4 What you're indicating is that there may  
5 be lower lows and higher highs, if I can, in the -- in  
6 the hydraulic generation going forward that may be  
7 related to climate change.

8 MR. HAROLD SURMINSKI: That is one (1)  
9 aspect of variability. The other is just extreme changes  
10 and more frequently. Like lows -- like we experienced in  
11 2003, '04, '05 where in '03 we went from an extreme  
12 drought to '05 to our record high flow.

13 So those extremes may not set any records  
14 but they could just be occurring more frequently instead  
15 of more stable patterns.

16 MR. BOB PETERS: And if the lows will go  
17 generally lower, the cost to Manitoba Hydro and its  
18 customers will usually be greater than if it goes to the  
19 high end of the hydraulic capability.

20 MR. HAROLD SURMINSKI: Yes. We -- putting  
21 it another way, we lose more in a lower flow year than we  
22 gain in a high flow year.

23 MR. BOB PETERS: Better said than I did.  
24 Thank you.

25 Mr. Kuczek, last week we were looking at

1 the book of documents Tab 33 and looking at the levelized  
2 cost on some of the DSM measures of the Corporation.

3 And you urged the Board, if I can, to use  
4 caution when considering, for example, the levelized cost  
5 of DSM related to new homes could be seven point two  
6 (7.2) cents per kilowatt hour.

7 Do you remember generally that discussion?

8 MR. LLOYD KUCZEK: Yes.

9 MR. BOB PETERS: In re-reading the  
10 transcript and reflecting on it, I think you were trying  
11 to tell the Board that -- that seven point two (7.2)  
12 cents would have been calculated at some stage in the  
13 planning cycle and it may not be the matured amount.

14 MR. LLOYD KUCZEK: I believe this was  
15 calculated as part of our evaluation of the program. And  
16 what it is is the calculation of what we achieved to that  
17 particular year of the evaluation being done.

18 So with the programs that were recently  
19 launched, you have all the startup costs associated with  
20 that that are thrown in there. And so, the first few  
21 years of the evaluation of the early years of the  
22 evaluation will have higher levelized costs than what you  
23 would over the life of the program more as planned.

24 MR. BOB PETERS: And I reflected on that  
25 but that seems inconsistent, Mr. Kuczek, with the second

1 sentence on that page at Tab 33 of the book of documents  
2 under 4.3.2.5 where it indicates that:

3 "the calculation of cents per kilowatt  
4 hour saved was based upon current  
5 program kilowatt hour savings, a  
6 generation over a thirty (30) year  
7 planning period."

8 MR. LLOYD KUCZEK: Yes. So -- so what  
9 that means and I could be corrected by the person behind  
10 me but, as I understand it, what we -- once you get the  
11 savings in those -- that year or the -- in the years up  
12 to the year of the evaluation, you assume that you're  
13 going to have those savings going forward.

14 It does not assume you're going to get  
15 future energy savings which you are expecting to get in  
16 the -- in the future years of the program.

17 MR. BOB PETERS: All right. Well thank  
18 you for that clarification. At Tab 34 of the book of  
19 documents the total resource cost test results were  
20 published for various DSM projects.

21 Would the Board be correct in concluding  
22 that there is no benefit included in the total resource  
23 cost test for delayed generation?

24 MR. LLOYD KUCZEK: That's correct.

25 MR. BOB PETERS: When we look at demand

1 side management and compare Manitoba with Saskatchewan,  
2 would you agree that in both provinces for the non all-  
3 electric homes there's roughly ten thousand (10,000)  
4 kilowatt hours per year used as an average amount?

5 MR. LLOYD KUCZEK: It's in that range,  
6 yes.

7 MR. BOB PETERS: And would it also be in  
8 that range that Saskatchewan's consumption is declining  
9 by approximately 2.9 percent per year?

10 MR. LLOYD KUCZEK: I believe one (1) of  
11 the IRs responded to that. I don't recall exactly the --  
12 the percentage decline.

13 MR. BOB PETERS: My -- my note was  
14 PUB/Hydro First Round question 94 but if Manitoba -- if  
15 Saskatchewan's consumption was declining by about 2.9  
16 percent a year, Manitoba's consumption appears to be  
17 increasing by just over 7 percent a year, correct?

18 MR. LLOYD KUCZEK: Yes, ours is  
19 increasing and I think as part of that response we  
20 explained that it was related to the increased  
21 electric/waterload that we're incurring and it's not  
22 happening in Saskatchewan.

23 MR. BOB PETERS: Maybe you could explain  
24 that to the Board.

25 What you -- what you're trying to suggest

1 to the Board is that in the province to our west their  
2 annual electricity consumption is decreasing by about 3  
3 percent a year but in Manitoba it's increasing by 7  
4 percent a year and Manitoba Hydro believes that's  
5 probably related to increased use of electric hot water  
6 heat?

7 MR. LLOYD KUCZEK: Yes, and I should I  
8 guess -- you -- you mentioned earlier that the average  
9 use for a home heated with electricity is about ten  
10 thousand (10,000) kilowatt hours. I don't know that's  
11 correct in Saskatchewan. I suspect it's much lower than  
12 that because the market there is not using, as I  
13 understand it, electric hot water tanks, it's using  
14 primarily natural gas.

15 MR. BOB PETERS: And in Manitoba there's  
16 a movement to use electricity to heat hot water, or I  
17 guess to heat water, primarily because there's no need  
18 for a chimney if you use electric hot water heaters  
19 rather than gas?

20 MR. LLOYD KUCZEK: Yeah, it's the overall  
21 cost associated with installing a natural gas hot water  
22 tank relative to electric hot water tank that is shipped  
23 at the market in Manitoba and, yes, you do not need a  
24 chimney so the new home construction practice has moved  
25 towards not including chimneys in their designs anymore.

1                   MR. BOB PETERS:    And that's primarily  
2 because even if you heat with -- with natural gas a high-  
3 efficiency natural gas furnace doesn't need a chimney?

4                   MR. LLOYD KUCZEK:    Correct.

5                   MR. BOB PETERS:    And if you don't need a  
6 chimney for your furnace, it would be perceived as  
7 expensive to put in a chimney just for the purposes of  
8 venting a natural gas hot water tank?

9                   MR. LLOYD KUCZEK:    Yes.

10                  MR. BOB PETERS:    In terms of Manitoba  
11 Hydro's DSM program and the City of Winnipeg agreement  
12 that they have, not only was there a requirement for a  
13 new Manitoba Hydro headquarters built in the City of  
14 Winnipeg but there was also an agreement where Manitoba  
15 Hydro would help the City with its demand side management  
16 programs; correct?

17                  MR. LLOYD KUCZEK:    Correct.

18                  MR. BOB PETERS:    There was an expectation  
19 that Manitoba Hydro could help the City of Winnipeg save  
20 eight hundred thousand dollars (\$800,000) a year to  
21 partially defray the cost of Mr. Doug Buhr's salary?

22                  MR. LLOYD KUCZEK:    There -- there was a  
23 commitment to achieve them eight hundred thousand dollars  
24 (\$800,000) in energy savings a year, a minimum of that,  
25 yes.

1                   MR. BOB PETERS:    And if we look at Tab 35  
2 of the book of documents Manitoba Hydro hasn't been all  
3 that successful in reaching that eight hundred thousand  
4 dollars (\$800,000) savings per year?

5                   MR. LLOYD KUCZEK:    We haven't been as  
6 successful as we would have liked but we are virtually  
7 there now.

8                   MR. BOB PETERS:    What you're telling the  
9 Board on that, Mr. Kuczek, is that while you haven't been  
10 as successful as planned, the difference between eight  
11 hundred thousand dollars (\$800,000) and the amount you've  
12 actually saved, Manitoba Hydro's had to cut a cheque to  
13 the City of Winnipeg?

14                  MR. LLOYD KUCZEK:    That's correct.

15                  MR. BOB PETERS:    And so far Manitoba  
16 Hydro has cut cheques, if I do the math right, for \$2.4  
17 million related to its obligation because it couldn't  
18 deliver Demand Side Management savings.

19                  MR. LLOYD KUCZEK:    I'll assume your  
20 calculations are correct.

21                  MR. BOB PETERS:    And so when we look at  
22 the expenditures and the programs with the City of  
23 Winnipeg, and I'm gonna look at the, I believe the second  
24 last document in Tab 35 of the book of documents.  It's a  
25 -- a schedule called "Electric Demand Side Management

1 Amortized -- Unamortized Balance."

2                   If we go down to Reference Point Number 1,  
3 The City of Winnipeg Power Smart Agreement, and we add up  
4 the expenditures, Manitoba Hydro is going to spend  
5 approximately \$10.3 million to honour its commitment to  
6 Winnipeg Hydro?

7                   MR. LLOYD KUCZEK:   That's the amount that  
8 it adds up to at that point, yes.

9                   MR. BOB PETERS:   Would have been cheaper  
10 for Manitoba Hydro to just cut a cheque for \$8 million  
11 and not do any of the Demand Side Management, correct?

12                   MR. LLOYD KUCZEK:   No.

13                   MR. BOB PETERS:   Why is that?

14                   MR. LLOYD KUCZEK:   Because through  
15 achieving those energy savings, we were economically  
16 better off.

17                   MR. BOB PETERS:   What does the eight  
18 hundred thousand dollars (\$800,000) a year savings  
19 translate to in gigawatt hours, Mr. Kuczek?

20

21                                   (BRIEF PAUSE)

22

23                   MR. LLOYD KUCZEK:   I don't have that  
24 handy, but it's more than just the gigawatt hours. It  
25 would be the cubic metres they have saved as well as the



1 water that they've saved -- that we achieved through the  
2 -- the project.

3 MR. BOB PETERS: I'm sorry, I didn't  
4 understand that answer. It's -- it's related to the  
5 water saved?

6 MR. LLOYD KUCZEK: We -- we -- our  
7 commitment was -- commitment was to save them energy  
8 savings, and we included water measures as well. So, if  
9 they saved on their water bill, that was reflected into  
10 that eight hundred (800) -- that was part of that eight  
11 hundred thousand dollar (\$800,000) calculation.

12 MR. BOB PETERS: Thank you, Mr. Kuczek.  
13 Back at Tab 33 of the book of documents, when we looked  
14 at Levelized Utility Costs, there is a footnote that the  
15 City of Winnipeg agreement is going to be evaluated. And  
16 I suppose a levelized cost calculation will be done when  
17 -- when all the figures are in, sir?

18 MR. LLOYD KUCZEK: I believe we'll be  
19 doing that calculation.

20 MR. BOB PETERS: It hasn't yet been done?

21 MR. LLOYD KUCZEK: We've done some  
22 calculations, but the project isn't finished yet, and I  
23 don't -- I don't believe they've been done yet, totally.

24 MR. BOB PETERS: When I did a back-of-  
25 the-envelope calculation, Mr. Kuczek, and went to the

1 book of documents, Tab 31, went to Schedule A3 to try to  
2 get some energy savings, looked at the \$10.3 million of  
3 costs incurred by Manitoba Hydro, it calculated out to  
4 approximately twenty one (21) cents per kilowatt hour as  
5 a levelized cost.

6 Does that seem reasonable to you, sir?

7 MR. LLOYD KUCZEK: Well, I've never done  
8 the calculation, so I -- I don't know if it works out to  
9 that. But as I said earlier, our commitment was  
10 to achieve eight hundred thousand dollars (\$800,000) in  
11 energy savings, and you asked if it was -- if we were  
12 economically better off to achieve those savings by  
13 pursuing those projects.

14 So we are, but those -- those costs  
15 associated with those payments have to be made whether we  
16 saved them or not. So as we moved forward, we looked at  
17 each project to see -- to see if we were economically  
18 better off by proceeding with that project. And so we --  
19 that was the test that we used for proceeding with each  
20 project and, provided we were economically better off, we  
21 proceeded.

22 MR. BOB PETERS: And have you undertaken,  
23 in this proceeding or agreed with me just now, to provide  
24 the Board with a levelized cost calculation for the City  
25 of Winnipeg?

1                   Is that something you can do and provide?

2                   MR. LLOYD KUCZEK:    We should be able to  
3 do it for the projects that we proceeded with.

4

5 --- UNDERTAKING NO. 20:     Manitoba Hydro to provide  
6                                    Board with a levelized cost  
7                                    calculation for the City of  
8                                    Winnipeg

9

10 CONTINUED BY MR. BOB PETERS:

11                   MR. BOB PETERS:    All of the expenditures  
12 appear from Tab 35 of the book of documents which have  
13 already been expended and no more expenses are -- are  
14 planned going forward?

15                   MR. LLOYD KUCZEK:    I think we have some  
16 minor expenses planned going forward.

17                   MR. BOB PETERS:    But they don't show up  
18 then on your -- in Tab 35 of the book of documents, the  
19 second last schedule?

20                   MR. LLOYD KUCZEK:    No, I believe they're  
21 in our plan though.

22                   MR. BOB PETERS:    Would you agree with me  
23 that if -- if the levelized cost or the savings -- well,  
24 the average cost of savings is twenty-one (21) cents a  
25 kilowatt hour, it would be difficult for the TRC to be

1 passed, the total resource cost test to be passed?

2 MR. LLOYD KUCZEK: I agree with that.

3 MR. BOB PETERS: Well then, we'll look at  
4 your number and maybe if there's any other explanations  
5 you have you could please provide that.

6

7 --- UNDERTAKING NO. 21: Manitoba Hydro to look at Mr.  
8 Kuczek's number, for Board,  
9 and if there are any other  
10 explanations to provide them

11

12 CONTINUED BY MR. BOB PETERS:

13 MR. BOB PETERS: Mr. Kuczek, in Tab 36 of  
14 the book of documents we compared space heating in  
15 Winnipeg to space heating in Thompson, Manitoba.

16 Have you got that information?

17 MR. LLOYD KUCZEK: Yes.

18 MR. BOB PETERS: Would -- would I be  
19 correct in interpreting it to say that comparing Winnipeg  
20 to Thompson is 20 percent more expensive to -- to space  
21 heat in Thompson than in Winnipeg?

22

23 (BRIEF PAUSE)

24

25 MR. LLOYD KUCZEK: This is the entire

1 bill, it's not just space heating. The category space  
2 heat is just to define the customers, it's -- but the  
3 bill is for all uses, so, if you said 20 percent more it  
4 would be true for all uses, on average.

5 MR. BOB PETERS: That may help us out  
6 because the -- the degree day heating calculation appears  
7 to be 33 percent greater in Thompson than in Winnipeg,  
8 correct?

9 MR. LLOYD KUCZEK: I'll assume the  
10 33 percent is correct.

11 MR. BOB PETERS: And if it was a -- if  
12 the degree day deficiency or the degree day heating  
13 requirement was 33 percent more in Thompson, one would --  
14 would expect that the cost to heat your home electrically  
15 in Thompson would be 33 percent more than Winnipeg?

16 Does that follow?

17 MR. LLOYD KUCZEK: That's correct, if all  
18 other things are equal including the size of the home,  
19 the insulation that's put into a home and the -- the  
20 envelope measures in terms of ceiling, if they were all  
21 the same.

22 MR. BOB PETERS: But it doesn't appear to  
23 be the case in this situation and one (1) of their  
24 explanations may be that it's the all-electric  
25 consumption, not just related to space heat.

1 MR. LLOYD KUCZEK: That's correct.

2 MR. BOB PETERS: Can you tell the Board  
3 whether homes in Thompson are generally better insulated  
4 than the homes in Winnipeg?

5 MR. LLOYD KUCZEK: I could not.

6 MR. BOB PETERS: You're not aware of  
7 that, whether it is or it isn't?

8 MR. LLOYD KUCZEK: I'm not aware of it,  
9 no, but there -- there is a code that requires basement  
10 insulation or up -- it's no longer true but it used to be  
11 true for a period of time where the insulation in the  
12 basement had to be at a higher level than it had to be in  
13 -- for natural gas heated homes, I guess.

14 I think all electric homes it's -- I'm not  
15 -- actually -- actually I'm not sure if that's true, if  
16 it's the north or if it was just all electric, but there  
17 was a difference in terms of some code changes there.

18 MR. BOB PETERS: If we turn --

19 MR. ROBERT MAYER: Would your assumption  
20 -- if you understood that there are no homes in Thompson,  
21 Manitoba that were built prior to 1958, would you make  
22 any assumptions if you had that statistic to start with?  
23 Because I certainly understand there are homes a lot  
24 older in Winnipeg.

25 MR. LLOYD KUCZEK: Yeah. Newer homes

1 generally are insulated better than older homes.

2

3 CONTINUED BY MR. BOB PETERS:

4 MR. BOB PETERS: The next page at Tab 36  
5 of the book of documents is a reproduction of  
6 PUB/Manitoba Hydro First Round question 2B. It seems to  
7 indicate that heating your home in Winnipeg with natural  
8 gas would be about equivalent to using electric heat in  
9 Thompson.

10 MR. LLOYD KUCZEK: Again, this is the  
11 all-in bills.

12 MR. BOB PETERS: And all-in natural gas  
13 in Winnipeg is about three hundred dollars (\$300) more  
14 than electricity in Winnipeg?

15 MR. LLOYD KUCZEK: Correct.

16 MR. BOB PETERS: Mr. Warden, from a  
17 policy perspective does it not make financial sense for  
18 Manitoba Hydro to promote electric heat in Winnipeg as  
19 opposed to natural gas heat in Winnipeg?

20

21 (BRIEF PAUSE)

22

23 MR. VINCE WARDEN: Not necessarily, Mr.  
24 Peters. I think, as we've talked about, the unit cost of  
25 electricity in Manitoba is -- based on -- on the cost of

1 service methodology that we follow is so far away from  
2 marginal costs that, over the long term, I'm not sure  
3 that I would agree that we would want to promote electric  
4 heat as -- as the primary heating source as -- as opposed  
5 to natural gas.

6 MR. BOB PETERS: What you're saying to  
7 the Board is that while in the short term it may be  
8 cheaper to use electricity for your space heat in  
9 Winnipeg, over the long term that may change back where  
10 it used to?

11 MR. VINCE WARDEN: It really does depend  
12 so much on the -- the long-term cost of natural gas,  
13 which is somewhat uncertain.

14 MR. BOB PETERS: I was looking at it from  
15 a perspective that if Manitoba Hydro was going to receive  
16 six (6) cents a kilowatt hour for its domestic  
17 residential sales and, on average, was only getting five  
18 (5) cents on the export market, it may be financially  
19 better off for the Corporation to -- to sell to domestic  
20 customers and get the higher revenue.

21 MR. VINCE WARDEN: But that's not really  
22 what we're all about. I mean we're here to serve what's  
23 in the best interest of -- of consumers, not what's in  
24 the best of our bottom line any given time.

25 MR. BOB PETERS: But why isn't -- why is



1 it not in the best interest of consumers to use electric  
2 space heat?

3 MR. VINCE WARDEN: It may be for a short  
4 period of time but, again, it depends -- looking at the  
5 long term future, it so much depends on -- on what the  
6 price of natural gas does over that long term.

7 MR. BOB PETERS: Is Manitoba Hydro  
8 prepared to share with the Board its forecast of what's  
9 going to happen with natural gas prices in the future?

10 MR. VINCE WARDEN: We do consider that to  
11 be commercially sensitive, Mr. Peters.

12 MR. BOB PETERS: Without disclosing any  
13 dollar amount then, Mr. Warden, do you see natural gas  
14 prices in the future going up, staying the same or  
15 decreasing?

16 MR. VINCE WARDEN: They'll be going up.

17 MR. BOB PETERS: All right. So as  
18 natural gas prices go up, doesn't that make electricity  
19 space heat all the more financially favourable to the  
20 homeowner?

21 MR. VINCE WARDEN: Well, electricity  
22 rates will be going up as well, as we've talked about in  
23 these proceedings.

24 MR. BOB PETERS: And your long-term  
25 concern is that when there's new generation coming on,

1 that may put pressure on rates to get closer to marginal  
2 costs than the historic average embedded cost?

3 MR. VINCE WARDEN: That will happen, yes.

4 MR. BOB MAYER: Mr. Warden or -- somebody  
5 help me here. I -- I'm looking at this -- at this chart  
6 what appears to the last page of Tab 36, and are you  
7 telling me that it is significantly cheaper, in total  
8 cost, to heat by propane than it is by electricity?

9 MR. LLOYD KUCZEK: The -- if you look at  
10 that page, Mr. Mayer, the -- what we provided was just  
11 the -- the information that we have on the customer's  
12 bills for those different categories of customers.

13 So the propane customers -- that's just  
14 their electric bill. That's not what their heating costs  
15 are. We don't have their propane hearing costs.

16 THE CHAIRPERSON: Mr. Peters, as you go  
17 through this, there seems to be some sort of disconnect  
18 on these from the simple understanding of it.

19 I know on the -- the gas side of their  
20 business -- I remember their Web site compares electric  
21 and natural gas -- that natural gas is allegedly cheaper  
22 to heat the home than electricity.

23 MR. LLOYD KUCZEK: With high efficient  
24 furnaces, yes.

25

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: What assumed efficient -  
3 - what assumed furnace efficiency is used in the answer  
4 to PUB/Manitoba Hydro First Round Number 2, Mr. Kuczek?

5 MR. LLOYD KUCZEK: This is actual billing  
6 information, so it's what customers are paying today, so  
7 it -- it doesn't provide you with a comparison -- an  
8 apples-to-apples comparison. For example, if you  
9 compare the electric heated homes to the natural gas  
10 heated homes, for example, in Winnipeg, generally  
11 speaking, all new homes are naturally gas heated.

12 There tend to be more end uses in those  
13 homes, the homes tend to be bigger than the older homes.  
14 You know, electric heated homes in Winnipeg, they would  
15 be smaller likely.

16 Homes in rural Manitoba tend to be  
17 smaller, so there's all sorts of differences, so this --  
18 all we provided you with is average bills for all  
19 customers in those categories, so you have to take that  
20 information as it is.

21 THE CHAIRPERSON: And Winnipeg's still  
22 heavily weighted to conventional furnaces?

23 MR. LLOYD KUCZEK: Correct.

24

25 CONTINUED BY MR. BOB PETERS:

1                   MR. BOB PETERS:    And so to find out the  
2 efficiency comparisons, again, the information on the  
3 Manitoba Hydro Web site would be the better -- better  
4 information, assuming high efficiency comparisons?

5                   MR. LLOYD KUCZEK:    If you wanted to  
6 compare the -- the different choices of fuels to heat a  
7 home, that would be the best place to use.  Because what  
8 we do is a calculation based on the same type of home for  
9 each fuel type.

10                  THE CHAIRPERSON:    Maybe, Mr. Peters, they  
11 could give us chart that just takes it then off for the  
12 mid-efficiency furnace, the conventional, and the high-  
13 efficiency, just so we have it on the record?

14                  MR. BOB PETERS:    I'll ask Ms. Ramage then  
15 if the Corporation could undertake to file that  
16 information?

17                  MR. LLOYD KUCZEK:    Yeah, I have it with  
18 me, so we'll provide that right after the break.

19                  MR. BOB PETERS:    Okay, thank you.

20                  THE CHAIRPERSON:    Thank you.

21

22 CONTINUED BY MR. BOB PETERS:

23                  MR. BOB PETERS:    Mr. Kuczek, staying with  
24 Thompson, Manitoba, there was a pilot project conducted  
25 by the Corporation about time-of-use metering in

1 Thompson?

2 MR. LLOYD KUCZEK: No, the -- the -- the  
3 project that we undertook wasn't just a Thompson project,  
4 it was a pre-pay -- pre-pay and information --  
5 informational monitor-type project that we provided  
6 customers with.

7 There was two (2) components to that  
8 project. One (1) was that you had to pre-pay your energy  
9 use, and the other component was just a -- it had a  
10 monitor in your home and it provided you with your  
11 consumption.

12 And so we were testing whether or not  
13 customers' behaviours would change based on having that  
14 information as well as having the pre-pay feature  
15 associated with that pilot.

16 And so Thompson was one (1) of the areas  
17 that we tested that project. We had, I believe, it was  
18 three (3) areas -- three (3) or four (4) areas that we  
19 tested that -- or feature with customers.

20 MR. BOB PETERS: Is there a final report  
21 available on those projects?

22 MR. LLOYD KUCZEK: I actually thought we  
23 filed it.

24 MR. BOB MAYER: You have.

25

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: Appendix 58 was the  
3 Acumen Research Study, if that's -- is that the report  
4 you're referring to?

5 MR. LLOYD KUCZEK: Correct.

6 MR. BOB PETERS: Okay, but from Manitoba  
7 Hydro's perspective, allowing customers to see in real  
8 time what their consumption was didn't have any  
9 measurable benefit?

10 MR. LLOYD KUCZEK: That project didn't  
11 show any measurable benefit associated with having that -  
12 - that meter there, as well as those features, no.

13 MR. BOB PETERS: And as a conclusion from  
14 that then, the experimental group reduced their  
15 consumption by about 2 percent, but the control group  
16 reduced theirs even more.

17 Wasn't that the outcome?

18 MR. LLOYD KUCZEK: Yes.

19 MR. BOB PETERS: Does Manitoba Hydro have  
20 any plans to continue with metering projects, including,  
21 I think what they call "smart meters" used in Ontario?

22 MR. LLOYD KUCZEK: What we're looking at  
23 doing is -- there -- there's a few projects that are  
24 ongoing, or at least being discussed right now, in terms  
25 of using those monitors.

1                   And these are just the monitors, not the  
2 monitors that we use; but they're produced by --  
3 manufactured by a company called Blue Line. And -- so  
4 we're going to monitor those pilots that are being  
5 undertaken in other regions.

6                   But our -- we believe that if we're going  
7 to move in any direction, we should move in the direction  
8 of trying to link some -- use the new technology that's  
9 coming along with AMI's.

10                  To use that and -- those meters and some  
11 technology that possibly provides controls with -- and  
12 uses in a home. And we think that's the way of the  
13 future, as opposed to just providing these monitors in  
14 homes.

15                  MS. SUSAN PROVEN:    Can I just ask, Mr.  
16 Kuczek, that -- that particular study, it -- it had two  
17 (2) parts, didn't it, because it wasn't just the ability  
18 to sort of see what was happening with the meter, but  
19 there was advance education given to both groups -- both  
20 the control group and the group that had the technology?

21                  MR. LLOYD KUCZEK:    That's correct.

22                  MS. SUSAN PROVEN:    And so in reading that  
23 study I sort of gleaned that advance education obviously  
24 has an effect because I think that you sort of, or in the  
25 study, you said that obviously that education had an

1 effect.

2 MR. LLOYD KUCZEK: Well, we believe it  
3 does and we also believe that the results that we're --  
4 we realized in Manitoba could be different than other  
5 regions because we've been promoting Power Smart in  
6 Manitoba quite aggressively since 1990, so, I think our  
7 market is different than some other markets where they  
8 haven't been promoting energy conservation.

9 So, we do believe education is important  
10 and -- and so by providing that you can realize a  
11 savings and by having that monitor there, it doesn't look  
12 like you achieve much more than that.

13 MS. SUSAN PROVEN: What I found  
14 interesting was that the person that paid the bill, the  
15 homeowner I guess we could call them, either he or she  
16 seemed to be making changes but the family members, it --  
17 it showed that family members didn't always make changes.  
18 I -- I found that very interesting.

19 MR. LLOYD KUCZEK: I -- I think that I  
20 read that in the Ontario report; that was one (1) of the  
21 conclusions that they concluded.

22 MS. SUSAN PROVEN: Why would that be?  
23 What -- do you do any studies on how much education can  
24 be -- like, obviously you educate certain people in the  
25 household but then you'd think there'd be some transfer



1 from one (1) member to another?

2 MR. LLOYD KUCZEK: Yes, and -- yes and no  
3 I guess because it depends on the individuals. We have  
4 so many individuals out there. We do believe if you can  
5 convince the children to change, that that transfer  
6 certainly takes place a lot better than just between  
7 spouses but...

8 MS. SUSAN PROVEN: Oh, you mean there's  
9 more transfer from one (1) generation to another?

10 MR. LLOYD KUCZEK: Oh, I'm just making a  
11 generic statement with regards to kids -- and this is  
12 based on personal experience, as well as with some  
13 friends. There's no studies to back this up but we do  
14 believe that or I believe anyways that if you can get  
15 your kids to want to conserve, they will transform the  
16 parents to conserve and that applies just -- not to just  
17 the conservation, it applies to throwing things out the  
18 window when you're driving down the street, applies to  
19 recycling and just a general comment. I'm not so sure  
20 that applies between spouses but I don't have any studies  
21 to back that up.

22 MS. SUSAN PROVEN: Thank you.

23

24 CONTINUED BY MR. BOB PETERS:

25 MR. BOB PETERS: Maybe just before the

1 break, Mr. Chairman, I'll conclude on the advanced  
2 metering infrastructure project, Mr. Kuczek.

3 As I understand from the materials, the  
4 Corporation has approximately five thousand (5,000)  
5 electric metres and a thousand (1,000) gas metres that  
6 they're using on the AMI project?

7 MR. LLOYD KUCZEK: Five thousand (5,000)  
8 electric and -- yes, that's correct.

9 MR. BOB PETERS: And that's in Winnipeg  
10 as well as rural Manitoba?

11 MR. LLOYD KUCZEK: Yes.

12 MR. BOB PETERS: Can you update the Board  
13 on the status of the pilot project as to what -- as to  
14 where it is?

15 MR. VINCE WARDEN: Mr. Peters, just a  
16 quick update. We have approximately four thousand  
17 (4,000) of the five thousand (5,000) electric meters  
18 installed and approximately four hundred (400) of the  
19 natural gas meters installed at this time.

20 MR. BOB PETERS: And in terms of those  
21 type of meters, Mr. Warden, are you aware as to whether  
22 those are what we'll call "smart meters" that could be  
23 used for time-of-use rates if such were in place in  
24 Manitoba?

25 MR. VINCE WARDEN: Yes. Yes, they could

1 be.

2 MR. BOB PETERS: Will they be used to  
3 gather data about time-of-use energy consumption by those  
4 who have them?

5 MR. VINCE WARDEN: Yes, Mr. Peters, that  
6 is one (1) of the purposes of the -- of the pilot.

7 MR. BOB PETERS: Do you know -- maybe I'm  
8 testing your memory here, Mr. Warden, but do you know the  
9 cost per meter or the total costs of that project?

10 MR. VINCE WARDEN: The total cost spent  
11 to date -- this is right up to the end of January is 1.8  
12 million on electric and two hundred thousand dollars  
13 (\$200,000) on gas.

14 MR. BOB PETERS: What's the duration of  
15 the pilot project, Mr. Warden?

16

17 (BRIEF PAUSE)

18

19 MR. VINCE WARDEN: Subject to  
20 confirmation, Mr. Peters, I believe our pilot program is  
21 running for two (2) years. We'll just have to confirm  
22 that though.

23 MR. BOB PETERS: Mr. Chairman, I was  
24 going to turn to some questions on low-income DSM. I  
25 could do that now, or I could do that after the break if

1 -- whatever suits the Board.

2 THE CHAIRPERSON: Ms. Ramage...?

3 MS. PATTI RAMAGE: I was just going to  
4 interject if -- if there is going to be a break, prior to  
5 the break, Mr. Surminski, had just brought to my  
6 attention he -- he wanted to clarify an earlier question  
7 or assumption of Mr. Peters. So I thought we might do  
8 that before the break if --

9 THE CHAIRPERSON: Very good.

10 MS. PATTI RAMAGE: -- if Mr. Peters is  
11 done.

12 THE CHAIRPERSON: Please, sir.

13 MR. HAROLD SURMINSKI: Yes, I would --  
14 I've heard references to -- to export prices and the  
15 value of power of five (5) cents being used by Mr.  
16 Peters.

17 And I would just like to put it on the  
18 record that I think that is a -- a low estimate of  
19 prices. For example, Tab 11 response to PUB/Manitoba  
20 Hydro-55 inferred prices were calculated and maybe for  
21 the first year of 2007/08 his estimate of five (5) is  
22 reasonable because it indicates an average price of five  
23 point two (5.2) cents, but in the following years in that  
24 table prices go to six point two (6.2), six point three  
25 (6.3) and -- and on.

1                   Using historic years like that is not  
2 appropriate. One (1) reason is that year was a higher  
3 than average flow year so we had opportunity sales, off  
4 peak sales that brought down the average price. So just  
5 using a year like that doesn't necessarily provide the  
6 best estimate based on the average of all-flow  
7 conditions, or more average flow condition. I would put  
8 forward that six (6) to six and a half (6 1/2) is a more  
9 appropriate expected price in years going forward.

10                   Also historic prices include negotiated  
11 export sales that were negotiated several years ago at  
12 low prices. These sales will be dropping out of the  
13 picture as we are going forward. So some of these lower-  
14 priced contracts we have will not be in -- in the picture  
15 in the future.

16                   So it's -- I'm just providing a -- a  
17 warning that maybe using a historic year like that it can  
18 be resulting in a low estimate of prices.

19                   THE CHAIRPERSON: Thank you, sir. We  
20 will have the break now, and come back in fifteen (15)  
21 minutes. Thank you.

22

23 --- Upon recessing at 10:33 a.m.

24 --- Upon resuming at 10:53 a.m.

25

1 THE CHAIRPERSON: Mr. Peters, whenever  
2 you're ready.

3

4 CONTINUED BY MR. BOB PETERS:

5 MR. BOB PETERS: Yes, thank you. Mr.  
6 Surminski, just before the break you were having a  
7 discussion and you corrected some information provided  
8 for the response, in essence, suggesting that export --  
9 future export revenues based on a price of six (6) to six  
10 and a half (6 1/2) cents a kilowatt hour would not be  
11 unreasonable.

12 MR. HAROLD SURMINSKI: Yes, or at least I  
13 stated if you were going to use these averages from these  
14 tables, it would be more appropriate to use that six (6)  
15 to six and half (6 1/2) as opposed to five (5) that I  
16 heard you refer to several times.

17 MR. BOB PETERS: All right, and then you  
18 draw -- you drew the Board's attention to a document at  
19 Tab 11 of the book of documents, the third page in.

20 If I draw your attention to Tab 12 of the  
21 book of documents, and look at -- and look at the --  
22 these aren't -- these aren't expected values, these are  
23 based on what has actually transpired, the information  
24 contained in PUB/ Manitoba Hydro First Round 57, correct?

25 MR. HAROLD SURMINSKI: Yes, and I did

1 state that looking at the past ones may -- is not a good  
2 indicator of the future.

3 MR. BOB PETERS: So it's a good indicator  
4 of the current situation though, would -- would it not  
5 be?

6 MR. HAROLD SURMINSKI: Yes, it is.

7 MR. BOB PETERS: All right. And another  
8 point that you had mentioned to the Chairman, I believe,  
9 is that some of your negotiated sales from years gone by  
10 will be falling by the wayside, those are my words, but  
11 in essence you were suggesting that some of those deals  
12 are going to expire and you'd be able to negotiate at a  
13 new price; correct?

14 MR. HAROLD SURMINSKI: Yes, that's  
15 correct.

16 MR. BOB PETERS: And at Tab 13 of the  
17 book of documents is a list of some of your current long-  
18 term energy sales. I see that there's one in October of  
19 2009 that's going to expire, but are there any other ones  
20 that are expiring in the next few years?

21

22 (BRIEF PAUSE)

23

24 MR. HAROLD SURMINSKI: Not all sales are  
25 -- are listed here. There are sales, shorter term,

1 smaller sales that are not here. Also our diversity  
2 sales are being renegotiated into -- into the longer  
3 term.

4 MR. BOB PETERS: Would you be able to  
5 file with the Board then a complete listing of your --  
6 your current sales agreements, without disclosing  
7 necessarily who the counterparty is?

8 MR. HAROLD SURMINSKI: Yes, we would have  
9 to be careful in -- in not disclosing because some can be  
10 identified by their characteristics.

11 MR. BOB PETERS: All right. I'll leave  
12 that to you in response to the undertaking. And if you  
13 could include these ones as well that are listed in Tab  
14 13.

15  
16 --- UNDERTAKING NO. 22: Manitoba Hydro to file with  
17 the Board a complete listing  
18 of current sales agreements;  
19 if not naming counterparties  
20 explain why. Also to include  
21 those listed in Tab 13

22  
23 CONTINUED BY MR. BOB PETERS:

24 MR. BOB PETERS: But in terms of those  
25 diversity agreements, Mr. Surminski, I had understood



1 that the two (2) summer/winter diversity agreements that  
2 are shown at PUB/Manitoba Hydro First Round 4(g), the 200  
3 megawatt and the 150 megawatt sales are being  
4 renegotiated into the 350 megawatt sale shown at the  
5 bottom of the chart, correct?

6 MR. HAROLD SURMINSKI: Yes, that's  
7 correct.

8 MR. BOB PETERS: And you're indicating to  
9 the Board that in -- I apologize for my -- my coughing.  
10 Also apologize to Digi-Tran for having to listen to it,  
11 I'm sure.

12 But the summer and winter diversity  
13 agreements that you referenced are being renegotiated.  
14 Are those the only two (2)?

15 MR. LLOYD KUCZEK: I should point out  
16 that table's only providing you with sales with Xcel/NSP.  
17 There's other companies that we negotiate with and so  
18 it's not inclusive.

19 MR. BOB PETERS: Agreed. And I thank you  
20 for that, Mr. Kuczek.

21 But the -- the two (2) diversity  
22 agreements with that counterparty are being renegotiated  
23 from what appears on this schedule?

24 MR. LLOYD KUCZEK: Yes. And there's  
25 another diversity agreement that we're currently nego --

1 renegotiating as well.

2 MR. BOB PETERS: And when you say  
3 renegotiating, do I take from that that would extend the  
4 term?

5 MR. LLOYD KUCZEK: Well, I guess the  
6 proper phrase is just negotiating. Neither party has to  
7 proceed with a diversity agreement going forward. We're  
8 negotiating either an extension of it or a new agreement,  
9 and that we determined depend -- whether you classify it  
10 as -- an extension or a new agreement will be determined  
11 through negotiations.

12 MR. BOB PETERS: And the purpose of  
13 bringing that to the Board's attention is to indicate to  
14 the Board that there's an expectation from Manitoba  
15 Hydro's point of view that the price for their energy  
16 will increase over what it was in a former agreement.

17 MR. LLOYD KUCZEK: Yeah. And I -- I have  
18 to be careful there because it depends what the terms and  
19 conditions that are negotiated under the new arrangement.  
20 But it's -- it's fair to say that the price of  
21 electricity and newly negotiated agreements will reflect  
22 what we believe the future price of electricity value to  
23 be.

24 MR. BOB MAYER: Gentlemen, I'm having  
25 some difficulty in suggesting that we ought not to know

1 who the counterparties are.

2 I understand not disclosing price, but I  
3 don't understand not disclosing who we're contracting  
4 with, in light of the fact that I almost always -- every  
5 time there's a new power sale, I hear it released, either  
6 by the government or by Manitoba Hydro telling me who  
7 it's with.

8 MR. LLOYD KUCZEK: Yeah. You're --  
9 you're correct. I think there was -- we mislead you  
10 there. I -- I -- we generally disclose who we're  
11 negotiating contracts with.

12

13 CONTINUED BY MR. BOB PETERS:

14 MR. BOB PETERS: In response to the  
15 undertaking you've given, Mr. Kuczek, if you -- if you  
16 have reasons to dis -- to not want to disclose the name  
17 of the counterparty then you can explain that I suppose  
18 in your answer. Otherwise, I think the Vice-Chair's  
19 indicating that that's probably a matter of public record  
20 already.

21 MR. LLOYD KUCZEK: Correct.

22 MR. BOB PETERS: Thank you. Mr. Kuczek,  
23 low-income DSM is a program that was launched under your  
24 supervision on December 14th of 2007, correct?

25 MR. LLOYD KUCZEK: Correct.

1 MR. BOB PETERS: And it was for all  
2 heating sources, not just electricity, but it would  
3 include gas and propane and other heating sources?

4 MR. LLOYD KUCZEK: Correct.

5 MR. BOB PETERS: And the low-income DSM  
6 program that the Corporation has launched is to be  
7 comprehensive, not only with its own Power Smart plan,  
8 but it also will make use of the affordable energy fund  
9 that may be available, the eco-energy programs, and any  
10 other provincial government programs, as well as  
11 community based infrastructure?

12 MR. LLOYD KUCZEK: Correct.

13 MR. BOB PETERS: Do I gather that the  
14 target of your low-income DSM is forty-six hundred  
15 (4,600) homes in the next three and a half (3 1/2) years?

16 MR. LLOYD KUCZEK: Correct.

17 MR. BOB PETERS: Can Manitoba Hydro do  
18 twelve hundred (1,200) homes a year?

19 MR. LLOYD KUCZEK: It's going to be a  
20 challenge.

21 MR. BOB PETERS: Do I take from that  
22 answer that your resources will be stretched to get that  
23 penetration rate?

24 MR. LLOYD KUCZEK: I wouldn't  
25 characterize it that way. When we discussed this program

1 with other parties that are offering low-income programs  
2 the biggest challenge that we understand is getting  
3 participants to participate in the program. We're hoping  
4 to leverage the -- the community based organizations that  
5 are out there.

6                   So a lot is going to depend on how quick  
7 we can get those community organizations interested in  
8 participating in these programs. And then, again, the  
9 other part that we don't have any control over is how  
10 aggressive these parties will want to be but...

11                   MR. BOB PETERS:    The program appears to  
12 be for a three and a half (3 1/2) year time horizon.  
13 Would that be a correct interpretation by the Board?

14                   MR. LLOYD KUCZEK:    That's what we have  
15 approval for at this point.

16                   MR. BOB PETERS:    Is that tied to the  
17 Federal Government program?

18                   MR. LLOYD KUCZEK:    Yes.

19                   MR. BOB PETERS:    And that's why it's  
20 three and a half (3 1/2) years, not a longer horizon?

21                   MR. LLOYD KUCZEK:    Yes. It would be fair  
22 to say that we probably will be doing more, but we don't  
23 know if the Federal Government's going to extend that  
24 program, whether they're going to come up with a --  
25 possibly a lower income program of some sort.

1                   So we thought probably at this point the  
2 best thing to do would just be to base our program on  
3 three and a half (3 1/2) years for now and then make  
4 adjustments as this information becomes available as we  
5 move forward.

6                   MR. BOB PETERS:    And the Federal program  
7 to which you're referencing is also known as the  
8 ecoENERGY Program or the ECO Retrofit Program?

9                   MR. LLOYD KUCZEK:    Correct.

10                  MR. BOB PETERS:    And that's where the  
11 Federal Government has indicated an availability of up to  
12 \$220 million to assist low-income home owners?

13                  MR. LLOYD KUCZEK:    I'm not familiar with  
14 the -- the maximum amount of dollars but you could be  
15 correct on that.

16                  MR. BOB PETERS:    Are you familiar with a  
17 five thousand dollar (\$5,000) maximum per -- per  
18 household?

19                  MR. LLOYD KUCZEK:    Correct.

20                  MR. BOB PETERS:    The low-income program  
21 for demand-side management that is being introduced by  
22 Manitoba Hydro will focus on tenants in multi-unit  
23 dwellings as well as home owners?

24                  MR. LLOYD KUCZEK:    Yes, as well as single  
25 family, semi-detached homes.

1                   MR. BOB PETERS:    So it will be tenants in  
2 multi-unit dwellings where the tenant is responsible for  
3 the electricity bills?

4                   MR. LLOYD KUCZEK:   Not totally.  It -- it  
5 can be where the landlord is as well.

6                   MR. BOB PETERS:    Is there a separate  
7 program for apartment buildings?

8                   MR. LLOYD KUCZEK:    We're looking at  
9 developing one.

10                  MR. BOB PETERS:    At Tab 37 of the book of  
11 documents do we understand correctly that the access to  
12 the program is based on 125 percent of the low-income  
13 cutoff point, established by Statistics Canada?

14                  MR. LLOYD KUCZEK:    That's what we based  
15 it on, yes.

16                  MR. BOB PETERS:    And this cutoff point  
17 uses the household income and also takes into account the  
18 number of people in the household and also the location  
19 of the -- of the house?

20                  MR. LLOYD KUCZEK:    Correct.

21                  MR. BOB PETERS:    Is that the -- that's  
22 the same program that the Corporation heard about on its  
23 Centra Gas side of the business?  Is this one and the  
24 same?

25                  MR. LLOYD KUCZEK:    Correct.

1                   MR. BOB PETERS:    Mr. Kuczek, do you agree  
2   that even if Manitoba Hydro was to quarterback this  
3   program there is many steps that need to be taken by the  
4   homeowner?

5                   MR. LLOYD KUCZEK:    There are a number of  
6   steps, yes.

7                   MR. BOB PETERS:    At Tab 39 of the book of  
8   documents is an extract from the evidence of Mr. Philippe  
9   Dusky who the Coalition has put forward and will -- will  
10   put forward as one of their witnesses, and he has done a  
11   flowchart in terms of some of the steps that have to be  
12   taken to -- to qualify for the program and to receive the  
13   benefits.

14                  MR. LLOYD KUCZEK:    Correct.

15                  MR. BOB PETERS:    On the second page of  
16   what's included at Tab 39, is a -- is a suggested  
17   revision of a five (5) step program down from the fifteen  
18   (15) steps on the previous page, and that five (5) step  
19   program would be managed by Manitoba Hydro.

20                  You're familiar with that?

21                  MR. LLOYD KUCZEK:    Yes, I'm familiar with  
22   that.

23                  MR. BOB PETERS:    Is that a workable -- a  
24   workable option?

25                  MR. LLOYD KUCZEK:    I guess everything's



1 workable. It's a question of what's -- what's going to  
2 be the best approach moving forward. We have discussed  
3 some of the benefits and the non-benefits of proceeding  
4 with Manitoba Hydro, or Manitoba Hydro proceeding down  
5 that path.

6                   But one (1) of the benefits that we do  
7 like is to have a homeowner involved in the process and  
8 we think there's more buy-in by having that homeowner  
9 involved in the process. We do agree that our process  
10 that we currently have and as Mr. Dunsky points out in  
11 his flowchart -- and I would say that he does make it  
12 look more complicated than it is for the customer,  
13 because if you showed this to the customer it would scare  
14 the customer off, but a number of these steps are steps  
15 that Manitoba Hydro takes as well.

16                   And the other thing I would point out is  
17 we're planning to help those customers step-by-step so  
18 that it isn't perceived that way by customers.

19                   MR. BOB PETERS:    When you say anything  
20 may be workable I take it there's a price tag attached to  
21 -- to going down the route that Mr. Dunsky is suggesting?

22                   MR. LLOYD KUCZEK:    There would be a price  
23 tag, yes. And the other point I'm making is that we -- I  
24 hate to repeat myself -- but we do think there's value in  
25 having the customer undertake some of the work, in terms

1 of getting more buy-in and understanding what's -- what  
2 needs to be done.

3 We don't see -- for example, if a furnace  
4 needs to be replaced we don't see this as any different  
5 than what the customer would be confronted with under  
6 normal conditions should the furnace break down or should  
7 the customer decide to replace the furnace. So we -- we  
8 don't think it's that complicated from the customer's  
9 perspective.

10 MR. BOB PETERS: But you would  
11 acknowledge that the more assistance from Manitoba Hydro,  
12 the better perceived it may be from the homeowner?

13 MR. LLOYD KUCZEK: Yes.

14 MR. BOB PETERS: Have you been able to  
15 quantify the cost of going from the -- the flowchart  
16 presented at Tab 39, the fifteen (15) step down to the  
17 five (5) step program?

18 What would be the additional cost to  
19 Manitoba Hydro?

20 MR. LLOYD KUCZEK: We didn't quantify  
21 that, no.

22 MR. BOB PETERS: Is that something you're  
23 able to do in terms of at least, let's call it a  
24 "ballpark figure"?

25 MR. LLOYD KUCZEK: We probably could do

1 that. What I would say is that, you know, we launched  
2 the program. We're moving forward. We just launched it  
3 and we're going to see how the process works.

4 We're certainly going to look at possibly  
5 -- some possible options in terms of helping the customer  
6 out. One (1) -- one (1) of those options is if they're  
7 in a community -- near a community-based organization we  
8 would encourage them to work through that organization as  
9 opposed to independently, but again we like the  
10 flexibility. If the customer wants to do the work  
11 themselves and hire the contractors or hire their  
12 relatives to, for example, put the insulation in the  
13 basement, we like them having that flexibility and  
14 choice.

15 MR. BOB PETERS: All right. Understood.  
16 Are you able to update the Board on what the uptake of  
17 the low-income program has been to-date, recognizing that  
18 it's only been launched December 14th of 2007?

19 MR. LLOYD KUCZEK: Well, the uptake to-  
20 date is we only -- we have two (2) community-based  
21 organizations that are up and running right now and those  
22 were pilots and so those haven't changed since then.  
23 We're currently going to be meeting with them and they're  
24 coming up with some plans, I believe it's four (4) year  
25 plans, but basically to take us to the end of this period

1 of our program and they're going to be -- going to be  
2 providing us with some proposals.

3 On the individual track we have had a  
4 number of calls. I couldn't give you the exact number,  
5 but there's I think in the range of maybe two hundred  
6 (200) calls that have come in. We've had fifty-five (55)  
7 applications I believe that have come in from individuals  
8 directly.

9 We're also working with the Spence  
10 neighbourhood. That's a separate track and they're --  
11 that's different than the other community-based  
12 organizations. They're actually helping us out, but it's  
13 -- their -- their approach is to have the individuals  
14 actually submit the applications directly to us. But  
15 they're involved and they possibly might orchestrate this  
16 contracting that you're suggesting for -- for group  
17 projects.

18 MR. BOB PETERS: You told the Board  
19 earlier that for tenants who don't pay the utility bills  
20 directly this program for low-income could apply, but as  
21 I understand it the landlords must flow the benefit to  
22 the tenant?

23 MR. LLOYD KUCZEK: Yes. Our low-income  
24 program requires that the lower income tenant in that  
25 case realize the benefits.

1                   MR. BOB PETERS:    Can you explain to the  
2 Board what that -- what that means, or how does that look  
3 like from the tenants' point of view.

4                   Is it a lower rent or is it a lower  
5 increase in the rent? Or how do you -- how do you  
6 measure that?

7                   MR. LLOYD KUCZEK:    Yeah, this is -- this  
8 is going to be the challenging area that we have to deal  
9 with, because in reality the landlord is entitled to the  
10 Federal grants and is entitled to the Power Smart dollars  
11 and incentives. So a tenant -- or a landlord could argue  
12 that he should realize a substantial portion of those  
13 benefits and I think his argument would be valid.

14                   So we would ideally like to see all the  
15 benefits flow to the low-income customer through either  
16 lower rents or lower increased rents, but as we move  
17 forward we'll -- we'll see how our experience unfolds  
18 with dealing with the landlords.

19                   MR. BOB PETERS:    For the tenant who ends  
20 up paying the utility bills, why would the landlord even  
21 bother doing the program?

22                   MR. LLOYD KUCZEK:    Well, being a landlord  
23 myself at one time, if somebody came along to me and said  
24 I'll insulate -- say I had a home for example, and I'm  
25 willing to insulate your basement and I'll put drywall

1 up, I'll insulate your ceiling and I'll caulk your  
2 windows and caulk your doors, put weatherstripping on it,  
3 and that's going to cost you two hundred dollars (\$200),  
4 I would jump at the chance if I was a landlord.

5           And the reason I would jump at the chance  
6 is that even if I'm -- well, if I was paying the utility  
7 bills, it could potentially help me. If I had to  
8 transfer that to the tenant it will still help me because  
9 one of the big concerns being a landlord is usually  
10 keeping your tenants or finding new tenants.

11           So if you could somehow provide benefits  
12 to the tenants through lower costs by renting your  
13 premise -- I -- I think there would be significant  
14 incentive on the part of the landlord, because as I say,  
15 the biggest concern with landlords generally is to keep  
16 the place occupied.

17           MR. BOB PETERS: In terms of the delivery  
18 of the program, I think you've indicated two (2)  
19 approaches that the Corporation is looking at: one (1) is  
20 certainly on the individual side and the second is a  
21 community based organization assisting the homeowner.

22           Is that correct?

23           MR. LLOYD KUCZEK: That's correct.

24           MR. BOB PETERS: And -- and from that I  
25 take it the individual can -- can do it alone if they

1 don't want to work with a community based group.

2 MR. LLOYD KUCZEK: Yes.

3 MR. BOB PETERS: Does the community based  
4 organization need to get the three (3) quotes that you're  
5 requiring as part of your program conditions?

6 MR. LLOYD KUCZEK: We -- we pay -- with  
7 the community based organizations, we pay based on -- on  
8 the measures being implemented, so it depends on what's --  
9 -- no, they -- they don't have to provide quotes. The --  
10 the organizations that we're working with right now  
11 actually do the work and they hire staff to do the work  
12 so there's no quotes involved in that.

13 We -- we would let them manage that  
14 process themselves.

15 MR. BOB PETERS: But the individual then  
16 has to get three (3) quotes if they want to do it  
17 themselves?

18 MR. LLOYD KUCZEK: That's correct.

19 MR. BOB PETERS: And when the three (3)  
20 quotes come in, does Hydro have a plan to -- as to how  
21 they're going evaluate those quotes?

22 MR. LLOYD KUCZEK: We're going to learn  
23 as we move forward, but what we're generally looking at  
24 doing is just ensuring that the quotes are reasonable,  
25 and if they're reasonable we'll approve them.

1                   MR. BOB PETERS:     That doesn't mean that  
2 the lowest quote necessarily gets the job?

3                   MR. LLOYD KUCZEK:    No.  Because an  
4 individual might want to buy a -- buy a higher -- well  
5 let's take the furnace for example and I know this isn't  
6 a gas hearing -- but if the customer wanted to install a  
7 furnace and decided that they wanted to install a furnace  
8 with a number of features on it and we don't think it's -  
9 - and -- and they're taking out the loan, we don't think  
10 it's -- it should be us that tells them that they  
11 shouldn't be doing that.  If they -- if they wanted to  
12 buy a particular model that was more expensive, it's not  
13 for us to tell them not -- not to do that, given that  
14 they're taking out the loan.

15                                 So we prefer that the customer have that  
16 choice.

17                   MR. BOB PETERS:     When you say Manitoba  
18 Hydro will -- will look at it from -- and give it the --  
19 I guess test it against reasonableness, does that imply  
20 to the Board that there will be guidelines as to what  
21 Manitoba Hydro thinks is reasonable for contractors to  
22 quote?

23                   MR. LLOYD KUCZEK:    Yes, we're going to  
24 establish that as the quotes come in over time.  We'll  
25 see what the furnace prices are coming in at.  We'll see



1 what the people are charging to put insulation in the  
2 basement and topping-up insulation in attics.

3 MR. BOB PETERS: Just on a side-note, why  
4 is there no refrigerator replacement program included?

5 MR. LLOYD KUCZEK: We designed the  
6 program -- one (1) of the objectives, the primary  
7 objectives, was to increase participation of lower income  
8 customers in our Power Smart programs that we currently  
9 offer. We currently don't offer refrigerator programs so  
10 we did not include that component into it.

11 Having said that, we are getting data from  
12 the homes that we audit on -- in terms of the fridges  
13 that are in place. We are looking at a refrigerator type  
14 replacement program of some sort, so -- and we may  
15 incorporate it as we move forward.

16 MR. BOB PETERS: Manitoba Hydro  
17 acknowledges that there can be a significant energy  
18 savings by upgrading the refrigerator?

19 MR. LLOYD KUCZEK: Yes.

20 MR. BOB PETERS: I think I looked in the  
21 materials and the energy efficient refrigerators are  
22 using about 400 kilowatt hours a year.

23 Is that your estimation?

24 MR. LLOYD KUCZEK: It's in that range,  
25 slightly higher, but you're correct.

1                   MR. BOB PETERS:    And the old ones with  
2 the rounded corners and the big handles on the front  
3 they're -- they're four (4) times as much, at 1,600  
4 kilowatt hours a year?

5                   MR. LLOYD KUCZEK:    They're all over the  
6 map.  As they get older, they do consume considerably  
7 more, and it could four (4) or five (5) times more, yes.

8                   MR. BOB PETERS:    In terms of the low-  
9 income savings at Tab 38 of the book of documents on the  
10 second page, page 2 of 3, of response to  
11 Coalition/Manitoba Hydro First Round 74, you have a  
12 chart, Mr. Kuczek, where you're demonstrating the savings  
13 that are available to a low-income home, correct?

14                   MR. LLOYD KUCZEK:    Yes.

15                   MR. BOB PETERS:    And do I take from that  
16 chart, on the Average Electric Savings Per Home column,  
17 that if I added those up and came up with four thousand  
18 one hundred and forty-one (4,141) kilowatt hours, that  
19 would be an annual savings assumption that that home  
20 could enjoy if it followed though on the programs being  
21 offered by Manitoba Hydro?

22                   MR. LLOYD KUCZEK:    Correct.

23                   MR. BOB PETERS:    And I'm looking on page  
24 2 of 3 of Coalition/Manitoba Hydro First Round 74.

25                   MR. LLOYD KUCZEK:    I'm not adding up the

1 numbers, but I believe it add ups to around four thousand  
2 (4,000), so you're correct.

3 MR. BOB PETERS: Could you explain to me  
4 what a Drainger is. Is that a basement pump?

5 MR. LLOYD KUCZEK: I had the same  
6 question actually back in the office. And so they -- I  
7 should of brought it here they actually put on one my  
8 desk.

9 But it's a -- a device that goes over your  
10 drain in your basement and the -- the concept there is  
11 that with older homes what happens is your dirt moves  
12 away from the outside of the foundation, and you get air  
13 drafts that actually go -- that blow through there and  
14 come up through the basement. So it's another way of  
15 sealing up your home.

16 MR. BOB PETERS: I thought it had to do  
17 with radon, but maybe that's not -- not at all?

18 MR. LLOYD KUCZEK: No, it wasn't to do  
19 with that.

20 MR. BOB PETERS: All right.

21

22 (BRIEF PAUSE)

23

24 MR. BOB PETERS: If you turn with me, Mr.  
25 Kuczek, to the last page in Tab 38. Again my apologies

1 for not marking them better, but it's page 3 of 3. But  
2 it's to a different Information Request that I put in  
3 there; it was Coalition/Manitoba Hydro First Round 74(c).  
4 On the last page there appears to be a calculation as to  
5 the savings for the homeowner as a result of the low-  
6 income initiatives being proposed.

7 MR. LLOYD KUCZEK: Correct.

8 MR. BOB PETERS: If I add up those items  
9 in the -- in the last chart in this answer the items  
10 under Electricity Heated Homes, there can be a savings of  
11 two hundred and thirty-five dollars (\$235) a year for the  
12 homeowner. Is --

13 MR. LLOYD KUCZEK: What was the number  
14 you came up with?

15 MR. BOB PETERS: Two thirty-five (235).  
16 Two hundred and thirty five dollars (\$235).

17 MR. LLOYD KUCZEK: Yeah, I -- I'm trying  
18 to recall what our estimates were, but it's in that range  
19 for electric heated homes, yes.

20 MR. BOB PETERS: And then on top of that  
21 if it was a -- an natural gas heated home there would be  
22 just twenty-nine dollars (\$29) savings because of the  
23 compact fluorescent lighting?

24 MR. LLOYD KUCZEK: You're -- you're  
25 talking about the savings from the electric bills as

1 opposed to electric and gas bills, I gath -- I gather?

2 MR. BOB PETERS: Yes.

3 MR. LLOYD KUCZEK: Correct. So the hot -  
4 - hot water -- the savings associated with the hot water  
5 tank as well.

6 MR. BOB PETERS: Any savings that are  
7 attributed to the all electric home that deal with  
8 insulation, or lighting, or water measures, and  
9 weatherization would also trans -- transfer through to  
10 the natural gas heated home, would they not?

11 MR. LLOYD KUCZEK: Yes, the numbers are  
12 different but same idea.

13 MR. BOB PETERS: And to provide those  
14 services if I look back one (1) page to page 2 of 3 of  
15 this answer, the second-last page in Tab 38 of the book  
16 of documents, the Utility's cost for this program is  
17 about \$1.185 million per year?

18 MR. LLOYD KUCZEK: Correct.

19 MR. BOB PETERS: And again that's over  
20 the three-and-a-half (3 1/2) year -- three (3) -- three-  
21 and-a-half (3 1/2) year planning horizon?

22 MR. LLOYD KUCZEK: Correct.

23 MR. BOB PETERS: Can I take it then that  
24 the total expenditure by Manitoba Hydro will be in the  
25 range of \$4.3 million over the current planned horizon

1 for low-income?

2

3

(BRIEF PAUSE)

4

5 MR. LLOYD KUCZEK: I believe that's  
6 correct.

7 MR. BOB PETERS: On the last page of Tab  
8 38, in answer to the Coalition question, the company  
9 provides a total resource cost test results as well as  
10 the rate impact measures.

11 From what you've said to the Board earlier  
12 this will demonstrate the fact that these don't achieve  
13 at least one point zero (1.0), that there is some cross-  
14 subsidy going on?

15 MR. LLOYD KUCZEK: Correct.

16 MR. BOB PETERS: And it also shows the  
17 Board that the cost to save a kilowatt hour being  
18 expended by Manitoba Hydro is in the range of eleven  
19 point two (11.2) cents?

20 MR. LLOYD KUCZEK: Correct.

21 MR. BOB PETERS: And it's eleven point  
22 two (11.2) cents to save a kilowatt hour that's costing  
23 the homeowner approximately six (6) cents?

24 MR. LLOYD KUCZEK: That's correct.

25 MR. BOB PETERS: The Affordable Energy

1 Fund is a fund that some of the Board Members will have  
2 heard about before, but that was a fund created by  
3 legislation in Manitoba?

4 MR. LLOYD KUCZEK: Correct.

5 MR. BOB PETERS: And it's administered by  
6 Manitoba Hydro?

7 MR. LLOYD KUCZEK: Correct.

8 MR. BOB PETERS: And at Tab 40 of the  
9 book of documents there is a breakdown of the fund and if  
10 I do the math correctly the province-wide low-income  
11 program will be \$2 1/2 million a year for four (4) years,  
12 totalling approximately \$10 million out of the Affordable  
13 Energy Fund?

14 MR. LLOYD KUCZEK: Correct.

15 MR. BOB PETERS: Maybe Mr. Derksen or Mr.  
16 Warden can explain this to the Board; that there was a  
17 suggestion that Manitoba Hydro take the money that was  
18 created by this legislated fund and ostensibly invest it  
19 or allow it to attract interest.

20 Do you recall that suggestion, Mr. Warden?

21 MR. VINCE WARDEN: There has been  
22 discussion with respect to interest on the fund, yes.

23 MR. BOB PETERS: And whereas the Public  
24 Utilities Board suggested that interest should attach to  
25 the fund to allow it to grow over time, that's not the

1 position favoured by Manitoba Hydro, as I understand it?

2 MR. VINCE WARDEN: We have not provided  
3 for interest on the fund at this time.

4 MR. BOB PETERS: And the last document at  
5 PU -- sorry, the book of documents Tab 40, Mr. Warden, is  
6 an explanation from the Corporation in essence indicating  
7 that the Corporation doesn't think it's worthwhile to do  
8 that. And maybe you can explain to the Board why  
9 Manitoba Hydro doesn't want interest attaching to this  
10 fund.

11 MR. VINCE WARDEN: Well, Mr. Peters, the  
12 legislation does not require interest to be applied to  
13 the fund and Manitoba Hydro chose to abide by the  
14 legislation as we interpreted it.

15 MR. BOB PETERS: All right. And we won't  
16 start giving different interpretations, but you would  
17 agree with me that there's no prohibition against  
18 interest attaching to the fund, is there?

19 MR. VINCE WARDEN: No, specific  
20 prohibition, no.

21 MR. BOB PETERS: And your point is that  
22 there's also no specific requirement for interest to  
23 attach?

24 MR. VINCE WARDEN: That's correct.

25 MR. BOB PETERS: All right.



1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: And where there's a  
4 total of -- that fund is \$35 million in -- in total, Mr.  
5 Warden?

6 MR. VINCE WARDEN: The initial amount was  
7 \$35 million in total, yes.

8 MR. BOB PETERS: That hasn't changed, has  
9 it?

10 MR. VINCE WARDEN: Well, it's being drawn  
11 down.

12 MR. BOB PETERS: All right. And, of that  
13 35 million, the 19 million is available for low-income  
14 programs. And you've itemized those on PUB/Manitoba Hydro  
15 First Round 34.

16 MR. VINCE WARDEN: That's the way the  
17 fund's been apportioned at this time, yes.

18 MR. BOB PETERS: And in terms of the  
19 draw-down, the third page in at the book of documents,  
20 Tab 40, shows the forecast draw-down of the funds that  
21 you've mentioned?

22 MR. VINCE WARDEN: Yes.

23 MR. BOB PETERS: So, as we sit here  
24 today, probably in the neighbourhood of \$3 million has  
25 been drawn down?

1 MR. LLOYD KUCZEK: I don't think we're  
2 that far into it.

3 MR. BOB PETERS: All right. So these  
4 figures might be prepared based on initial projections,  
5 but it's not quite as aggressive as shown in here?

6 MR. LLOYD KUCZEK: The expenditures  
7 haven't transpired in accordance with our plan, no.

8 MR. BOB PETERS: Mr. Kuczek, in terms of  
9 the demand-side management rate impacts, at Tab 41 of the  
10 book of documents is just a graphical depiction of the  
11 data that you've provided to the Coalition First Round  
12 Question 109(m).

13 And, if a picture tells a thousand words,  
14 what this is saying is that the Corporation's DSM  
15 expenditures are ramping up since 2002, and forecast to  
16 keep going up through 2009?

17 MR. LLOYD KUCZEK: That would be  
18 accurate.

19 MR. BOB PETERS: And the major increases  
20 have occurred over the last four (4) years?

21 MR. LLOYD KUCZEK: Correct.

22 MR. BOB PETERS: Can you explain again to  
23 the Board why -- why a major push has been on DSM  
24 programming in the last four (4) years when there isn't  
25 delayed generation as a result of the DSM initiatives?

1                   MR. LLOYD KUCZEK:    It's -- the increased  
2 value of the deferred uses -- usage of energy over a  
3 period of time.  In the '90s -- late '90s or mid 90s, the  
4 market in the US deregulated, and so in the -- and plus  
5 the surplus capacity got used up -- surplus generation  
6 capacity got used up, so market prices have increased.  
7 Energy prices -- the gas prices have gone up, which have  
8 translated into higher prices.

9                   But the end result was our -- our avoided  
10 costs, which is, I guess, two (2) components.  You -- you  
11 asked me if it included deferred generation.  It does  
12 not.  But it does include deferred transmission costs and  
13 distribution costs.

14                   So it's the export value plus those  
15 deferred charges.  And so the reason for the increased  
16 expenditures is reflective of the increased value  
17 associated with the efficient use of energy.

18                   MR. BOB PETERS:    If you turn the page  
19 with me, Mr. Kuczek, to the second graph found at Tab 41  
20 of the book of documents, it's broken down by -- I'm  
21 sorry, it's broken down by what the unamortized expense  
22 is, as well as the additional amounts that are included.

23                   And the unamortized balance of the DSM  
24 grows significantly, correct?

25                   MR. LLOYD KUCZEK:    Yes.

1                   MR. BOB PETERS:    And the unamortized  
2 balance is the amount that accrues in the fifteen (15)  
3 years over which Manitoba Hydro amortizes all of its DSM  
4 costs?

5                   MR. LLOYD KUCZEK:    Correct.

6                   MR. BOB PETERS:    And that fifteen (15)  
7 years is based on Manitoba Hydro's forecast of the number  
8 of years that the programs will provide benefits to the  
9 consumers?

10                  MR. LLOYD KUCZEK:    I'm going to let Mr.  
11 Derksen speak up.  He hasn't said anything yet this  
12 morning.

13                  MR. WILLY DERKSEN:    Yes, that's correct,  
14 Mr. Peters.  That would be about -- the average is  
15 something in excess of fifteen (15) years, so individual  
16 investments may not provide that fifteen (15) years, but  
17 some of them will provide benefits much longer than that  
18 period.

19                  MR. BOB PETERS:    And you're aware that  
20 Manitoba Hydro amortizes their DSM costs over a longer  
21 period of time than -- that virtually every other -- any  
22 other utility?

23                  MR. WILLY DERKSEN:    Than the ones that  
24 we've compared with, yes, we are amortizing it over a  
25 longer period of time.

1                   MR. BOB PETERS:    Does that mean they're  
2 wrong and you're right, or is it the other way around,  
3 Mr. Derksen?

4                   MR. WILLY DERKSEN:    Well, I haven't -- we  
5 haven't looked into the details of why they're using  
6 whatever number they're using.  But the amount that we're  
7 using is certainly justified and supportable and it's  
8 reasonable under the circumstances, so we think that we  
9 have a correct approach to it, yes.

10                  MR. BOB PETERS:    Well, I appreciate that.  
11 But that also shows that there's probably different ways  
12 to interpret the appropriate length of time over which to  
13 amortize those costs?

14                  MR. WILLY DERKSEN:    Yes.  The fact that  
15 the others have different periods of time would indicate  
16 that there are alternative approaches.

17                  MR. BOB PETERS:    And that with Manitoba  
18 Hydro's fifteen (15) year amortization period, that will  
19 result in consumers paying for DSM costs on programs that  
20 have since ended or been discontinued?

21                  MR. WILLY DERKSEN:    Well not really.  It  
22 -- what will happen is that the benefits from  
23 extraprovincial sales will offset those costs so  
24 consumers will not really be paying for them directly.  If  
25 we hadn't incurred those DSM expenditures and achieved

1 those savings consumers would have paid more.

2 MR. BOB PETERS: The unamortized balance  
3 shown on the last document in Tab 41, Mr. Derksen, when  
4 it sits at \$180 million, it's going to increase because  
5 the spending to 2017 on DSM expenditures, it goes up to  
6 \$571 million, correct?

7 MR. WILLY DERKSEN: Do you have a  
8 reference on that? I -- I'd have to check in the CEF  
9 but --

10 MR. BOB PETERS: I think in the book of  
11 documents at Tab 31, there's an indication that all of  
12 the demand-side management costs out through your  
13 planning horizon are going to end up costing \$571  
14 million.

15 I'm looking at Schedule A-5, in Tab 31.  
16 It's an Excel spreadsheet. It may be your last page, Mr.  
17 Derksen.

18 MR. WILLY DERKSEN: I have the  
19 spreadsheet. If you could give me a minute to review it  
20 please.

21

22 (BRIEF PAUSE)

23

24 MR. WILLY DERKSEN: That 571 million  
25 includes the costs that are incurred to date and,

1 therefore, that's why it doesn't agree with our CEF. I  
2 understand that now.

3 I -- I think to ascertain whether or not  
4 the deferred balance would continue to increase, we'd  
5 have to continue with the amortization schedule that  
6 you'd prepared earlier in the graph.

7 MR. BOB PETERS: But you would -- you  
8 would expect it to all -- to keep increasing. You just  
9 don't know how high because you would depend on when  
10 those -- or how much of that \$571 million would be spent  
11 in what years, correct?

12 MR. WILLY DERKSEN: It would likely  
13 increase for a period of time but at some point an  
14 equilibrium is reached whereby the amount of amortization  
15 may be greater than the amount of incremental spending,  
16 and at that point the deferred balance would start  
17 decreasing.

18 MR. BOB PETERS: Okay, understood. What  
19 we do know from looking at that chart, the second chart  
20 in Tab 41 of the book of documents, is that back in 1994  
21 consumers were paying nine hundred and seventy-eight  
22 thousand dollars (\$978,000) in their rates on account of  
23 demand-side management expenses, and that's increasing to  
24 \$13.7 million in 2009, correct?

25 MR. WILLY DERKSEN: Yes, that's correct.

1 But my point, Mr. Peters, was that you're not showing the  
2 amount of extraprovincial revenues also achieved during  
3 that timeframe, so I'm not sure that it's correct to say  
4 that on balance they were paying these amounts of money  
5 as shown in here.

6 MR. BOB PETERS: Well no. It is correct  
7 that they paid these amount of monies, but you're saying  
8 there may be an offset attributed to the export revenues  
9 that were achieved as a result of the demand-side  
10 management energy savings.

11 MR. WILLY DERKSEN: Yes, I see your  
12 point.

13 MR. BOB PETERS: Moving on to  
14 depreciation and amortization in the bigger picture, Mr.  
15 Derksen, a new depreciation study became effective April  
16 1st of 2007, correct?

17 MR. WILLY DERKSEN: Yes, that's correct.

18 MR. BOB PETERS: And that's because the  
19 previous study applied for the five (5) years preceding  
20 that.

21 MR. WILLY DERKSEN: Well -- well it's  
22 because the Utility performs its studies every five (5)  
23 years. It's a reasonable timeframe to -- to review your  
24 depreciation rates.

25 MR. BOB PETERS: And the depreciation



1 rates were -- the study was filed as Appendix 20 in these  
2 proceedings, correct?

3 MR. WILLY DERKSEN: Yes, that's correct.

4 MR. BOB PETERS: And the depreciation  
5 expense increased by \$6.5 million related to a change in  
6 the depreciation rates?

7 MR. WILLY DERKSEN: Yes, that's correct.

8 MR. BOB PETERS: And in addition to that  
9 increase of \$6.5 million there's also an increase in the  
10 depreciation amount, based on the growth in the capital  
11 expenditures of the Company?

12 MR. WILLY DERKSEN: Yes, that's correct.

13 MR. BOB PETERS: At Tab 44 of the book of  
14 documents there's a response to PUB/Manitoba Hydro First  
15 Round 49(a), Payments to the Province -- I'm sorry,  
16 Payment to Provincial Government.

17 MR. WILLY DERKSEN: Yes, sir?

18 MR. BOB PETERS: I think we've covered  
19 the various amounts and the witnesses have told the Board  
20 that the debt guarantee fee increased perhaps last -- in  
21 2007 it went up to 1 percent of the provincial -- of the  
22 debt, as of March 31st?

23 MR. WILLY DERKSEN: Yes, that's correct.

24 MR. BOB PETERS: And in terms of water  
25 rental rates, the water rental rate essentially doubled

1 in 2002. Is that your recollection?

2 MR. WILLY DERKSEN: Yes, that's correct.

3 MR. BOB PETERS: And since then it's  
4 remained constant?

5 MR. WILLY DERKSEN: Yes, sir.

6 MR. BOB PETERS: Is there any advance  
7 notice given to Manitoba Hydro if those rates are going  
8 to change, such that you can include them in your  
9 forecast? Or do you have to wait for the public  
10 announcements?

11 MR. VINCE WARDEN: We typically have to  
12 wait, Mr. Peters.

13 MR. BOB PETERS: Mr. Warden, shown on Tab  
14 -- in Tab 44 of the book of documents the response to  
15 PUB/Manitoba Hydro First Round 49(a) is the Sinking Fund  
16 Administration Fee.

17 Is that a fee paid to the province for  
18 their administering the Manitoba Hydro's sinking fund?

19 MR. VINCE WARDEN: Yes, it is.

20 MR. BOB PETERS: And why is that not  
21 administered by Manitoba Hydro?

22 MR. VINCE WARDEN: I believe it's part of  
23 legislation, but aside from that there's benefits to  
24 having the province administer that for us.

25 MR. BOB PETERS: What would those

1 benefits include, Mr. Warden?

2 MR. VINCE WARDEN: Well, they -- they  
3 have the structure in place at the province to monitor  
4 investments more closely than we do. That is, they --  
5 their -- they have the staff in place and we have a very  
6 small staff in our treasury division, so there's -- we  
7 receive benefits for the services they provide in this  
8 regard.

9 MR. BOB PETERS: Mr. Warden, in the  
10 second document at Tab 44, there's additional breakdown  
11 of payments to governments over a different time horizon.  
12 And there's on -- included municipal governments  
13 payments, property tax, and grants in lieu of taxes on  
14 the -- second from the bottom line.

15 Have you found that?

16 MR. VINCE WARDEN: Yes.

17 MR. BOB PETERS: There's an increase from  
18 '08 to '09. Is that related to the new headquarters for  
19 Manitoba Hydro?

20 MR. VINCE WARDEN: Yes, it is.

21 MR. BOB PETERS: Can you indicate to the  
22 Board if you now are able to quantify what property tax  
23 you'll be paying on the building?

24 MR. VINCE WARDEN: No. Mr. Peters, I  
25 think we covered this previously; that -- that number is

1 still being negotiated.

2 MR. BOB PETERS: I want to talk about  
3 greenhouse gas emissions briefly. And as I understand it  
4 there are two (2) types of greenhouse gas emissions and  
5 reductions: one (1) would be from what you would call  
6 indirect, and the other could be called direct.

7 Have I got that right?

8 MR. LLOYD KUCZEK: Correct.

9 MR. BOB PETERS: And the indirect  
10 greenhouse gas emissions are due to the theoretical  
11 reductions in other jurisdictions, based on Manitoba  
12 Hydro's exports?

13 MR. LLOYD KUCZEK: Correct.

14 MR. BOB PETERS: And from the Demand Side  
15 Management Program, Mr. Kuczek, Manitoba Hydro is laying  
16 claim to having reduced greenhouse gas emissions, at  
17 least on an indirect basis, by 730 kilotonnes on a  
18 cumulative basis.

19 Have I got that right?

20 MR. LLOYD KUCZEK: That's our estimate of  
21 the -- the reduced greenhouse gas emissions as a result  
22 of our combined efforts, yes.

23 MR. BOB PETERS: And I'm on Tab 42 of the  
24 book of documents for these questions, Mr. Kuczek.

25 While that's Manitoba Hydro's estimate,

1 what difference does it make to Manitoba Hydro whether  
2 it's right or wrong?

3 MR. LLOYD KUCZEK: I'm not sure what you  
4 mean by that. But we -- I mean, there's no way of  
5 knowing for certainty what the exact amount of emission  
6 reductions are in -- in the US, for example, that our  
7 electricity exports displace. We -- we come up with our  
8 best estimate of what that is, and we report this  
9 information.

10 But there's -- in terms of what value, it  
11 being correct or not, we're not realizing a value, per  
12 se, by selling these or anything like that, so...

13 MR. BOB PETERS: So it's, at best, a  
14 theoretical evaluation, but there's no financial benefit  
15 to the Corporation at this point in time?

16 MR. LLOYD KUCZEK: Yeah, there's no meter  
17 measuring it, and there's no financial benefit to  
18 Manitoba Hydro, other than if we are realizing added  
19 value through our export sales. And I couldn't say at  
20 this point.

21 MR. BOB PETERS: But that added value  
22 through export sales is also, at this point, theoretical,  
23 because there's no mandatory requirement of carbon  
24 legislation in the jurisdictions that you're exporting  
25 to.

1 MR. LLOYD KUCZEK: Correct.

2 MR. BOB PETERS: And -- and not to -- not  
3 to diminish, in any way, the value of -- of  
4 hydrogenerated electricity to that from a thermal source,  
5 you indicate on the first document, at Tab 42, that just  
6 from the DSM alone, it amounts to the removal of, you  
7 know, two hundred and eleven thousand (211,000) cars off  
8 the highways in the United States for one (1) full year.

9 And that's Manitoba Hydro's, I suppose,  
10 analogy of -- of showing what benefit there is to  
11 hydrogenerated electricity rather than fossil fuel?

12 MR. LLOYD KUCZEK: A lot of people use  
13 that analogy in terms of how many cars taken off the  
14 street. It just provides an easy way for the common  
15 person to understand what these tonnes really mean.

16 MR. BOB PETERS: And the -- if that two  
17 hundred and eleven thousand (211,000) cars is related to  
18 the DSM initiatives alone, that number would magnify and  
19 multiply if you added in the total exports of Manitoba  
20 Hydro, correct?

21 MR. LLOYD KUCZEK: That's correct.

22 MR. BOB PETERS: If you just did the math  
23 on a straight proportionate basis, there could be as much  
24 as 4,735 kilotonnes of greenhouse gas emissions savings  
25 as a result of Hydro through their exports.



1 some calculations on -- on -- based on what the  
2 information that's provided here at the top of the page?

3 MR. LLOYD KUCZEK: Okay.

4 MR. BOB PETERS: And 91 percent of that  
5 is due to electricity generation which I take it is all  
6 thermal?

7 MR. HAROLD SURMINSKI: Yes, I'll attempt  
8 to answer some of these questions, although our expert  
9 may have to come in if we get too deeply into this.

10 MR. BOB PETERS: For my purposes I don't  
11 think we'll get that deep, Mr. Surminski, but are the  
12 direct greenhouse emissions from Manitoba Hydro, that 91  
13 percent amount, is that due to thermal generation?

14

15 (BRIEF PAUSE)

16

17 MR. HAROLD SURMINSKI: Yes.

18 MR. BOB PETERS: And in terms of thermal  
19 is that all related to coal?

20 MR. HAROLD SURMINSKI: It's a combination  
21 of natural gas and coal.

22 MR. BOB PETERS: With the -- with the  
23 expectation though that natural gas is not being utilized  
24 to any significant degree?

25 MR. HAROLD SURMINSKI: Yes.



1                   MR. BOB PETERS:    And so in practical  
2 terms it's likely -- it's likely all coal?

3                   MR. HAROLD SURMINSKI:   Well, practical,  
4 yes, but there is a ratio that we do run our gas plants  
5 just to keep them maintained. We have some minimum  
6 running requirements for our gas plants so they are  
7 somewhat in the picture.

8

9                                   (BRIEF PAUSE)

10

11                   MR. BOB PETERS:    Mr. Derksen, back at Tab  
12 27 of the book of documents there was a -- a calculation  
13 related to affiliates of Manitoba Hydro, and this dealt  
14 with the OM&A analysis. And the second-last line on Tab  
15 27 of the book of documents, the first document in -- or  
16 you can go the second page, it doesn't really matter --  
17 there's a line indicating OM&A costs by element and  
18 subsidiaries has a -- it looks like about \$11 million  
19 attributed to it in the 2009 test year.

20                   MR. WILLY DERKSEN:    Yes, that's correct.

21                   MR. BOB PETERS:    And, Mr. Derksen, is  
22 that \$11 million of additional cost recovered? Is that a  
23 gross amount or is that net amount?

24                   MR. WILLY DERKSEN:    That would be the  
25 operating costs that are not eliminated through

1 consolidation. So those operating costs, where a  
2 subsidiary such as Manitoba Hydro Utility Services  
3 provides services to Manitoba Hydro, those costs would  
4 not be included in this \$11 million total.

5 MR. BOB PETERS: I'm not sure I  
6 understood that but let me try it this way: In terms of  
7 affiliates, one (1) of the Corporation's affiliates is  
8 Minell Pipelines Limited, correct?

9 MR. WILLY DERKSEN: Yes, that's correct.

10 MR. BOB PETERS: That's a pipeline that  
11 takes natural gas up to the western side of the province?

12 MR. WILLY DERKSEN: Yes.

13 MR. BOB PETERS: Are all of the costs  
14 attributed to Minell Pipelines Limited recovered from the  
15 gas side of the business, or are some of those costs  
16 being paid by electricity customers?

17 MR. WILLY DERKSEN: All of those costs  
18 would be recovered through the gas side of the business.

19 MR. BOB PETERS: And so there would be no  
20 net amount included in the financial statements of  
21 Manitoba Hydro for subsidiaries related to Minell  
22 Pipelines?

23

24 (BRIEF PAUSE)

25

1 MR. WILLY DERKSEN: Mr. Peters, with  
2 respect to Minell, it has a very low operating cost and  
3 all of its revenue does come from Centra Gas, and it  
4 recovers all of its operating costs through that process.  
5 However, for the purposes of presentation the  
6 consolidated IFF has -- is classified into two (2)  
7 components: one (1) is Centra Gas and the other one is  
8 Manitoba Hydro and its subsidiaries. And so Minell would  
9 be in Manitoba Hydro and its subsidiaries.

10 But still the answer's correct that none  
11 of the costs of Minell would be recovered from electric  
12 customers.

13 MR. BOB PETERS: So even though they're  
14 shown here on the Manitoba Hydro electric statements,  
15 they wouldn't -- they wouldn't be charged through in  
16 rates to Manitoba Hydro's electric customers?

17 MR. WILLY DERKSEN: That's correct.

18 MR. BOB PETERS: And in your previous  
19 answer to me, Mr. Derksen, you indicated that costs  
20 outside of Manitoba Hydro's organization, that we're not  
21 eliminated on consolidation do make it to this -- to this  
22 \$11 million bottom line number?

23 MR. WILLY DERKSEN: Yes, that's correct.

24 MR. BOB PETERS: Does that mean that  
25 Manitoba Hydro is paying \$11 million out of its pocket to

1 support the subsidiaries, but is not getting back revenue  
2 to cancel that out?

3 MR. WILLY DERKSEN: No. It is getting  
4 revenue to cancel that out. The revenue is shown in  
5 "Other Income" on Manitoba Hydro's statement as well.

6 MR. BOB PETERS: And in terms of a net  
7 impact of -- of subsidiaries and affiliates, Mr. Derksen,  
8 are you able to update the Board as to where -- where  
9 that nets to?

10 MR. WILLY DERKSEN: Yes. For 2006/'07,  
11 the net income of the subsidiaries of the major  
12 subsidiaries was two million one hundred and forty  
13 thousand (\$2,140,000) dollars. And that's provided in  
14 the annual report.

15 MR. BOB PETERS: Mr. Warden, can you  
16 explain to the Board what Manitoba Hydro International is  
17 presently -- presently doing?

18 MR. VINCE WARDEN: Manitoba Hydro  
19 International provides consulting services to a number of  
20 utilities around the world.

21 MR. BOB PETERS: And it presently is  
22 active?

23 MR. VINCE WARDEN: Yes, it is.

24 MR. BOB PETERS: Meridium Power Inc. is  
25 another subsidiary of Manitoba Hydro, correct?

1                   MR. VINCE WARDEN:   Actually Meridium  
2 Power has been wound up so it's no longer a subsidiary of  
3 Manitoba Hydro.

4                   MR. BOB PETERS:    Are there any financial  
5 obligations either owing to Meridium Power or from  
6 Meridium to Manitoba Hydro?

7                   MR. VINCE WARDEN:    Any residual costs of  
8 Meridium Power have been written off and reflected in the  
9 financial statements of the Corporation.

10                  MR. BOB PETERS:    Approximately how much  
11 was written off?

12                  I'm -- I'm looking, sir, at PUB/Manitoba  
13 Hydro First Round Question 18(c). I didn't put it in the  
14 book of documents so I'm not able to give you that  
15 reference.

16

17                                   (BRIEF PAUSE)

18

19                  MR. VINCE WARDEN:    Yes, thank you for  
20 that reference, Mr. Peters. The -- what's indicated in  
21 that response is that Manitoba Hydro's written off a  
22 total of approximately \$3 million with respect to  
23 Meridium Power.

24                  MR. BOB PETERS:    Why was it discontinued,  
25 or the relationship discontinued, in any event?

1                   MR. VINCE WARDEN:    A number of reasons.  
2 Meridium Power was established a number of years ago for  
3 purposes of distributing a -- a motor -- innovative motor  
4 that had the potential to provide service at the three  
5 (3) phase level, where three (3) phase service was not  
6 available.

7                   So we're -- could provide service to  
8 remote locations, such as irrigation pumps where a large  
9 motor might be required. And three (3) phase service was  
10 not available at that location. Meridium motor -- the  
11 Written Pole Motor it was called, was able to provide  
12 that service from single phase.

13                   So Manitoba Hydro did acquire through --  
14 initially through a research and development project, we  
15 did acquire the distribution rights for that motor in  
16 Canada.

17                   It -- we just did not have the marketing  
18 network set up in order to market that motor  
19 appropriately, or properly across Canada. It still has  
20 the potential, but we decided that it isn't -- wasn't in  
21 our -- within our core business and, therefore, we  
22 decided to step back from it.

23                   It still has potential, though, in the  
24 future.

25                   MR. BOB PETERS:    But Manitoba Hydro has

1 severed its relationship? It's no longer involved?

2 MR. VINCE WARDEN: That's right.

3 MR. BOB PETERS: Mr. Derksen, I think I'm  
4 going to complete my questioning with you, sir. And your  
5 colleagues on the panel thought you were too quiet this  
6 morning, so this will be your -- your last change with  
7 me, sir.

8 As I understand it, generally accepted  
9 accounting principles, or GAAP, changed from time to  
10 time.

11 MR. WILLY DERKSEN: Yes, sir.

12 MR. BOB PETERS: And Canadian GAAP used  
13 to exempt rate-regulated companies from certain  
14 requirements?

15 MR. WILLY DERKSEN: Yes, there was a  
16 provision in Canadian GAAP for rate-regulated  
17 enterprises, that's correct.

18 MR. BOB PETERS: And for the fiscal year  
19 after January 1st, 2009, those exemptions were -- were  
20 removed.

21 MR. WILLY DERKSEN: I believe that they  
22 have discontinued -- the Canadian Institute of Chartered  
23 Accountants has discontinued its -- it's study on rate-  
24 regulated operations, and is deferring to international  
25 financial reporting standards when they come into place

1 in 2011.

2 MR. BOB PETERS: All right. You're  
3 cutting right to the quick with me, sir, and I appreciate  
4 that from a timing perspective.

5 After January 1st, 2011, for fiscal year  
6 ends, the international reporting standards will become  
7 operative?

8 MR. WILLY DERKSEN: That's the current  
9 plan, yes.

10 MR. BOB PETERS: There's no option for  
11 Manitoba Hydro but to comply with international standards  
12 which will become, then, the new GAAP.

13 MR. WILLY DERKSEN: That's our  
14 understanding, yes.

15 MR. BOB PETERS: And, as I understand,  
16 one (1) of the big differences between current reporting  
17 and international financial reporting standards is how to  
18 report on deferred charges.

19 Do you agree?

20 MR. WILLY DERKSEN: That's one (1) of the  
21 differences, yes.

22 MR. BOB PETERS: And it's a significant  
23 difference for Manitoba Hydro, because Manitoba Hydro has  
24 a -- has a lot of deferred charges, correct?

25 MR. WILLY DERKSEN: Yes, it could be.



1                   MR. BOB PETERS:    Manitoba Hydro, at Note  
2   8 of their financial statements in their annual report --  
3   and I don't have them in the book of documents, sir --  
4   but there's a listing of various deferred charges in  
5   2007, totalling \$457 million, correct?

6                   MR. WILLY DERKSEN:    Yes, that's correct.

7                   MR. BOB PETERS:    And so what happens  
8   after January 1st, 2011 for your year end is that  
9   there'll be a new test to defer a charge, and you'll have  
10  to determine whether there is an enduring benefit to  
11  Manitoba Hydro, and whether Manitoba Hydro has control  
12  over the access to those benefits.

13                  MR. WILLY DERKSEN:    I wouldn't  
14  characterize that as being a new test, Mr. Peters.  I  
15  think that's a test that's being used right now for the -  
16  - the bulk of our deferred charges.

17                  MR. BOB PETERS:    Well, in terms of an  
18  example as to how it may affect the Corporation, Mr.  
19  Derksen, in terms of planning studies, if the underlying  
20  capital project is, in the vernacular scrapped, then the  
21  planning study is of no longer any enduring benefit,  
22  correct?

23                  MR. WILLY DERKSEN:    Well -- well, our  
24  position has been -- and -- and I think we've responded  
25  to this in a previous directive -- that the planning

1 studies that were undertaken by Manitoba Hydro are an  
2 essential cost of -- of the -- of the facility that is  
3 being built, and so they're not necessarily deferred  
4 charges that would be scrapped under that scenario.

5 MR. BOB PETERS: But there'd be no longer  
6 an enduring benefit to keep them as a deferred charge,  
7 and therefore Manitoba Hydro wouldn't be able to amortize  
8 them going forward, correct?

9 MR. WILLY DERKSEN: The whole transition  
10 into international financial reporting standards is under  
11 review, and I think a lot of those issues are -- are  
12 still being reviewed, not only by Manitoba Hydro and  
13 Canadian GAAP, but also by American utilities and -- and  
14 the American regulators.

15 So I'm not -- I think it may be premature  
16 to say that this is what's going to happen in 2001; that  
17 we'll obligated to do this or that or something else.

18 MR. BOB PETERS: Has Manitoba Hydro or  
19 its auditors put forward a position paper on behalf of  
20 the Utility?

21 MR. WILLY DERKSEN: Manitoba Hydro will  
22 be working with a -- consultants in order to assess its  
23 impacts or its requirements -- accounting requirements  
24 related to international financial reporting standard.

25 MR. BOB PETERS: Hasn't yet done so?

1                   MR. WILLY DERKSEN:    No, but a request for  
2 a proposal is being prepared and will be issued within  
3 the next few months I believe.

4                   MR. BOB PETERS:    From a financial  
5 reporting perspective, Mr. Derksen, one (1) of the  
6 negative impacts of Manitoba Hydro may be that some of  
7 the deferred charges will have to be, I guess the word is  
8 "written off" or expensed in the current year, rather  
9 than amortising them over longer periods of time as  
10 presently the Corporation does?

11                  MR. WILLY DERKSEN:    Well, that is a  
12 possibility.

13                  MR. BOB PETERS:    And at this point you're  
14 not prepared to indicate whether that will become a  
15 reality?

16                  MR. WILLY DERKSEN:    No, as I said there  
17 is a lot of review being carried out on this whole  
18 international financial reporting standards and its  
19 implication, and especially to regulated utilities.

20                  Although IFRS does not specifically  
21 acknowledge rate-regulated operations there is discussion  
22 as to that in fact it may allow the continued deferral of  
23 such charges, provided the regulator continues to allow  
24 them in -- in its rate setting process.  But again that's  
25 a -- that's a preliminary perspective and it's not

1    finalled (sic).

2                   MR. BOB PETERS:    Manitoba Hydro doesn't  
3    then have a migration plan to the IFRS standards or  
4    International Financial Reporting Standards to which you  
5    referred?

6                   MR. WILLY DERKSEN:   Well, that's part of  
7    the request for proposal that is being issued.  And I  
8    understand it's within the next few weeks, not the next  
9    few months, is that part of it will be to develop a  
10   migration plan and to develop that understanding  
11   necessary so that we can move forward in a -- in a proper  
12   and efficient manner.

13                  MR. BOB PETERS:    All right.  Thank you.  
14   With that answer, Mr. Chairman, I'd like to thank Messrs.  
15   Kuczek, Surminski, Page, Derksen, and Warden for their  
16   answers.

17                  I would also I think on behalf of the  
18   Board appreciate and thank the assistants:  Ms. Kuruluk,  
19   Ms. Flynn, Mr. Epp, Ms. Doering, Mr. Shulz, and at least  
20   at this point to a lesser extent Mr. Rainkie and Mr.  
21   Wiens and Mr. Thomas for their assistance, but we'll have  
22   at those last two (2) at the next panel.  I thank them  
23   very much.

24                  THE CHAIRPERSON:   And thank you, Mr.  
25   Peters.  Before we shut down for the lunch break, Mr.

1 Derksen, I have one (1) question.

2                   In 2007 the tab of documents, Tab number  
3 25, refers to capitalized OM&A in 2007 of approximately  
4 239 million and in 2008 of 260 million.

5                   I'm wondering how much in those years is  
6 actually depreciated and hits the bottom line, so to  
7 speak? Like, it goes in of course. When it gets  
8 capitalized it would go into the capital asset and then  
9 presumably at some point it would be subject to  
10 depreciation.

11                   So I'm wondering, similar the buildup of  
12 the deferred cost on DSM, what's actually written off in  
13 2007 and 2008, with respect to previously capitalized  
14 OM&A? You can take it as an undertaking if you wish.

15                   MR. WILLY DERKSEN: Thank you. I think  
16 we'd have to review that. Let me just get a  
17 clarification. You are looking for the amount of  
18 internal costs capitalized to date and the amount of  
19 depreciation that would be recorded on that amount?

20                   THE CHAIRPERSON: Yes. I'm referring to  
21 this particular schedule, Operating OM&A Costs by Cost  
22 Element, and on it it indicates capitalized OM&A costs  
23 for the year ended March 31st, 2007 in total is 239  
24 million, and the forecast for 2008 is 260 million. And  
25 of course this practice has been going on for some years

1 so presumably it goes into the capital assets and is  
2 eventually subject to depreciation.

3 So I'm wondering, when you cut to the  
4 chase, how much is actually depreciated in 2007 and 2008  
5 to see how much the net build is if you like.

6 MR. WILLY DERKSEN: It may be difficult  
7 for us to -- to get the historical details together but  
8 we'll take it away and -- and see if we can resolve your  
9 question appropriately.

10 THE CHAIRPERSON: Have a try at it even  
11 if it's estimated. Thank you.

12 MR. WILLY DERKSEN: All right. Thanks.

13

14 --- UNDERTAKING NO. 23: Manitoba Hydro to indicate to  
15 Board how much is depreciated  
16 from the capitalized OM&A  
17 costs in 2007 and 2008

18

19 THE CHAIRPERSON: Okay. We'll adjourn  
20 now for lunch. We'll be back at 1:15. Thank you.

21

22 --- Upon recessing at 12:06 p.m.

23 --- Upon resuming at 1:21 p.m.

24

25 THE CHAIRPERSON: Okay folks, we're all

1 set to go.

2 Ms. Ramage, you have some exhibits by the  
3 looks of it. You've been busy over lunch.

4 MS. PATTI RAMAGE: Yes, thank you, Mr.  
5 Chair. We have a number of undertakings to file. If --  
6 if you don't mind I'll just run through because we've  
7 sort of assigned exhibit numbers on our own here.

8 But the first is Manitoba Hydro  
9 Undertaking 14 which we're suggesting be Exhibit Manitoba  
10 Hydro 11 and that's dealing with Bipole 3.

11

12 --- EXHIBIT NO. MH-11: Response to Undertaking 14

13

14 MS. PATTI RAMAGE: The second is headed  
15 "Typical Home and Water Heating Cost". We don't have an  
16 undertaking number on that. If you recall, Mr. Kuczek  
17 gave that prior to the break this morning. But we'd  
18 suggest that become Exhibit 12.

19

20 --- EXHIBIT NO. MH-12: Document entitled "Typical  
21 Home and Water Heating Cost"

22

23 MS. PATTI RAMAGE: Next, I have Manitoba  
24 Hydro Undertaking 7 which is the breakdown of components  
25 of net revenue finance expenses and operating expenses

1 for the Wuskwatim Power Limited Partner. That, we'd  
2 suggest, be Exhibit 13.

3

4 --- EXHIBIT NO. MH-13: Response to Undertaking 7

5

6 MS. PATTI RAMAGE: Then Undertaking  
7 Number 3, which is the IFF recalculation that we suggest  
8 become Exhibit Manitoba Hydro 14.

9

10 --- EXHIBIT NO. MH-14: Response to Undertaking 3

11

12 MS. PATTI RAMAGE: Manitoba Hydro  
13 Undertaking Number 5, which is the estimated forecast  
14 generation for the last quarter of the fiscal year, in  
15 light of the favourable water conditions, we suggest that  
16 be Exhibit MH-15.

17

18 --- EXHIBIT NO. MH-15: Response to Undertaking 5

19

20 MR. PATTI RAMAGE: And, finally,  
21 Undertaking 15, which is to provide an explanation as to  
22 why the thermal and hydraulic generation figures in the  
23 Power Resource Plan are not identical to the figures in  
24 PUB/MH-1-85, and we'd suggest that be Exhibit MH-16.

25



1 --- EXHIBIT NO. MH-16: Response to Undertaking 15

2

3 THE CHAIRPERSON: That would be fine, but  
4 that's the one I don't have.

5 MS. PATTI RAMAGE: Okay.

6

7 (BRIEF PAUSE)

8

9 THE CHAIRPERSON: Okay, thank you, Ms.  
10 Ramage.

11

12 (BRIEF PAUSE)

13

14 THE CHAIRPERSON: Okay, Mr. Gange for  
15 RCM/TREE.

16 Mr. Gange...?

17 MR. BILL GANGE: Thank you, Mr. Chair.

18 I'd like to thank Mr. Williams for his indulgence in --  
19 in allowing RCM/TREE to butt in. Professor Miller has --  
20 has a scheduling conflict for the next two (2) days, and  
21 we -- we've asked if we could go while Professor Miller  
22 is here, as he's obviously the brains behind this  
23 operation.

24 So, with that, Mr. Chair, I've -- I've  
25 provided to counsel a set of documents. It's a very high

1 standard that -- that we have set by Mr. Peters, making  
2 the rest of us look rather poor. But -- so, I -- I've --  
3 I've provided to you what I would like to mark as  
4 RCM/TREE-4-5.

5 THE CHAIRPERSON: Very good.

6 MR. BILL GANGE: Thank you.

7

8 --- EXHIBIT NO. RCM/TREE-4-5: Set of documents

9

10 MR. BILL GANGE: And I believe, Ms.  
11 Ramage, that -- that I -- I dropped off a number of those  
12 for you. Hopefully, most of the people on the panel have  
13 a copy.

14 MR. PATTI RAMAGE: Thank you. We made  
15 additional copies -- I'm sorry, I missed the exhibit  
16 number that was assigned.

17 MR. BILL GANGE: Number 5.

18

19 CROSS-EXAMINATION BY MR. BILL GANGE:

20 MR. BILL GANGE: In looking at -- I think  
21 this is -- is a question for you, Mr. Warden, although,  
22 for most of these, I'm not exactly sure who is going to  
23 respond.

24 But in looking at page 1 of RCM/TREE  
25 Number 5, there is a table -- Manitoba Hydro Table 11, on

1 page 1. And that was provided in the rebuttal evidence.

2 MR. VINCE WARDEN: Yes, we have it here,  
3 Mr. Gange.

4 MR. BILL GANGE: That -- that table has -  
5 - the -- that -- that table's not been provided  
6 previously in this disclosure process, has it sir?

7

8 (BRIEF PAUSE)

9

10 MR. VINCE WARDEN: No, Mr. Gange. I  
11 think this is the first time we've presented this in this  
12 format.

13 MR. BILL GANGE: Okay, thank you. In --  
14 in -- on page 2 of the -- the Exhibit 5, there is a --  
15 with respect to Mr. Chernick's evidence, there's the  
16 comment in the first full paragraph that Mr. Chernick's  
17 evidence -- and I'm about halfway through that paragraph,  
18 sir -- however, his evidence does not set forth the  
19 methods used in such estimates, and whether or not these  
20 entail the use of market forecasts.

21 Are you with me on that, sir?

22 MR. VINCE WARDEN: Yes.

23 MR. BILL GANGE: The -- the information -  
24 - or Mr. Chernick's evidence had provided links to New  
25 England and California, with respect to avoided cost



1 -- the New England and California avoided cost  
2 derivations, I take it because they weren't reviewed that  
3 you don't know if those forecasts -- or where the avoided  
4 -- the avoided costs were based on forecasts of market  
5 prices?

6                   You're not able to -- to respond to that I  
7 take it?

8                   MR. VINCE WARDEN:    I'm not.

9                   MR. BILL GANGE:    Okay.  In -- in response  
10 though, in the rebuttal evidence on page 2, the next  
11 sentence says further, in a footnote on the same page,  
12 referring to Mr. Chernick's evidence, he has noted that  
13 utilities in these jurisdictions request protection for a  
14 market price forecast.

15                   And -- and, sir, Mr. Chernick says to me  
16 that -- that his footnote did not refer to New England  
17 and California, that he was making a comment that -- that  
18 he is aware that some jurisdictions -- or in some  
19 jurisdictions the utilities do request the -- the  
20 protection for the market price forecast.  But he was not  
21 referring to California and New England.

22                   You -- you're not able to -- to make a  
23 comment on that, I take it, in light of -- of the  
24 inability to review those materials?

25                   MR. VINCE WARDEN:    I'm sorry, Mr. Gange,

1 but we'll accept his statement on that.

2 MR. BILL GANGE: Okay. Thank you. And  
3 Mr. Chernick has advised me that in -- in a number of the  
4 -- the filings that he has reviewed in other  
5 jurisdictions detailed forecasts of market prices are  
6 provided to parties who are not engaged in power trading.  
7 So that although there is protection that -- that  
8 information is provided to -- to those Intervenors who  
9 are not in competition with -- with Manitoba -- or with -  
10 - with the Utility.

11 Are you aware of that position?

12 MR. VINCE WARDEN: I accept that as being  
13 reasonable, yes.

14 MR. BILL GANGE: Okay. Just wondering,  
15 sir, if -- if there's any reason why Manitoba Hydro could  
16 not provide it's detailed forecasts of market prices to  
17 parties such as the Coalition and to RCM/TREE who -- who  
18 are not in competition with -- with Hydro.

19 MR. VINCE WARDEN: I guess it's just the  
20 fact that the more widely circulated that information is,  
21 the less advantage, if it is an advantage to us, the less  
22 advantage it would become.

23 MR. BILL GANGE: But would you agree with  
24 me, sir, that there ought to be a way that the Board  
25 ought to be able to regulate that process putting

1 confidentiality provisions on -- on parties such as  
2 RCM/TREE and the Coalition not to disclose that  
3 information but to have it available to it?

4

5

(BRIEF PAUSE)

6

7

MR. VINCE WARDEN: Mr. Gange, for the  
8 reasons I gave I think it's appropriate that information  
9 remain confidential.

10

MR. BILL GANGE: Okay, thank you, sir.  
11 At -- at also at page 41, so page 2 of RCM/TREE-5 there -  
12 - there's a heading stating "Forward looking generation  
13 marginal costs are not based on SEP prices", and -- and  
14 then there's a reference to Mr. Chernick's evidence  
15 stating that -- where -- where Mr. Chernick had said:

16

17

18

19

"Hydro apparently estimates marginal  
generation costs from historical prices  
charged to surplus energy program  
customers."

20

21

22

23

24

And -- and your point in response has been  
that Mr. Chernick is incorrect when he makes that  
assumption, that the forward looking generational  
marginal costs are based on surplus energy program  
prices?

25

That's the position that you've taken in

1 the rebuttal that he was wrong in making that assumption,  
2 sir?

3 MR. VINCE WARDEN: That's correct, yes.

4 MR. BILL GANGE: The estimate of marginal  
5 energy costs is based on a twenty (20) year levelized  
6 marginal cost of generation of fifty-five dollars and  
7 thirty-eight cents (\$55.38) per megawatt hour reference  
8 to the northern generation.

9 That part the -- is that part accurate,  
10 sir?

11 MR. HAROLD SURMINSKI: That sounds  
12 accurate. Could you give us a reference where you're  
13 getting that.

14 MR. BILL GANGE: Well, I -- I believe it  
15 -- it comes out of the -- the value set in -- in table  
16 number 11.

17

18 (BRIEF PAUSE)

19

20 MR. HAROLD SURMINSKI: Yes, it sounds  
21 like it could be close. We accept that, subject to  
22 check.

23 MR. BILL GANGE: Okay, thank you, sir,  
24 subject to check. I appreciate that.

25 And if you look at page 18 of RCM/TREE-5,



1 in response to RCM/TREE Interrogatory Round 1, or  
2 Information Request Round 1 Number 4, does the -- the  
3 question was asked of -- of to specify the avoided cost  
4 Manitoba Hydro was using to screen DSM projects, and the  
5 response includes this:

6 "The marginal cost contains the  
7 expected value of electricity exports  
8 is commercially sensitive, and  
9 therefore detailed information on the  
10 derivation of the avoided cost cannot  
11 be provided."

12 That's the position that Manitoba Hydro has taken, that -  
13 - that it's -- it's too commercially sensitive to be  
14 revealed?

15 Is that correct, sir?

16 MR. HAROLD SURMINSKI: Yes, that's  
17 correct.

18 MR. BILL GANGE: Thank you. The -- the  
19 values that are set out though, sir, in -- in Table  
20 Number 11, are Manitoba Hydro's market perspective for  
21 prices of energy and capacity exported or imported?

22 Is that a fair comment?

23 MR. HAROLD SURMINSKI: Are you trying to  
24 determine how marginal or avoided costs are determined  
25 and what factors go into those? Is that your question?

1                   MR. BILL GANGE:   Well, the question right  
2 now is just that -- that Table 11 does relate to market  
3 perspectives for prices of energy and capacity exported  
4 and/or imported.

5                   MR. HAROLD SURMINSKI:   And those are our  
6 factors that go into determining marginal costs.

7                   MR. BILL GANGE:   And the -- the numbers  
8 that are published are the value levelized for twenty  
9 (20) years.

10                                   Is that correct, sir?

11

12                                   (BRIEF PAUSE)

13

14                   MR. HAROLD SURMINSKI:   Yes. I did not  
15 prepare this table so that's why I have to refer back.

16                   MR. BILL GANGE:   No, I -- any assistance,  
17 Mr. Surminski, that you can get that's perfectly  
18 understandable to a neophyte like me.

19                                   So in -- in terms of -- of this forecast  
20 for twenty (20) years, you're publishing that value even  
21 though you're negotiating contracts for twenty (20) years  
22 into the future?

23                   MR. HAROLD SURMINSKI:   Yes. We are  
24 willing to provide the overall number but the -- the  
25 shape, the number -- the values ramp up over time. We

1 are more protective of the absolute numbers in any one  
2 (1) year period.

3 So this does give away some intelligence  
4 on our numbers but it does not give away the year by  
5 year, the year specific estimates.

6 MR. BILL GANGE: I see. So it's the year  
7 to year estimates that you're not prepared to share to --  
8 to the Coalition or to RCM/TREE under a protective order?  
9 It's that year to year calculation?

10 MR. HAROLD SURMINSKI: Well it was a  
11 compromise. I think we -- we'd prefer not to provide a  
12 long term levelized number also, but I think we in  
13 particular -- particularly in the CEC process we realized  
14 that we would have to provide some indication, so it was  
15 a compromise to providing a minimal amount that would be  
16 of harm to us.

17 MR. BILL GANGE: Do I understand, sir,  
18 that the avoided costs include the higher prices you can  
19 get for firm power and capacity and the surplus energy  
20 program costs reflects only short term non-firm energy?

21 MR. HAROLD SURMINSKI: I think you're  
22 saying that the avoided costs are solely based on firm  
23 energy. That is not correct. But the SEP program costs  
24 are short term. They're -- they're historic.

25 MR. BILL GANGE: Are you able to tell us,

1 sir, the generation marginal costs used in deriving  
2 Appendix 11.2 -- or pardon me, Appendix 11?

3 MS. PATTI RAMAGE: Table 11.

4 MR. BILL GANGE: Table 11. Thank you,  
5 Ms. Ramage.

6 MR. HAROLD SURMINSKI: Could you repeat  
7 the -- more specifically what you mean?

8

9 CONTINUED BY MR. BILL GANGE:

10 MR. BILL GANGE: Well Table 11, what I'm  
11 asking for is can you tell us what the generation  
12 marginal costs were that are used to -- to establish --  
13 produce Table 11?

14 MR. HAROLD SURMINSKI: I think I know  
15 what -- by generation we mean not in -- not generation  
16 deferral, to clarify. We mean the costs associated with  
17 operating our generating system.

18 So costs of operating our generating  
19 system include thermal energy, imports and the byproduct  
20 is exports.

21 So we include all those -- the export,  
22 imports and the thermal energy. All production costs in  
23 our system are included in the generation category.

24

25 (BRIEF PAUSE)

1

2 MR. BOB MAYER: And your bipole costs  
3 too, aren't they?

4 MR. HAROLD SURMINSKI: No, they are --  
5 they are not a factor in our avoided costs. They're not  
6 considered to be a factor related -- but bipole costs are  
7 related to reliability, so they're not related to a  
8 generation need.

9

10 CONTINUED BY MR. BILL GANGE:

11 MR. BILL GANGE: In looking at Table 11,  
12 sir, is that calculated -- is it a levelized value in  
13 nominal dollars or in 2008 dollars?

14 MR. HAROLD SURMINSKI: I believe they  
15 were 2007 dollars -- constant dollars.

16 MR. BILL GANGE: Constant dollars.

17

18 (BRIEF PAUSE)

19

20 MR. BILL GANGE: And is inflation worked  
21 into the twenty (20) year price?

22 MR. HAROLD SURMINSKI: No. Inflation --  
23 when we apply a value at constant dollars, we do not have  
24 to consider inflation. But inflation is considered when  
25 -- when they're applied to -- to programs.

1                   If -- it depends on what -- what dollar  
2 years you're working on. If you're dealing in current  
3 dollars, or you can do it in constant dollars.

4                   MR. BILL GANGE:    And, sir, would you  
5 expect that market prices for hydro exports are going to  
6 rise over that twenty (20) year period?

7                   MR. HAROLD SURMINSKI:   Yes, I have stated  
8 that numerous times over the last few days.

9                   MR. BILL GANGE:    And -- and is that -- is  
10 that taken into account in -- in the table?

11                   MR. HAROLD SURMINSKI:   Yes. It's our  
12 forecast of export prices -- or is definitely the factor  
13 in marginal costs. We determined our marginal costs in  
14 exactly the same way that we value our resources.

15                   So, when we value Wuskwatim, we value it  
16 against increasing export prices. Our avoided costs are  
17 evaluated in exactly the same way, using our simulation  
18 model, using all our flow conditions. That's why the  
19 thermal and import energy comes into play.

20                   You'll have -- in the low flow conditions,  
21 there is a displacement of thermal and import energy  
22 that's considered in the avoided costs. In high flow  
23 cases, the value could be very little. In our very  
24 highest flow cases, our marginal value of a product is --  
25 is almost zero, because we are spilling energy in our

1 system. So any energy inputted into our system when we  
2 are spilling has almost zero value.

3 MR. BILL GANGE: Thank you. And -- and -  
4 - you -- you've raised -- Mr. Peters has raised this  
5 issue with you, sir, and you've mentioned that you do  
6 factor in greenhouse gas prices with respect to the US  
7 utilities by virtue of the consultants that you hire, and  
8 they provide you with a figure for that, correct?

9 MR. HAROLD SURMINSKI: Yes, we use the  
10 consultants as a guide, and we have a best estimate that  
11 we use for -- for the greenhouse gas -- yes, they -- how  
12 they convert into energy prices.

13 MR. BILL GANGE: Right. And -- and the  
14 conclusion that you come to, I take it from that, is that  
15 -- is that that is going to increase export prices to a  
16 certain degree as well.

17 MR. HAROLD SURMINSKI: Yes, to an  
18 increasingly significant degree. As I'd indicated, it  
19 starts ramping up in around 2011, and -- and just keeps  
20 increasing from there. And, in fact, this year we asked  
21 for estimates by our consultants up to 2050, and they  
22 were increasing even up to that point in time.

23 MR. BILL GANGE: And, sir, also in terms  
24 of export prices, you're aware that Ontario is committed  
25 to phasing out its coal plants by somewhere around the

1 year 2014?

2 MR. HAROLD SURMINSKI: They have various  
3 plans, but that's one (1) of them.

4 MR. BILL GANGE: That's one (1) of them.

5 Whatever the end result is going to be, I  
6 take it, though, that that's going to have an effect and  
7 increase export prices as well.

8 Is that -- is that your assumption, or  
9 Hydro's assumption?

10 MR. HAROLD SURMINSKI: Ontario was --  
11 Ontario's situation has very influence on our forecast of  
12 prices.

13 MR. BILL GANGE: Okay.

14

15 (BRIEF PAUSE)

16

17 MR. BILL GANGE: And if you look at pages  
18 3 and 4 of RCM/TREE Number 5, this is RCM/TREE  
19 Information Request 13, and -- and, sir, are -- are these  
20 values used in the avoided costs calculations?

21 MR. HAROLD SURMINSKI: These are the  
22 avoided cost numbers.

23 MR. BILL GANGE: So those are the values  
24 that are used in -- in Table 11 on page 1?

25 MR. HAROLD SURMINSKI: They would be



1 consistent with those.

2 MR. BILL GANGE: Okay, thank you.

3

4 (BRIEF PAUSE)

5

6 MR. BILL GANGE: Given that, sir, that --  
7 that you've provided the avoided costs at page 4 and page  
8 1, then looking at -- at page 18, RCM/TREE First Round  
9 Number 4 dealing with marginal costs, why would you not  
10 have been able to supply that information, given that  
11 you've -- you've provided it in -- in Table 11 and in  
12 response to Information Request Number 13?

13 Isn't it all the same information or in  
14 the same category?

15 MR. HAROLD SURMINSKI: We were willing to  
16 provide the -- the early year, for example the year '08,  
17 but we do not provide the detail of how we progress from  
18 that to 2027, whatever the period is of the twenty (20)  
19 year levelized period.

20 MR. BILL GANGE: Just the long term --  
21 the long term information that -- that causes a problem?

22 MR. HAROLD SURMINSKI: Yes, because our  
23 contracts are being negotiated out in -- in the long  
24 term.

25 MR. BILL GANGE: Thank you.

1 MR. HAROLD SURMINSKI: So it's not that  
2 critical that today's estimates are made known. It's --  
3 it's the future forecast, because it is a view in the  
4 future. Today's numbers are -- are quite well known;  
5 it's the future view that's important to Manitoba Hydro  
6 to be kept confidential.

7 MR. BILL GANGE: Thank you, sir. With  
8 respect to low-income assistance issues, I think Mr.  
9 Kuczek -- in Appendix 2 of the Round 2 Interrogatories,  
10 there's a report entitled, "The Greening of the  
11 Centennial Pilot Project." I got --

12 MR. LLOYD KUCZEK: Yes?

13 MR. BILL GANGE: -- got six six (66) --  
14 sixty-two (62). And -- and in there, I'm just going to  
15 read something that jumps out at Professor Miller and Mr.  
16 Weiss. It says that:

17 "The Treasury Board has recently  
18 directed the Minister of Manitoba  
19 Energy, Science and Technology, and the  
20 Minister responsible for the Public  
21 Utilities Board to explore  
22 opportunities and develop alternatives  
23 to reduce energy costs for low-income  
24 families."

25 Are you familiar with that directive that

1 was made by Treasury Board?

2 MR. LLOYD KUCZEK: No, I'm not.

3 MR. BILL GANGE: Okay. So that's -- the  
4 -- the directive has -- has not been provided to Manitoba  
5 Hydro directly?

6 MR. LLOYD KUCZEK: I didn't see the  
7 document, no.

8 MR. BILL GANGE: It -- it -- the -- The  
9 Greening of Centennial Pilot Project, am I right on that,  
10 sir, that's a Manitoba Hydro report?

11 MR. LLOYD KUCZEK: No, it's not actually.  
12 That report was drafted by -- it's -- it's drafted either  
13 by the group that's -- the community group that's running  
14 the Centennial Project or a combination of the Centennial  
15 Group and Science Technology and Energy and Mines.

16 MR. BILL GANGE: Okay, thank you. I  
17 wonder, Ms. Ramage, if -- if there could be an  
18 undertaking on behalf of Hydro. Mr. Kuczek says he's not  
19 aware of that directive.

20 I'm just wondering if -- if there's  
21 anybody in Hydro that is aware of the directive and if  
22 so, could it be supplied to us?

23 MR. LLOYD KUCZEK: I'm aware of the  
24 directive in the sense that I read that but I haven't  
25 seen the -- the actual directive.

1                   MR. BILL GANGE:    No, I -- I appreciate  
2   that, Mr. Kuczek and -- and -- it is the directive that I  
3   would like to see.

4                   MS. PATTI RAMAGE:   My concern is I'm not  
5   sure how we would go about finding that out.  If Mr.  
6   Kuczek will...

7

8                                       (BRIEF PAUSE)

9

10                  MS. PATTI RAMAGE:   I don't think Mr.  
11   Rose's information has changed anything, I was going to  
12   say.

13                         I'm not sure how we could -- if Mr. Rose  
14   and Mr. Kuczek aren't aware I -- I don't know who -- how  
15   we would canvass others.  But I would suspect if they're  
16   not aware, it's unlikely others would be, given Manitoba  
17   Hydro isn't a recipient of Treasury Board orders.

18                  MR. BILL GANGE:    Thank you, Ms. Ramage.  
19   I -- the question was just put out there in terms of if -  
20   - if -- if it is something that others are aware of that  
21   Mr. Kuczek isn't aware of, could it be provided.

22                         I -- I appreciate your comment.  But if --  
23   if it is available we'd like to see it.  If you can't  
24   find it, you can't find it.  That's -- that's...

25                  MS. PATTI RAMAGE:   I think we'll have to

1 leave it at -- that we're not aware of anything. If we  
2 became aware we could certainly deal with it at that  
3 time.

4 MR. BILL GANGE: Fair enough. Thank you.

5

6 --- UNDERTAKING NO. 24: Manitoba Hydro to supply  
7 RCM/TREE wit Treasury Board  
8 directive, if possible

9

10 CONTINUED BY MR. BILL GANGE:

11 MR. BILL GANGE: Mr. Kuczek, Mr. Weiss  
12 has used the concept in his testimony of energy burden.  
13 Is that a -- a phrase that you're familiar with?

14 MR. LLOYD KUCZEK: Yes.

15 MR. BILL GANGE: And going back to -- to  
16 your family with the -- it makes it tidy, in terms of the  
17 -- being able to put these questions to you -- the  
18 scenario that you painted of -- of your rich brother and  
19 your poor sister.

20 Which one has the higher energy burden?

21 MR. LLOYD KUCZEK: My sister.

22 MR. BILL GANGE: Okay. And the energy  
23 burden is in general terms the ratio of the energy bill  
24 to the household income?

25 MR. LLOYD KUCZEK: Correct.

1                   MR. BILL GANGE:    And -- and would you  
2 agree with me that -- that when the -- the energy burden  
3 is reduced and the energy becomes more affordable, when  
4 either of two (2) thing happen and that -- those two (2)  
5 things are that income has increased or energy bills go  
6 down?

7                   MR. LLOYD KUCZEK:    Correct.

8                   MR. BILL GANGE:    And in terms of -- of  
9 Manitoba Hydro's role, obviously your -- your involvement  
10 can only affect the size of the people's energy bills,  
11 correct?

12                   MR. LLOYD KUCZEK:    Correct.

13                   MR. BILL GANGE:    And -- and in terms of  
14 reducing that energy burden, would you agree with me that  
15 the -- that -- that basically there are three (3)  
16 different ways of -- of -- of accomplishing that, and one  
17 (1) would be low rates, a second would be bill  
18 assistance, and the third would be DSM measures to reduce  
19 consumption?

20                   MR. LLOYD KUCZEK:    Those three (3)  
21 categories sound reasonable.

22                   MR. BILL GANGE:    And in terms of the  
23 current new low-income program that's currently being  
24 rolled out, of those three (3) targets -- or of those  
25 three (3) methods, which of them are -- are being

1 pursued?

2 MR. LLOYD KUCZEK: Lowering their bills  
3 through the efficient use of energy.

4 MR. BILL GANGE: So targeted DSM to  
5 reduce consumption?

6 MR. LLOYD KUCZEK: Correct.

7 MR. BILL GANGE: I -- I take it though  
8 that bill assistance would also be one (1) way to relieve  
9 the energy burden of -- of low-income customers.

10 MR. LLOYD KUCZEK: Bill assistance would  
11 be, yes.

12 MR. BILL GANGE: Can -- can you tell us  
13 what the advantages and disadvantages for each of those  
14 approaches would be: that is the DSM, the lower rates, or  
15 the bill assistance.

16 MR. LLOYD KUCZEK: Give me the three (3)  
17 categories again.

18 MR. BILL GANGE: DSM, the advantages and  
19 disadvantages; the -- the lower rates; and thirdly the  
20 bill assistance program.

21 MR. LLOYD KUCZEK: Well, to -- to -- it's  
22 rather difficult for me to talk about the pros and cons  
23 of both -- all of them, but in -- in terms of DSM what we  
24 believe one (1) of the advantages of that is, is  
25 sustainable and long lasting.

1                   Getting into the other programs or options  
2 are really a rates issue which Mr. Wiens really should  
3 address. And bill assistance I think we addressed that in  
4 our rebuttal, and I think that's more of an issue of who  
5 should be providing that and whether that's our role or  
6 the Government's role. And I -- I think we suggested in  
7 our rebuttal that that's the Government's role.

8                   MR. BILL GANGE:    In terms of -- of the  
9 DSM program, sir, does -- does Manitoba Hydro have any  
10 information on whether the highest consumers might also  
11 present the most cost effective DSM opportunities?

12                   MR. LLOYD KUCZEK:   That can be in some  
13 cases, but not necessarily in all cases.

14                   MR. BILL GANGE:    You -- you mentioned  
15 this morning that -- that probably you're -- well, you  
16 said that your target over the next three (3) years was  
17 about thirty-six hundred (3,600) customers?

18                   MR. LLOYD KUCZEK:    I believe it's forty-  
19 six hundred (4,600).

20                   MR. BILL GANGE:    Forty-six hundred  
21 (4,600), sorry. And -- and you said I think it was about  
22 twelve hundred (1,200) per year for three and a half (3  
23 1/2) years. And -- and yet at the same -- but -- but at  
24 the same time you indicated that you were going to be  
25 challenged to meet that -- that goal.



1 MR. LLOYD KUCZEK: Yes, that's correct.

2 MR. BILL GANGE: Would you agree that it  
3 makes sense to prioritize lower income customers with the  
4 largest consumption bills for the DSM?

5 MR. LLOYD KUCZEK: I -- I think it makes  
6 sense for us to look at that. We're currently doing that  
7 actually in the hotel sector right now, so I don't know  
8 why we wouldn't do that with the lower income sector as  
9 well.

10 MR. BILL GANGE: Okay, thank you.

11 MR. LLOYD KUCZEK: But -- but I -- I  
12 guess one (1) of the problems I should point out is that  
13 our database doesn't have low-income data, so we don't  
14 necessarily know who our low-income customers are. So it  
15 does pose somewhat of a problem. I mentioned, in the  
16 hotel industry we do know who they -- they are.

17 But -- but there's nonetheless there's no  
18 reason why we can't pursue DSM opportunities whether  
19 they're lower income customers or not based on the  
20 consumption of those customers.

21 MR. BILL GANGE: Would there be a way,  
22 sir, of identifying the families that have low incomes  
23 because they've qualified for -- for low-income programs?

24 MR. LLOYD KUCZEK: Yes. There -- there's  
25 the social agencies, I guess, to that degree, and my

1 staff were talking to them about that.

2 MR. BILL GANGE: That -- that is a  
3 process that -- that Hydro is -- is currently developing,  
4 to -- to try to target those -- those consumers?

5 MR. LLOYD KUCZEK: Yes, through that  
6 avenue and another avenue that we're certainly going to  
7 be looking at. In fact we've -- we've talked to our  
8 collections people, and we believe that a number of those  
9 customers that have collections problems are -- likely  
10 are lower income customers as well.

11

12 (BRIEF PAUSE)

13

14 MR. BOB MAYER: How much access are you  
15 entitled to, to social assistance roles? Don't we have a  
16 privacy issue here?

17 MR. LLOYD KUCZEK: Yes. But what we can  
18 do is work with those agencies and make sure that they're  
19 aware of our program. So what they would do is when  
20 customers -- when they get Manitobans that are coming to  
21 them, they could make them aware of our program, and  
22 they're kind of sales leads for us.

23 MR. BOB MAYER: So the flow of -- the  
24 flow of information is the other way? You're going to  
25 pass the information to the people of limited income

1 through the agencies, not have it come the other way?

2 MR. LLOYD KUCZEK: That's correct.

3

4 (BRIEF PAUSE)

5

6 CONTINUED BY MR. BILL GANGE:

7 MR. BILL GANGE: Mr. Warden, I'd like to  
8 move onto the Affordable Energy Fund. I think this  
9 morning you testified that it -- \$35 million is in the  
10 Affordable Energy Fund, as of -- as of 2007, although  
11 it's a decreasing amount over time.

12 MR. VINCE WARDEN: Yes, as at March 31st,  
13 2007 the \$35 million was reduced by approximately \$1  
14 million.

15 MR. BILL GANGE: Thank you. And -- and  
16 I'm not sure that I made an accurate note but I think  
17 that your testimony was that \$9 million of the thirty-  
18 five (35) had been allocated for the benefit of low-  
19 income customers.

20 MR. VINCE WARDEN: I think that was \$19  
21 million.

22 MR. BILL GANGE: 19 million, yes, that's  
23 what I meant to say. I'm sorry if I didn't.

24 But your -- your testimony also was that  
25 those funds are not segregated so that -- and -- and you

1 said that there was no provision in the legislation  
2 requiring you to set it aside and -- and attribute  
3 interest to the -- the Affordable Energy Fund.

4 MR. VINCE WARDEN: Yes, that's correct.

5 MR. BILL GANGE: I -- I take it though,  
6 sir, that -- that, from a -- a conceptual point of view,  
7 that \$35 million is -- is just kept within -- within  
8 Hydro's accounts.

9 MR. VINCE WARDEN: Yes, we are accounting  
10 for the disbursements from that Fund separately, yes.

11 MR. BILL GANGE: And that -- that Fund  
12 then would reduce the cost of acquiring that amount of  
13 capital for Hydro that -- that Hydro would otherwise  
14 require?

15 MR. VINCE WARDEN: Not totally sure I  
16 understand your question, Mr. -- Mr. Gange.

17 MR. BILL GANGE: Well, somehow -- the  
18 fact that you've got that \$35 million, does -- within  
19 Hydro, create an interest factor, does it not?

20 MR. VINCE WARDEN: No. No, we have not  
21 set aside the \$35 million in a fund, so the cash is not -  
22 - it doesn't represent cash.

23 MR. BILL GANGE: No I -- I appreciate  
24 that. But it either -- it either -- there's one (1) of  
25 two (2) ways of it affecting your bottom line. And one

1 (1) way is that it attracts interest or the other way is  
2 that it reduces your cost of borrowing.

3 Isn't that the case?

4 MR. VINCE WARDEN: No.

5 MR. BILL GANGE: So that in -- in this  
6 case it's not affected in any way?

7 MR. VINCE WARDEN: No. The only impact  
8 on the bottom line is -- is actual disbursements towards  
9 that \$35 million.

10 MR. BOB MAYER: Mr. Gange, you seem to  
11 forget the good debt/bad debt discussion we had earlier.  
12 Hydro doesn't have any cash and doesn't have any money in  
13 the bank, it just has accounts.

14

15 CONTINUED BY MR. BILL GANGE:

16 MR. BILL GANGE: But, sir, if it were  
17 segregated and put into a separate account, there --  
18 there would be then interest accruing to that fund?

19 MR. VINCE WARDEN: Well, if we had to go  
20 out and borrow \$35 million to put it into a fund, there  
21 would be interest accruing in that cash fund but there  
22 would be costs incurred to do -- to do that, and to the  
23 extent that it's unlikely we could invest at the same  
24 rate that we borrow. It would -- there would be a net  
25 cost to the Corporation, so that's why it doesn't make

1 sense to do that.

2

3

(BRIEF PAUSE)

4

5 MR. BILL GANGE: Thank you, Mr. Warden.

6 That's fine. Thank you.

7

Earlier in the day we -- we looked at in --  
8 - on page -- or in -- well, no, I'll -- I'll just go to  
9 my document. It'll probably be easier.

10

At pages 7, 8, and 9 Appendix 12A has been  
11 reproduced being the report on Kyoto's relevance to  
12 Manitoba Hydro. And I'm not sure, Mr. Warden, if you're  
13 the one that's going to be answering these or -- but I'll  
14 -- I'll start off -- I'll start off with you.

15

In reviewing on page 9 Figures 1 and 2, in  
16 1991 Manitoba Hydro was approximately 15 percent below  
17 the -- the targeted 1990 level.

18

Does that arise from -- from shutting down  
19 the four (4) coal generating units in Brandon?

20

MR. VINCE WARDEN: Mr. Gange, I'm not  
21 totally sure to what depth you're going to get into this,  
22 but it might be best if we were to bring up the witness  
23 that is very knowledgeable in this area. That's Mr. Bill  
24 Hamlin so --

25

MR. BILL GANGE: Maybe that would be the

1 easiest way of doing it then, sir.

2 MR. VINCE WARDEN: Thank you.

3

4 BILL HAMLIN, Sworn

5

6 CONTINUED BY MR. BILL GANGE:

7 MR. BILL GANGE: Thank you, Mr. Hamlin.

8 The question that I asked earlier was that: Was the  
9 reduction by about 15 percent in 1991 due to the -- the  
10 shutting down of the four (4) coal generating units in  
11 Brandon?

12 MR. BILL HAMLIN: The -- the change or  
13 the actual emissions in any given year is -- has a  
14 variety of -- of contributions, the cost of coal in that  
15 year, the market conditions.

16 I can't -- I'm -- I'm not sure to what  
17 extent any of the individual factors contributed to the  
18 change between 1990 and '91, but certainly in the -- in  
19 the early '90s the four (4) -- the four (4) small coal  
20 units at Brandon were brought offline.

21 MR. BILL GANGE: Okay. Can you tell us  
22 what the -- the cause was of the significant decrease  
23 between '91 and '97, in terms of the bullets that are  
24 shown underneath Figure Number 1?

25 MR. BILL HAMLIN: Again, we could

1 undertake to -- to do some historical analysis but I --  
2 I --

3 MR. BILL GANGE: Yes, that's fine. If  
4 you -- if you'll undertake to do that, that's fine, sir.  
5 We'd be happy with that.

6  
7 --- UNDERTAKING NO. 25: Manitoba Hydro to determine  
8 for RCM/TREE the cause of the  
9 decrease between 1991 and  
10 1997

11  
12 (BRIEF PAUSE)

13  
14 MR. BILL HAMLIN: I'm being provided with  
15 some assistance.

16 And, in fact, the actions listed provide  
17 reasonable detail on all of the things that have  
18 contributed to the -- to the reductions: the shutdown of  
19 Brandon Units 1 to 4; in later years, conversion of  
20 Selkirk Units 1 and 2.

21 All of -- probably the most significant  
22 one on that list is the development of Limestone  
23 Generating Station, which was coming online in the early  
24 -- early '90s and would -- would have reduced our needs  
25 for thermal generation.





1 into this figure. We -- we hold a number of perspectives  
2 and account for the greenhouse gas is different in  
3 different perspectives. This figure depicts our  
4 voluntary commitment, and that's considering only the  
5 emissions from our own resources, but factoring in any --  
6 any offsets.

7                   There are a few instances in which our  
8 export customers have assigned -- in buying the  
9 electricity, have assigned the rights to the emission  
10 reductions to us. Those are the -- that -- a small  
11 component of our exports gets factored in.

12                   We have another -- another perspective  
13 which is the -- we call the "global perspective" and it  
14 completely factors in all of our imports and all of our  
15 exports.

16                   MR. BOB MAYER: Okay. So in addition to  
17 your thermal generating units, and then I'm assuming you  
18 have vehicles, what other producers of CO2 or greenhouse  
19 gases does Hydro have?

20                   MR. BILL HAMLIN: Figure -- Figure 4, on  
21 the -- on the previous page our natural gas operations,  
22 our fleet vehicles, and there's a small component called  
23 "Others" which would capture consumption of natural gas  
24 to heat our buildings and some other smaller  
25 contributors.

1 MR. BOB MAYER: Thank you.

2

3 CONTINUED BY MR. BILL GANGE:

4 MR. BILL GANGE: Mr. Hamlin, I -- I  
5 understand that your previous answer, with respect to the  
6 reduction, is shown in the bullets underneath Figure 1 on  
7 -- on page 9 of -- of RCM/Tree Number 5. I wonder if you  
8 could give us an undertaking to provide the reasons why  
9 the -- between '97 and 2000 why it went up to such a  
10 degree, because we don't have that information.

11 MR. BILL HAMLIN: We'll -- we'll  
12 undertake to do so.

13

14 --- UNDERTAKING NO. 26: Manitoba Hydro to provide  
15 Board with reasons for  
16 increase between 1997 and  
17 2000.

18

19 CONTINUED BY MR. BILL GANGE:

20 MR. BILL GANGE: Thank you, sir. And in  
21 the -- in the chart in Figure 1, there's shown offsets.  
22 Given your previous answer of -- of what is taken into  
23 account, the -- these are all domestic offsets, is that  
24 correct, sir?

25 MR. BILL HAMLIN: That factors in the

1 emission -- emission reductions from our natural gas DSM  
2 programs. But the most significant contributor to --  
3 towards those offsets are where our export customers, in  
4 purchasing the electricity, have assigned emission  
5 reduction rights towards us.

6 MR. BILL GANGE: Okay. And do you have  
7 that information? Is that -- is that available for us?  
8 To -- to breakdown --

9 MR. BILL HAMLIN: It --

10 MR. BILL GANGE: -- those offsets?

11 MR. BILL HAMLIN: The -- the breakdown of  
12 where they're coming from, in terms of how much is -- is  
13 natural gas, DSM, and how much is other?

14 MR. BILL GANGE: Yes.

15 MR. BILL HAMLIN: Yeah.

16 MR. BILL GANGE: Could -- could you  
17 provide that to us?

18 MR. BILL HAMLIN: I will do so.

19 MR. BILL GANGE: Thank you, sir.

20

21 --- UNDERTAKING NO. 27: Manitoba Hydro to provide  
22 RCM/TREE, regarding emission  
23 reduction, the breakdown of  
24 offsets in terms of how much  
25 is natural gas, DSM, and

1 other

2

3 (BRIEF PAUSE)

4

5 CONTINUED BY MR. BILL GANGE:

6 MR. BILL GANGE: In -- in terms of -- of  
7 calculating the -- the cost of -- of greenhouse gases,  
8 sir, those are -- are based on the internalized values  
9 expected in the market prices in the export markets.

10 Is that correct?

11 MR. BILL HAMLIN: In -- in terms of  
12 internalizing the greenhouse gas value for our DSM  
13 programs? Is that --

14 MR. BILL GANGE: Yes.

15 MR. BILL HAMLIN: -- the question?

16 MR. BILL GANGE: Yes.

17 MR. BILL HAMLIN: Yes, that's  
18 internalized by our expectations of the -- in the export  
19 market.

20 MR. BILL GANGE: And those export markets  
21 are -- would it be fair to say that none of them have a  
22 Kyoto commitment? None of the American markets have --  
23 have Kyoto commitment?

24 MR. BILL HAMLIN: That is correct.

25 MR. BILL GANGE: And -- and the -- the

1 export markets don't necessarily reflect provincial  
2 standards. It's -- it's what -- it's their value that  
3 they're calculating.

4 Is that correct, sir?

5 MR. BILL HAMLIN: It -- what is being  
6 built into the forecast are the forecasters various views  
7 about what constraints will be in place, not what are in  
8 place now but what types of constraints will come in --  
9 into place over the -- over that horizon.

10 And -- and while there's not a Kyoto  
11 commitment in the US today there are a variety of  
12 emerging State level and Federal bills that are on the  
13 table. Those are the types of things that they would be  
14 building into their considerations.

15

16 (BRIEF PAUSE)

17

18 MR. BILL GANGE: But those values, sir,  
19 aren't necessarily the sustainability values for  
20 greenhouse gases? Again, it's -- it's their -- it's  
21 their calculations.

22 MR. BILL HAMLIN: It is their view of the  
23 level of constraints that would be in place.

24 MR. BILL GANGE: Thank you.

25

1 (BRIEF PAUSE)

2

3 MR. BILL GANGE: If you look at Figure 2  
4 on page 9, Mr. Hamlin, looking at -- at Figure 2 on page  
5 9, the Cumulative Global Emission Reductions, is -- is  
6 there a calculation in there for the role that coal has  
7 had on the cumulative global emission reductions?

8 MR. BILL HAMLIN: The role of our own  
9 coal?

10 MR. BILL GANGE: Yes.

11 MR. BILL HAMLIN: Yes, that factors in.  
12 That global perspective factors in all of the emissions  
13 from our own sources plus the emissions that would be  
14 reduced by our exports, less the emissions that would be  
15 accrued due to -- due to our imports.

16 So it -- it tries to capture all of those  
17 elements.

18 MR. BILL GANGE: Thank you.

19

20 (BRIEF PAUSE)

21

22 MR. BILL GANGE: Mr. Hamlin, if you can  
23 go to page 11 and you'll see on page 11 that -- that  
24 there's a -- under the "CO2 Emission Factors and  
25 Sources", there's a box "Marginal Electricity

1 Implications Associated with Exports and Imports".

2                   What are the assumptions that are built  
3 into that calculation, sir?

4                   MR. BILL HAMLIN:   It's -- it's based on  
5 as assumption of displa -- of a mixture of emitting  
6 resources.  For instance, the highest efficiency combined  
7 cycle natural gas which would have the lowest fossil fuel  
8 emissions is about point three six (.36), simple cycle  
9 tonnes, that's in units of tonnes per megawatt hour.  
10 Simple cycle natural gas would be something on the order  
11 of 5 to -- .5 to .6 tonnes per megawatt hour, and  
12 existing or older coal would be on the order of one point  
13 one five (1.15).

14                   So -- so that's based on an assumption of  
15 displacing a mixture of -- of resources.  We've looked at  
16 it from a reasonable -- reasonability stand-point, what's  
17 -- what's on the margin.  We -- we purposefully picked a  
18 round number, not meaning to add any false precision, but  
19 it is reasonable from a number of perspectives including  
20 what -- what the marginal contribution is.

21                   MR. BILL GANGE:   And -- and I take it --  
22 well, given that information, sir, that you've just  
23 provided, you've done all those calculations that go into  
24 finding out that -- or -- or tabulating the marginal  
25 electricity implications.



1                   Can you break that down for us by way of  
2 an undertaking? The information that you just provided,  
3 can you -- can you tabulate that and give us the -- the  
4 ratios that you just were stating?

5                   MR. BILL HAMLIN:   Certainly, I can  
6 provide a written table with a variety of emission  
7 factors for different resources.

8                   MR. BILL GANGE:   And along with the  
9 greenhouse gas figures that would go with it --

10                  MR. BILL HAMLIN:   Yeah.

11                  MR. BILL GANGE:   -- with each one? Thank  
12 you.

13                  MR. BILL HAMLIN:   Yes.

14

15   --- UNDERTAKING NO. 28:       Manitoba Hydro to provide a  
16                                   written table with a variety  
17                                   of emission factors for  
18                                   different resources, along  
19                                   with the greenhouse gases  
20                                   that would go with each one

21

22   CONTINUED BY MR. BILL GANGE:

23                   MR. BILL GANGE:   On page 10 in the -- the  
24 last paragraph of -- of the answer to RCM/TREE  
25 Information Request Number 3, the answer says:

1 "These estimates are intended to be a  
2 illustrative rather than definitive."

3 And states a qualifier:

4 "In the longer term, strong action  
5 taken to reduce electricity sector  
6 emissions in the midwest States could  
7 change the conclusions of this  
8 assessment, improve the performance of  
9 geothermal heat pumps, relative to high  
10 efficiency gas."

11 In -- in looking at that, sir, how would  
12 the new coal generation in South Dakota affect these  
13 calculations?

14 Were -- were that -- was that taken into  
15 account?

16  
17 (BRIEF PAUSE)

18  
19 MR. BILL HAMLIN: There -- there are a  
20 variety of -- of factors that contribute that, certainly,  
21 if the US did not put in place any constraints, then our  
22 assumption and -- and traditional coal was the -- the  
23 resource of the day, going well into the future, then  
24 point seven five (.75) would be a low -- low number.

25 Even -- if -- if the US were to implement

1 very aggressive standards, it would still be  
2 significantly well out into the future before their  
3 fossil fuel resources were all off the books, even under  
4 the most aggressive -- so, point seven five (.75) is --  
5 is probably a reasonable number going -- going out into  
6 the future.

7 MR. BILL GANGE: Okay.

8

9 (BRIEF PAUSE)

10

11 MR. BILL GANGE: And -- and if -- if --  
12 rather than it being geothermal, but was all natural gas,  
13 would that affect those calculations as well?

14 MR. BILL HAMLIN: The -- yes. Those  
15 considerations are all -- all just a factor of the  
16 electricity displacement. Everything else would be  
17 relative to that.

18

19 (BRIEF PAUSE)

20

21 MR. BILL GANGE: Sir, the --I -- would  
22 you agree that if -- if -- in order to make the biggest  
23 impact on reducing global greenhouse gases, the -- the  
24 most powerful way of doing that would be if the province  
25 prescribed gas demand water heating and high efficiency

1 gas space heating, rather than -- rather than  
2 electricity?

3 MR. BILL HAMLIN: Well, it's clear that -  
4 - that the highest efficiency natural gas is -- from this  
5 global perspective is the best performer right now.

6 MR. BILL GANGE: Mr. Chair, I pro -- I --  
7 I lied to you, I'm a little bit over an hour. I wonder  
8 if we could take the afternoon break and I can consult  
9 with Professor Miller and I think that -- we're into the  
10 last fifteen (15) minutes or so.

11 THE CHAIRPERSON: That's fine. You  
12 didn't lie, you just mis-estimated.

13 MR. BILL GANGE: Thank you.

14 THE CHAIRPERSON: Okay, we'll be back in  
15 fifteen (15).

16  
17 --- Upon recessing at 2:34 p.m.

18 --- Upon resuming at 2:53 p.m.

19

20 THE CHAIRPERSON: Okay, welcome back  
21 everyone. Just before we go back to Mr. Gange, Mr.  
22 Derksen, I have another odd little question for you.  
23 Probably someone's asked this and answered it a long time  
24 ago and I've just sort of forgotten.

25 But in the annual report you always report

1 the number of employees and you break them down between  
2 regular and construction and you come to a total.

3 MR. WILLY DERKSEN: Yes.

4 THE CHAIRPERSON: Is the construction  
5 line, is that some sort of a composite of actual  
6 construction workers and some ratio with respect to the  
7 OM&A capitalized expenses.

8 MR. WILLY DERKSEN: The way that it's  
9 calculated for the annual report purposes is taking the  
10 number of hours that employees work on construction  
11 activities for the month of March and then coming up with  
12 an -- an effective number of employees based upon those  
13 number of hours.

14 So if we had -- if we had let's say one  
15 (1) person working all four (4) weeks in March and -- and  
16 eight (8) hours a day on construction activities, that  
17 person would become one (1) EFT on the construction  
18 report as well as on the total report.

19 THE CHAIRPERSON: That -- that could be  
20 someone in your own department, couldn't it?

21 MR. WILLY DERKSEN: It could only be  
22 somebody in my department if they were working on a  
23 computer project, because that would be the only type of  
24 capital activities that a person in my area would be  
25 working on directly.

1 THE CHAIRPERSON: But it's not just  
2 simply construction workers in the vernacular, how people  
3 think of construction workers.

4 MR. WILLY DERKSEN: That's true, yes, it  
5 would be workers working on capital activities directly,  
6 but not the overhead parts of it. Just direct --

7 THE CHAIRPERSON: So in the planning  
8 department, for example?

9 MR. WILLY DERKSEN: If the planning  
10 department were working on capital activities, yes, it  
11 would include them as well.

12 THE CHAIRPERSON: Thank you.

13 MR. BOB MAYER: And if Mr. Brennan and  
14 Mr. Schroeder (phonetic) went out to the access road to  
15 Wuskwatim to open it, would that be considered  
16 construction?

17 MR. WILLY DERKSEN: No, sir, it would  
18 not, no.

19 THE CHAIRPERSON: As long as they're not  
20 picking up a shovel, I guess.

21 Okay, Mr. Gange.

22

23 CONTINUED BY MR. BILL GANGE:

24 MR. BILL GANGE: Thank you. I only have  
25 a few more questions left. Mr. Kuczek, this morning we

1 were talking with -- with Mr. Peters about the -- the gas  
2 furnace replacement program -- the furnace replacement,  
3 and with respect to that, sir, we had also -- Mr. Peters  
4 had referred you to the Dunsky Report at Tab 39, with the  
5 idea of reducing the difficulty for individuals.

6 And your point was that -- that, from your  
7 perspective, you want the customers to have a buy-in,  
8 because the more that they are involved in the process,  
9 the more they're going to be committed to the process. I  
10 think that was your -- your explanation.

11 MR. LLOYD KUCZEK: Yeah, we -- we  
12 generally believe that if we can get the customers more  
13 involved in the process that we can get more sustained  
14 savings that way. And you possibly might even be able to  
15 achieve some behavioural changes as well.

16 MR. BILL GANGE: Professor Miller advises  
17 me that -- that he attended a -- a consultation meeting  
18 that you held on the -- the low-income process where  
19 contractors attended and -- and indicated that the idea  
20 of them going out and giving quotes was costly to them.

21 MR. LLOYD KUCZEK: That's correct. And I  
22 would agree even there -- there might be some benefit  
23 from their perspective as well.

24 MR. BILL GANGE: And has thought been  
25 given to the idea of rather than having the individual

1 obtain three (3) quotes, for Hydro to simply negotiate  
2 with -- with suppliers in order to get a significantly  
3 reduced price for this process, and then having a -- an  
4 approved list of -- of suppliers?

5 MR. LLOYD KUCZEK: Thought has been given  
6 to that, and is still being given to it at this time.

7 MR. BILL GANGE: Oh, I see. So that's  
8 still something that's under consideration?

9 MR. LLOYD KUCZEK: Yeah, the subject's  
10 not closed at this point.

11 MR. BILL GANGE: Would you agree that,  
12 conceptually, it -- it probably is the case that Hydro  
13 can negotiate a better price on a -- on a global basis  
14 for the program than individual consumers can by calling  
15 in three (3) people to -- to give quotes?

16 MR. LLOYD KUCZEK: In general, that's  
17 probably true, if -- if you look at the average prices  
18 that consumers are going to realize, yes.

19 MR. BILL GANGE: Would you agree that --  
20 that if -- if a -- if there are three (3) quotes, two (2)  
21 of the people giving that quote and taking time to  
22 prepare the quote, to go out and visit the premises, two  
23 (2) of those people aren't getting -- two (2) of those  
24 supplies aren't getting the business, so they have to  
25 build in to their prices the -- the fact that on two (2)



1 out of three (3) quotes, they aren't going to be the  
2 successful bidder?

3 MR. LLOYD KUCZEK: Yes. And that's what  
4 they experience every day, and that's part of their  
5 business. But your -- your comment is valid.

6 MR. BILL GANGE: Okay, thank you. In --  
7 in -- with respect to the gas furnace replacement, has  
8 there been any consideration given to preparing an  
9 incentive program for furnace inspections and tune-ups on  
10 a regular basis after the furnaces have been installed?

11 MR. LLOYD KUCZEK: We've had some  
12 internal discussions about that, yes.

13 MR. BILL GANGE: And -- and is there any  
14 thought that that might be moved forward in the future?

15 MR. LLOYD KUCZEK: I can only say that  
16 we're having discussions at this point. I couldn't say  
17 whether or not we'll go down that path.

18 MR. BILL GANGE: In terms of those  
19 discussions, would you agree, sir, that from -- from --  
20 having regular inspections, would likely result in  
21 increased efficiency of the furnaces and also increase  
22 safety, generally speaking?

23 MR. LLOYD KUCZEK: If the furnace filter  
24 is changed, certainly there would be an efficiency gain  
25 to be -- that would be achieved through something like

1 that. Whether or not it would be cost-effective would be  
2 another issue.

3 MR. BILL GANGE: And -- are you running  
4 cost efficiency studies on that?

5 MR. LLOYD KUCZEK: I'd have to talk to my  
6 technical people. I'm not aware of what those  
7 efficiencies would be at, but it would depend on -- a lot  
8 on how bad the filters would get, because it reduces the  
9 air flow.

10 MR. BILL GANGE: Good. Thank you, those  
11 are my questions. Thank you very much. Thank you, Mr.  
12 Chair.

13 THE CHAIRPERSON: Thank you, Mr. Gange.  
14 Mr. Williams, are you ready to go?

15 MR. BYRON WILLIAMS: I'd like to think  
16 so, Mr. Chairman.

17 THE CHAIRPERSON: Very good. We'll see.

18

19 CROSS-EXAMINATION BY MR. BYRON WILLIAMS:

20 MR. BYRON WILLIAMS: Good afternoon, Mr.  
21 Chairman and Members of the Board. And I should have  
22 noted this morning that in the audience was Ms. Kimberly  
23 Weihs, who is the new executive director, that was this  
24 morning, for the Manitoba Society of Seniors. I  
25 neglected to introduce her because I didn't recognize



1                   2019 the reductions to net income are  
2                   estimated to average in the order of 20  
3                   million per year. Should restrictions  
4                   be placed on the operations of Brandon  
5                   eg., essential conditions only, the  
6                   reduction to net income [the  
7                   reductions, with an 's'] to net income  
8                   are estimated to average approximately  
9                   10 million per year, depending upon the  
10                  nature of the restrictions."

11                  So just as a starting point, Mr.  
12 Surminski, that's your basic understanding of the  
13 financial implications of either removing or putting some  
14 restrictions on Brandon?

15                  Is that right?

16                  MR. HAROLD SURMINSKI: Yes, I'll accept  
17 those.

18                  MR. BYRON WILLIAMS: And I know you had a  
19 bit of a discussion with Mr. Peters about mothballing and  
20 -- and things like that, but I want to turn first of all  
21 to the -- the option of placing restrictions on the  
22 operations of Brandon, ie., essential operations only.

23                  And I wonder if you can explain for my  
24 clients benefit what you -- what you mean by essential  
25 operations only and some of the practical implications of

1 that if you would, sir.

2

3

(BRIEF PAUSE)

4

5 MR. BYRON WILLIAMS: I'm sorry, I was  
6 hiding on you, Mr. Surminski.

7

8 MR. HAROLD SURMINSKI: I can speak about  
9 that in general high level terms. We -- we could reduce  
10 operations at the plant for drought conditions, to -- to  
11 satisfy our requirements in drought conditions. Those  
12 could be considered essential operations, and -- and  
13 reliability in -- in general for reliability purposes.

14 MR. BYRON WILLIAMS: Just so I  
15 understand, of those two (2) points if you could just  
16 elaborate a little bit more, first of all on reduce  
17 operations except for -- for drought conditions. Just  
18 elaborate on that point a bit more, sir.

19 MR. HAROLD SURMINSKI: We design our  
20 systems such that when our hydraulic conditions are low,  
21 we require and depend on non-hydraulic resources, our  
22 thermal plants to -- to supply generation to meet  
23 obligations, and so its obligations for about domestic  
24 and -- and firm export purposes.

25 So in a drought condition, a severe  
drought, this would be case. We would require the

1 supplemental energy from our Brandon 5 unit.

2 MR. BYRON WILLIAMS: And maybe it's  
3 intimately related but you also mentioned reliability.  
4 Perhaps you could expand on that just a bit, sir.

5 MR. HAROLD SURMINSKI: Reliability is --  
6 is a little more difficult to explain. There could be --  
7 Brandon generation provides support to Western Manitoba  
8 so there is a -- a role that is served by having  
9 generation in Western Manitoba and also in Southern  
10 Manitoba.

11 MR. BYRON WILLIAMS: You knew I was from  
12 Souris, that's why you came up with that.

13 So just if -- if I were to -- the  
14 distinction between kind of the essential operations and  
15 kind of business as usual, is that with Brandon Number 5  
16 under "Business as Usual" you -- you run it when there's  
17 an economic case that -- that it should be run -- is that  
18 -- when it aids in the Hydro bottom line, is that right,  
19 sir?

20 MR. HAROLD SURMINSKI: Yes, that would be  
21 correct. That would be unrestricted operation.

22 MR. BOB MAYER: Mr. Surminski, we know  
23 that when -- when we're discussing reliability, we have  
24 to be careful or be prepared to in-fill for some outages  
25 and I recognize that your single cycle turbine -- gas

1 turbine generators out of Brandon can be turned on  
2 virtually almost instantly.

3 But how long does it take to fire up  
4 Brandon Unit 6 if you had it in shutdown mode? From the  
5 time you required the power to the time you could  
6 actually get it up and generating electricity?

7 MR. HAROLD SURMINSKI: Unit 5. You  
8 mentioned it was Unit 6.

9 MR. BOB MAYER: Sorry.

10 MR. HAROLD SURMINSKI: But, yes. It's in  
11 the order of, I guess, twelve (12) until ten (10), so  
12 it'll be somewhere, you know eight (8) plus to -- to  
13 twelve (12) fifteen (15) hours. And -- and it ramps up  
14 over time. So it's not -- it's not just instantly on,  
15 it could be ramping over time.

16 MR. BOB MAYER: And when you say twelve  
17 (12) fifteen (15) hours is that when it's up to full  
18 capacity or is that when it starts getting power you can  
19 use?

20 MR. HAROLD SURMINSKI: That's at full  
21 capacity.

22

23 CONTINUED BY MR. BYRON WILLIAMS:

24 MR. BYRON WILLIAMS: Just in terms of the  
25 restricted operations -- restricting it to essential

1 operations if you can just indicate to me, are there any  
2 practical limitations on when you could go to a  
3 restriction purely to -- essential oper -- operations?

4 And what I'm trying to get at, Mr.  
5 Surminski, is -- is there -- is that something you could  
6 do tomorrow, or is that something that would -- for your  
7 planing purposes, is that something that you would expect  
8 would take more time?

9

10 (BRIEF PAUSE)

11

12 MR. HAROLD SURMINSKI: Yeah, depending on  
13 the degree of -- of the restrictions, but generally we --  
14 we would survive if we had short term notice because we  
15 have our natural gas plants that we could use.

16 MR. BYRON WILLIAMS: Just going -- in  
17 terms of the -- the other option, which you -- which I  
18 referred to you, removing Brandon number 5 from service,  
19 not Souris, prior to the projected date in 2019, leaving  
20 aside issues of economics, are there practical  
21 limitations on when it would be removed from service?

22 For example, are there any -- or is it  
23 likewise something you could do on fairly short notice?

24 MR. HAROLD SURMINSKI: I can't think of -  
25 - of any requirements that we would have that would stop



1 us from doing it on a short notice.

2 MR. BYRON WILLIAMS: In -- Mr. Surminski,  
3 just in terms of -- I referenced the figure of \$20  
4 million associated with the -- the removal of Brandon  
5 Number 5 -- or \$20 million per year, associated with the  
6 removal of Brandon Number 5 from service.

7 And I may have missed it, but is there a  
8 derivation of that? Or is that calculation set out  
9 similar on the -- on the record that I've missed?

10 MR. HAROLD SURMINSKI: No, we're not  
11 aware that's on the record.

12 MR. BYRON WILLIAMS: Would you be able to  
13 provide me with -- or provide my clients with a high  
14 level explanation of -- of how that figure was derived by  
15 way of an undertaking, sir?

16 MR. HAROLD SURMINSKI: Yes, we could  
17 undertake that.

18

19 --- UNDERTAKING NO. 29: Manitoba Hydro to provide  
20 Coalition with a high level  
21 explanation of how the figure  
22 of \$20 million per year,  
23 associated with the removal  
24 of Brandon Number 5 from  
25 service, was derived. As

1 well, provide the derivation  
2 of the 10 million calculation  
3 assumed with going to  
4 essential operations

5

6 CONTINUED BY MR. BYRON WILLIAMS:

7 MR. BYRON WILLIAMS: And likewise in  
8 terms of the -- the 10 million assumed with going to  
9 essential operations would you be able to undertake to  
10 provide my clients with a derivation of that calculation  
11 as well, please?

12 MR. HAROLD SURMINSKI: Yes, we could add  
13 it to the same one.

14 MR. BYRON WILLIAMS: And, Mr. -- Mr.  
15 Hamlin, I do apologize for the shots about your -- your  
16 hair.

17 MR. BILL HAMLIN: I'm just glad you  
18 didn't mention my weight.

19 MR. BYRON WILLIAMS: I just didn't feel  
20 looking in the mirror I could go very far down that path,  
21 Mr. Hamlin.

22 Would you -- do you -- in terms of let's  
23 say that -- has -- has Manitoba Hydro pre -- prepared any  
24 estimates, in terms of the im -- the impact on greenhouse  
25 gas emissions of Brandon Number 5 being restricted to

1 essential operations?

2 MR. BILL HAMLIN: It -- the -- I think we  
3 can -- we can extend the same kind of -- of logic that  
4 we've done to the -- to the heat pumps. So we've got a  
5 very high emission source, and that would be -- being  
6 taken off-line, but a certain number of those emissions  
7 would be presumably migrating outside our -- our  
8 province.

9 So, from a global perspective it might  
10 contribute net emission reductions, but certainly not as  
11 big as -- as the local emission reductions.

12 MR. BYRON WILLIAMS: Have you -- and  
13 again, I -- I may have -- I may be missing something on  
14 the record -- has Manitoba Hydro attempted to -- to  
15 prepare an estimate for local and global emissions, first  
16 of all for the removing Brandon Number 5 from service and  
17 secondly for restricting its operations to essential  
18 operations only?

19 MR. BILL HAMLIN: We -- we've done a  
20 variety of -- of calculations along those lines. I don't  
21 know that -- that any of them have been published. We  
22 could certainly do something very simple and illustrative  
23 for...

24 MR. BYRON WILLIAMS: So if -- if you  
25 could and if you would do this by way of undertaking

1 again to assist my clients so they can understand some of  
2 the ramifications. If you could do it -- look at both  
3 the local and the global implications of Number 1),  
4 removing Brandon Number 5 from service, and Number 2),  
5 placing restrictions on the operations of Brandon to  
6 essential operations only.

7                   Would you be able to do that, sir?

8                   MR. BILL HAMLIN: I will, sir.

9

10 --- UNDERTAKING NO. 30: Manitoba Hydro to indicate  
11 for Coalition the local and  
12 the global implications of  
13 removing Brandon Number 5  
14 from service, and placing  
15 restrictions on the  
16 operations of Brandon to  
17 essential operations only

18

19 CONTINUED BY MR. BYRON WILLIAMS:

20                   MR. BYRON WILLIAMS: Thank you. And I  
21 apologize for not having more questions for Mr. Hamlin,  
22 but maybe the next General Rate Application.

23                   Just to -- to assist the Chair -- the  
24 Chairman and other members of the Board, we're -- on  
25 behalf of the Coalition I intend to go on cross-

1 examination for the rest of today and well into tomorrow.

2 I'm gonna just start out with some -- some  
3 motherhood issues, and then talk a little bit about the  
4 corporate strategic plan. And then we're gonna go to a  
5 bit of a conversation about smart meters, and then to  
6 low-income DSM, and then look at some of the cost drivers  
7 of the Corporation including OM&A, and then look at debt  
8 equity, and then look at some consumer implications.

9 And I know just I -- I did want to thank  
10 Board counsel and advisors. I think they did a good job.  
11 And although -- not be able to tell it, they did restrict  
12 my cross-examination to a significant degree by their  
13 questions. I am going to go over, for example, on smart  
14 meters an issue and obviously the Board's read a bit  
15 about that.

16 And -- but there's some issues of  
17 importance to my clients. So I -- I will spend a bit of  
18 time with that, recognizing that the Board is well versed  
19 in that area.

20 MR. BOB MAYER: Mr. Williams, would you  
21 care to reconsider your gender specific term  
22 "motherhood"? "Parenthood" I think is the word we're  
23 using these days.

24

25 CONTINUED BY MR. BYRON WILLIAMS:

1 MR. BYRON WILLIAMS: Well, maybe it's a  
2 reflection of my -- my grey hair but --

3 And I guess I will start with some  
4 parenthood issues and, Mr. Warden, I'll apologize for  
5 that, but I want to start with some parenthood issues or  
6 platitudes, just at a high level; some things that we can  
7 agree on.

8 You'd agree with me that hydro electric  
9 power is an important way -- part of the way of life for  
10 many Manitobans.

11 Would you agree with that at a high level,  
12 sir?

13 MR. VINCE WARDEN: So far, so good.

14 MR. BYRON WILLIAMS: And for many -- for  
15 many Manitobans, residential customers, we run our  
16 appliances, heat our homes and run our computers using  
17 electricity. Would that be fair?

18 MR. VINCE WARDEN: Yes.

19 MR. BYRON WILLIAMS: And you'd agree with  
20 me, as well, that hydro electricity is a -- a critical  
21 part of our elec -- our economic development in this  
22 Province, as well, at a high level, sir.

23 You'd agree with that?

24 MR. VINCE WARDEN: Yes, I would.

25 MR. BYRON WILLIAMS: It's important to --

1 to my brother on the farm and it's important to large  
2 industrial operations and to small businesses as well.

3 Would that be fair, sir?

4 MR. VINCE WARDEN: It would.

5 MR. BYRON WILLIAMS: So we can agree, and  
6 I think I'm coming back to my first point, that the  
7 provision of this commodity is important to our basic  
8 existence, our economic development and our quality of  
9 life in Manitoba.

10 Would that be fair, sir?

11 MR. VINCE WARDEN: Yes.

12 MR. BYRON WILLIAMS: And I guess we -- we  
13 can also, at the high level of parenthood statements,  
14 agree that -- that -- recognizing that it's important to  
15 our -- our way of life, we also have to be cognisant of  
16 the impact of our consumption choices on -- on the planet  
17 on which we live. Would that be fair, sir?

18 MR. VINCE WARDEN: It would. Especially  
19 as parents.

20 MR. BYRON WILLIAMS: Looking to the long  
21 term, it's -- it's important that we be aware of the  
22 impacts that consumption of this resource has upon the  
23 world in general.

24 Is that right, sir?

25 MR. VINCE WARDEN: Okay.

1 MR. BYRON WILLIAMS: I'll get to some  
2 specifics in a second, Mr. Warden. Don't worry too much.

3 And certainly Manitoba Hydros recognize  
4 that in its strategic plan. For example it set an  
5 objective of being a national leader in implementing cost  
6 effective energy conservation.

7 Would that be fair, sir?

8 MR. VINCE WARDEN: Yes.

9 MR. BYRON WILLIAMS: So, while Manitoba  
10 Hydro recognizes the importance of its product to  
11 consumers in Manitoba, whether residential or other, it's  
12 -- it also believes, going on the theme of energy  
13 efficient, that it's important to provide Manitobans with  
14 awareness of the opportunities and means to conserve  
15 energy.

16 Would that be fair, sir?

17 MR. VINCE WARDEN: Yes.

18 MR. BYRON WILLIAMS: And subject to there  
19 being a business case, Manitoba Hydro would also agree  
20 that it's important to provide consumers with incentives  
21 to conserve and tools to conserve.

22 Would that be fair, sir?

23 MR. VINCE WARDEN: Yes.

24 MR. BYRON WILLIAMS: And I'm probably  
25 turning over to Mr. Kuczek. I don't want you to feel



1 neglected, Mr. Warden, but if you do you, you just pipe  
2 up and let me know, okay?

3                   Mr. Kuczek, again, we're -- we're still at  
4 platitudes or high level statements. But -- but as we  
5 look at the -- the -- the mechanisms or potential  
6 mechanisms to provote -- promote conservation in  
7 Manitoba, you'll agree with me -- and I think you've  
8 agreed with both Mr. Peters and Mr. Gange -- that one (1)  
9 way to do so is to promote conservation is through  
10 Manitoba Hydro's portfolio of DSM programs.

11                   Would that be right, sir?

12                   MR. LLOYD KUCZEK:    Yes.

13                   MR. BYRON WILLIAMS:   And another  
14 theoretical way, at least, to promote conservation is  
15 through a rate structure that del -- delivers more  
16 transparent price signals to encourage the efficient use  
17 of energy.

18                   Would that be right, sir?

19

20                                   (BRIEF PAUSE)

21

22                   MR. LLOYD KUCZEK:    Yes, a rate structure  
23 can help achieve those same results, yes.

24                   MR. BYRON WILLIAMS:   And potentially, one  
25 other way to affect consumer consumption behaviour is

1 through a -- Board Member Proven was talking about  
2 earlier with regard to the Smart Meter Program --  
3 education either through Hydro's efforts or through tools  
4 such as smart meters.

5 Would that be fair, sir?

6 MR. LLOYD KUCZEK: To the degree that it  
7 provides consumers with that information, yes.

8 MR. BYRON WILLIAMS: If -- if we look at,  
9 again, at a high level, the big picture of -- of the  
10 tools that are available for promoting energy,  
11 efficiency, and changed consumer behaviour within  
12 Manitoba, apart from the DSM portfolio, potentially the  
13 rate structure, and potentially tools like smart meters,  
14 are there any other major weapons in Manitoba Hydro's  
15 arsenal?

16 MR. LLOYD KUCZEK: Codes and standards.

17

18 (BRIEF PAUSE)

19

20 MR. BYRON WILLIAMS: Any others besides  
21 that?

22

23 (BRIEF PAUSE)

24

25 MR. LLOYD KUCZEK: None that come to my

1 mind.

2 MR. BYRON WILLIAMS: You'll let me know  
3 if -- if there are any more? So that's the big four (4).

4 MR. LLOYD KUCZEK: And codes and  
5 standards is actually part of our overall Power Smart  
6 strategy. So I -- I lump it into the same category.

7 MR. BYRON WILLIAMS: Now, Mr. Kuczek, you  
8 didn't have the benefit of -- like Chairperson Lane,  
9 Board Member Proven, and myself -- of sitting through the  
10 payday lending proceeding, the one that -- the never-  
11 ending payday lending proceeding.

12 Is that right, sir? You weren't there?

13 MR. LLOYD KUCZEK: Thank God.

14 MR. BYRON WILLIAMS: It was very  
15 interesting, but -- and -- and there's -- there's a point  
16 to this that in the course of that proceeding, the  
17 esteemed Dr. Jerry Buckland provided evidence suggesting  
18 consumers are complex individuals and that understanding  
19 consumer behaviour is a complex issue.

20 And I understand that you weren't at that  
21 hearing, but is -- is that a general proposition that you  
22 would agree with, sir?

23 MR. LLOYD KUCZEK: Yes.

24 MR. BYRON WILLIAMS: So it's a complex  
25 matter to predict and affect consumer behaviour. Would

1 you agree with that, sir?

2 MR. LLOYD KUCZEK: Yes, because  
3 individuals are -- are all different, and they have  
4 different drivers, and...

5 MR. BYRON WILLIAMS: And in fact you'll  
6 agree with me that there are -- there are difference --  
7 there are different schools which have been developed,  
8 theoretical schools, seeking to explain and understand  
9 and affect consumer behaviour.

10 Would you -- would you agree with that,  
11 sir?

12 MR. LLOYD KUCZEK: Yes.

13 MR. BYRON WILLIAMS: And if we were  
14 talking to Mr. Wiens or Mr. Harper, they might approach  
15 the issue of affecting consumer behaviour from a, I'd  
16 suggest to you, a more neoclassical approach.

17 They'd suggest that armed with perfect  
18 information in a perfectly competitive market, consumers  
19 will tend to act in a rational manner that maximizes  
20 their self interest.

21 Whether or not you agree with that  
22 characterization of Wiens and Harper, you'll agree that  
23 that's -- that's one (1) theory of -- of affecting  
24 consumer behaviour, sir?

25 MR. LLOYD KUCZEK: That's something I

1 would expect Mr. Wiens to say, yes.

2 MR. BYRON WILLIAMS: I spent many hours  
3 reading the evidence of Mr. Wiens, and I hope I got it  
4 right.

5 And you may be familiar with other schools  
6 of thought or subscribe to them, whether we call them New  
7 Keynesian or institutionalisation -- institutional --  
8 which say that those assumptions of people like Mr. Wiens  
9 and even perhaps Mr. Harper are a little oversimplistic  
10 and that we can't understand consumer behaviour unless we  
11 understand deeper societal or contextual issues such as  
12 poverty, inequality in information, inequality in market  
13 power.

14 Are you aware of that kind of theory,  
15 those thoughts regarding consumer behaviour, sir?

16 MR. LLOYD KUCZEK: I would say yes, but I  
17 -- I wouldn't say I'm an expert in this area.

18 MR. BYRON WILLIAMS: I'm not either, so  
19 we'll -- we'll just stay at a high level. And we may  
20 come back to this a bit later. And I won't go on on  
21 this.

22 But perhaps you're familiar with other  
23 theories of consumer behaviour, from -- even from  
24 behavioural economists, who use concepts such as bounded  
25 rationality.

1                   Are -- are you familiar with those themes,  
2    sir?

3                   MR. LLOYD KUCZEK:    I've heard that term.

4

5                                   (BRIEF PAUSE)

6

7                   MR. BYRON WILLIAMS:   And just to  
8    summarize --again, going back to where, perhaps, I  
9    started -- we've agreed that there are different theories  
10   that may exist for predicting and affecting consumer  
11   behaviour.

12                   Is that right, sir?

13                   MR. LLOYD KUCZEK:    Yes.

14                   MR. BYRON WILLIAMS:   And I wonder if  
15   you'd also agree with me that when -- when it comes to  
16   the real world, as apart from the theoretical world,  
17   consumer behaviour does not always perfectly accord with  
18   consumer theory.

19                   Would that be fair, sir?

20                   MR. LLOYD KUCZEK:    Sounds reasonable.

21

22                                   (BRIEF PAUSE)

23

24                   MR. BYRON WILLIAMS:   An approach -- and  
25   again we'll -- we'll move off this subject.

1                   But at a high level, an approach that  
2 might theoretically be a good approach and a good way to  
3 affect consumer behaviour might, when -- when seen in  
4 practice, not be quite as effective.

5                   You'd agree with that?

6                   MR. LLOYD KUCZEK:    Yes, we probably  
7 experience that with our program designs.  Sometimes in  
8 theory we expect certain results and we don't get those  
9 asult -- results exactly as we implement them.

10                  MR. BYRON WILLIAMS:  I've talked at a  
11 high level in terms of consumers in general.

12                  In terms of understanding the beha -- I  
13 wonder if -- if you have any thoughts on whether, in  
14 comparing consumers in general versus low-income  
15 consumers, let's say, using LICO -- consumers who fit  
16 within the LICO definition, in -- in your view or in your  
17 experience are there -- there any differences in  
18 modelling or predicting low-income consumers' behaviour  
19 versus the -- the great mass of consumers?

20                  MR. LLOYD KUCZEK:  I think their  
21 behaviour is -- their responses or behaviours would --  
22 could and likely would be different to general categories  
23 of other Manitobans or consumers.

24                  MR. BYRON WILLIAMS:  And in what way  
25 might you expect it to be different or that -- or -- sir?

1                   MR. LLOYD KUCZEK:   Well, it -- it really  
2 depends on what we're talking about.  You know, if we're  
3 speaking at a high level, so I -- I make that statement  
4 from a high level of perspective.

5                   But just to -- if we were to come up with  
6 some specific examples, their priorities might be  
7 different, for example, in terms of how they're going to  
8 respond to programs.  Their pro -- their priorities could  
9 be, you know, just getting by day to day and worrying  
10 about how they're going to pay their bills as opposed to  
11 just generally sitting back and watching TV each day, as  
12 some people do or drive their three (3) or four (4)  
13 different boats that they own.

14                  MR. BYRON WILLIAMS:   So -- and again --  
15 and we'll come back to this when we come to the low-  
16 income program.  And I thank you for that -- that -- what  
17 I consider to be a helpful answer.

18                  The point I understand you to be making is  
19 that the -- you're dealing with a different market when  
20 you're dealing with people who are struggling on a day-  
21 to-day basis just to get by.

22                  Is that right, sir?

23                  MR. LLOYD KUCZEK:   Yes, it's clearly a  
24 different market.

25                  MR. BYRON WILLIAMS:   And, Mr. Chairman



1 and members of the Board, I neglected to introduce Ms.  
2 Desorcy, who's -- who's here, I think, in the back row,  
3 second from the back row. So we're pleased to see her  
4 here.

5

6 (BRIEF PAUSE)

7

8 MR. BYRON WILLIAMS: Mr. Warden, just  
9 coming back to you for a minute. And again we're still -  
10 - we're -- we're just about done the -- the high-level  
11 statements.

12 But when we're dealing -- as I understand  
13 the corporate strategic plan -- and you don't need to --  
14 to turn there I don't think, sir.

15 But as I understand the corporate  
16 strategic plan it sets out the key goals of the  
17 Corporation. Is that right, sir?

18 MR. VINCE WARDEN: It does, yes.

19 MR. BYRON WILLIAMS: And with regard to  
20 each goal it identifies measures and associate --  
21 associated targets by which it will determine its  
22 progress towards achieving those goals.

23 Would that be fair, sir?

24 MR. VINCE WARDEN: That's correct, yes.

25 MR. BYRON WILLIAMS: And the -- the last

1 kind of element I see is it also identifies the central  
2 strategies by which -- by which it will work towards  
3 achieving those targets.

4 Would that be fair, sir?

5 MR. VINCE WARDEN: That's correct.

6 MR. BYRON WILLIAMS: So it serves as a --  
7 a broad planning outline, and it's -- also serves as a  
8 means to evaluate -- for the Corporation to evaluate itself  
9 as against the key target measures.

10 Would that be fair, sir?

11 MR. VINCE WARDEN: Yes.

12

13 (BRIEF PAUSE)

14

15 MR. BYRON WILLIAMS: And we've agreed  
16 that the strategies are a key -- key element of achieving  
17 the targets.

18 Is that right, sir?

19 MR. VINCE WARDEN: Yes, they are.

20 MR. BYRON WILLIAMS: So to the extent  
21 that a corporation does not reach its target, it may wish  
22 to reflect upon its strategies and -- and upon on the  
23 ways in which it executed those strategies in  
24 order to improve them for the future.

25 Would that be fair, sir?

1 MR. VINCE WARDEN: As we do on a regular  
2 basis, yes.

3 MR. BYRON WILLIAMS: Now -- now kind of a  
4 -- a mundane detail, but the corporate strategic plan for  
5 2006/'07, when would it have been finalized?

6 MR. VINCE WARDEN: We would typically  
7 take the corporate strategic plan to the Board in January  
8 of every year so that it's approved for the ensuing  
9 fiscal year.

10 MR. BYRON WILLIAMS: So the corporate  
11 strategic plan for the pending fiscal year is prep --  
12 prepared for the Boards of Manitoba Hydro's approval  
13 prior to the -- to the -- the year -- actual year itself.

14 Is that right?

15 MR. VINCE WARDEN: Yes.

16 MR. BYRON WILLIAMS: I'll come back to  
17 that tomorrow. But perhaps we can finish today on the  
18 Smart Meter Project, which, for the Board's -- and it's --  
19 -- certainly I -- I know the Board has read it, but  
20 appears in Volume XIII, Tab 58 of the -- of the  
21 voluminous record today. And if the Chair would excuse  
22 me for one (1) second.

23

24 (BRIEF PAUSE)

25

1                   MR. BYRON WILLIAMS:    And, Mr. Kuczek, I -  
2   - I thank you for agreeing to discuss this with -- with  
3   me. Ms. Desorcy has given me a number of questions. I  
4   have a few of my own on this subject, so it's of some  
5   interest to my clients.

6                    Just as a sparti -- starting point -- and  
7   I know you discussed this a little bit with Mr. Peters  
8   this morning.

9                    But I wonder if you could define for me,  
10   what is a pay-as-you-go smart meter?

11                   MR. LLOYD KUCZEK:    There is two (2)  
12   components to the smart meter. One is -- and -- and it  
13   has a control box that you have -- you have an  
14   intelligent meter to start with, and then you have a  
15   control box inside your home. And you have to slip a  
16   card, like a credit card in there. And so what it  
17   involves is you have to prepay your electricity usage.  
18   And provided that you have this card in there that's  
19   prepaid, you will continue to receive electricity.

20                    And the other component is it provides you  
21   with information on your usage.

22                   MR. BYRON WILLIAMS:    I'll come back to  
23   the intelligent part of it, which -- which I assume  
24   provides information on -- on the uses. And just start  
25   with the prepay option.

1                   And for the benefit of my client, it's --  
2 it's 3:00 in the morning and my card has run out. How  
3 does -- how does that work, Mr. Kuczek?

4                   MR. BOB MAYER:    It doesn't in Thompson.

5                   MR. LLOYD KUCZEK:    It -- it we had  
6 provisions for that where you if -- if you ran out you  
7 wouldn't necessarily lose power. But in theory you're  
8 supposed to lose power.

9                   And I -- I believe if you ran out and you  
10 called us at that time of the hour or you realized you're  
11 going to run out, we would -- we would override it and  
12 allow you so much power so that you can go fill up your  
13 credit card.

14

15 CONTINUED BY MR. BYRON WILLIAMS:

16                   MR. BYRON WILLIAMS:    So -- so just so I  
17 understand, if -- if my credit card runs out, would my  
18 power be cut off unless I asked for some assistance from  
19 Manitoba Hydro? Just so I understand how that -- how it  
20 works, sir.

21

22   (BRIEF PAUSE)

23

24                   MR. LLOYD KUCZEK:    I -- I think that's  
25 what's supposed to happen, but for -- for some reasons

1 I'm not sure that -- I guess I shouldn't say for some  
2 reasons.

3 But I'm not -- I'm not an expert on how  
4 the details were programmed into it, because we were  
5 concerned about customers in that regard too. But we did  
6 have some provisions, but in theory that was the idea if  
7 you proceeded with that.

8 MR. BYRON WILLIAMS: I see, Mr. -- is it  
9 Mr. Rose whispering in your ear? I'm not -- I'm not sure  
10 if there's anything you wish to elaborate on.

11 MR. LLOYD KUCZEK: No, this is like  
12 everyday life at work.

13

14 (BRIEF PAUSE)

15

16 MR. BYRON WILLIAMS: If it's -- if it's  
17 any consolation, Mr. Kuczek, Ms. Desorcy is whispering,  
18 but I'm reading her notes as I...

19 Well, let's go to the -- and thank you for  
20 that. Let's go to the -- the intelligent -- intelligent  
21 part of it which provides the information on use.

22 And I wonder if you could explain to me  
23 visually or -- or give me some idea of how it tells me  
24 what I'm using during the day.

25 Can you give me some sense of that or --

1 if -- if you can, sir?

2 MR. LLOYD KUCZEK: Well, the sad part is  
3 I never did see the display, but I did see the Blue line  
4 display. And if it's similar to that, it just is a LED-  
5 type display, tells the usage and -- and a -- and a few  
6 different parameters. With the Blue line, I know it  
7 provides you with temperature, rate, the rates, and the  
8 actual usage at that particular time.

9 MR. BYRON WILLIAMS: And --

10 MR. BOB MAYER: It goes farther than  
11 that, sir.

12 MR. LLOYD KUCZEK: And -- and it also  
13 provides you with how much is left in your meter. It's  
14 like a gas tank in terms of gas.

15 MR. BOB MAYER: It also tells you how  
16 much you -- you used -- you used last month, the kilowatt  
17 per hour you are burning at present or cents per hour you  
18 are burning at present, so that if you watch your -- your  
19 smart meter as you turn on your stove, you will actually  
20 see the increase in cents per kilowatt hour or cents per  
21 hour that you're actually paying at that given point in  
22 time.

23 And there are two (2) or three (3) other  
24 functions. I've actually seen one of these things in  
25 operation, and I was absolutely fascinated.

1

2 CONTINUED BY MR. BYRON WILLIAMS:

3 MR. BYRON WILLIAMS: Now, Mr. Kuczek,  
4 since the Vice Chair is not under oath, can you -- are  
5 you prepared to confirm his -- his statements?

6 MR. LLOYD KUCZEK: That sounds right.

7

8 (BRIEF PAUSE)

9

10 MR. BYRON WILLIAMS: And we don't want to  
11 swear in the -- the Vice Chair.

12 So, Mr. Kuczek, just -- and just to follow  
13 this through one more step using the -- the Vice Chair's  
14 example, if I was using the stove and the -- which would  
15 be a rare event.

16 But in the Williams household, if I was  
17 using the stove during a peak time, presumably the -- the  
18 price would -- would be materially different as displayed  
19 on a smart meter than if I was using the stove in a non-  
20 peak time.

21 Would that be right, sir?

22 MR. LLOYD KUCZEK: We don't have  
23 different time use rates, so there'd be no difference in  
24 that regard. But there would be a difference in terms of  
25 using your stove or not using your stove.



1 MR. BYRON WILLIAMS: Okay, okay. Thank  
2 you.

3 MR. BOB MAYER: But that machine would  
4 give you the opportunity to actually go to time of use  
5 rates, would it not?

6 MR. LLOYD KUCZEK: That's correct.

7

8 (BRIEF PAUSE)

9

10 CONTINUED BY MR. BYRON WILLIAMS:

11 MR. BYRON WILLIAMS: Just in terms of  
12 going back to the card, apparently I didn't read my notes  
13 carefully enough.

14 How do you renew your card?

15 MR. LLOYD KUCZEK: We had a retail outlet  
16 that you had to go to to buy or top up your card.

17 MR. BYRON WILLIAMS: For the purposes of  
18 the pilot project, was it possible to renew your card  
19 online?

20 MR. LLOYD KUCZEK: No.

21 MR. BYRON WILLIAMS: In models that  
22 you're aware of elsewhere would it be possible to renew  
23 your card online?

24 MR. LLOYD KUCZEK: I'm not familiar with  
25 what's available.

1                   MR. BYRON WILLIAMS:    Would a consumer  
2   require a credit card for the purposes of this -- this  
3   project?

4                   MR. LLOYD KUCZEK:    No, you wouldn't  
5   require a credit card.

6                   MR. BOB MAYER:    The card in question, as  
7   I understand it, is -- am I correct?  The card, you  
8   actually provide the card.  And it works similar to  
9   buying minutes for a phone.  And you plug -- you push the  
10  thing into your machine, pull it out.

11                   And unfortunately in Thompson, Manitoba  
12  when you ran out on Sunday afternoon and Clarke's  
13  Pharmacy wasn't open and neither was your -- neither was  
14  your service centre, you did in fact lose your power at  
15  some time on Monday.

16                   If you didn't -- if you -- if you didn't  
17  have enough power to go to 8:30 Monday morning, it is my  
18  understanding you had some difficulty, and you would be  
19  without power for the period between when you ran out on  
20  the weekend and your service centre opened at 8:30 Monday  
21  morning.

22                   MR. LLOYD KUCZEK:    I'm -- I'm fairly sure  
23  that what we did do though was allowed the customer to  
24  call us, and we would -- there was enough intelligence  
25  there where we can override that and keep the meter or

1 the power flowing until the -- the morning, or as --  
2 until the Monday morning.

3 MR. BOB MAYER: It is my understanding  
4 that although you may have allowed that, at least the  
5 person I knew who had one of these didn't know which  
6 number she could contact, because the service centre in  
7 Thompson was not open, and there wasn't a number given.

8 MR. LLOYD KUCZEK: You sound like you  
9 would know more than I know.

10

11 CONTINUED BY MR. BYRON WILLIAMS:

12 MR. BYRON WILLIAMS: Mr. Kuczek, just  
13 before I move into the study itself, if -- just if you  
14 could draw the distinction between the -- the smart meter  
15 with the pay-as-you-go function versus what you're  
16 looking at in terms of the advance metering infra --  
17 infrastructure or AM -- AMI.

18 What would be the distinctions between  
19 those two (2) products?

20 MR. LLOYD KUCZEK: Well, the biggest  
21 distinction is with the new product it's not a prepay --  
22 it doesn't have that prepay feature with it.

23 And it also, with a new product, I don't  
24 believe we have a display provided inside the home as  
25 well to provide the consumer with that information.

1 (BRIEF PAUSE)

2

3 MR. LLOYD KUCZEK: I'll -- I'll just tell  
4 you what Mr. Rose told me, but it -- it is interesting  
5 anyways and probably valuable for you to know this.

6 But with the technology that -- and the  
7 metres that we're using, you can certainly get that  
8 information to the consumers through the Internet. And  
9 that seems to be the way the technology is moving towards  
10 in the future.

11 And there is some -- companies that are  
12 working towards controlled devices where, you can  
13 actually control the -- in theory you'd sit there, and  
14 you can be at work, you can be at home, or wherever you  
15 might be. And you can control certain devices in your  
16 home, such as set back your thermostat. Before you come  
17 home you might be able to turn your temperature up so  
18 that you have your -- your house is warm when you get  
19 there or cool if it's air conditioning.

20 The other thing you could do is set back  
21 your hot water tanks, possibly, in the future. So these  
22 -- these -- this seems to be the way the technology is  
23 moving towards in the future.

24 MR. BOB MAYER: How much in the future  
25 are we really talking about? When I was in Tampa --

1 Tampa, spoke to a gentleman from Florida who said that  
2 for years now the -- the power supplier in where he  
3 lives, he had bit of -- a bit of a buyback operation  
4 whereby they could -- they had the authority or ability  
5 to shut off his furnace or his air conditioner for  
6 fifteen (15) minutes every couple of hours, and for that  
7 he got a rebate.

8                   And so obviously those kind of metres have  
9 been around for some time, because he said they were  
10 doing that in the '70s.

11                   Are you aware of that?

12                   MR. LLOYD KUCZEK: Yeah, that -- that's  
13 not the meter back in those days that was controlling it.  
14 That was a -- and I'm not sure how the -- the technology  
15 worked, but it wasn't through, necessarily, the metres.  
16 The smart meters, that's fairly recent technology.

17                   But they -- there are programs, and I know  
18 there's programs even in Grand Forks where they had some  
19 control devices and -- in the homes to control the hot  
20 water tanks. And so the utility actually had control  
21 over that and provided the consumers with a rebate or a  
22 discount of some sort.

23

24

(BRIEF PAUSE)

25

1 CONTINUED BY MR. BYRON WILLIAMS:

2 MR. BYRON WILLIAMS: Okay, and -- and  
3 thank you for that, Mr. Kuczek. Just turning to page 12  
4 of the study, and we're going to spend a -- a few more  
5 minutes on -- on it.

6

7 (BRIEF PAUSE)

8

9 MR. BYRON WILLIAMS: Mr. Kuczek, again,  
10 at a -- a very quick and high level, I understand your  
11 objectives in this -- or the obje -- objectives of this  
12 study were:

13 First, to measure the change in electric  
14 usage in homes with the smart meter pay-as-you-go system  
15 over the course of a year.

16 Secondly, to examine and report changes in  
17 attitudes towards monitoring the electricity provider and  
18 consumer perceptions of control.

19 And third, to assess overall satisfaction  
20 with the pay-as-you-go smart meter system.

21 Is that right, sir?

22 MR. LLOYD KUCZEK: That's correct.

23 MR. BYRON WILLIAMS: But if I just draw  
24 your -- at least in terms of the background, going back  
25 one (1) page to the bottom of page 11, the very bottom of



1 page 13, or the bottom of page 12, you'll actually see  
2 that you're -- you're originally looking at having three  
3 hundred (300) for the experimental group and three  
4 hundred (300) for the control group.

5 Is that right?

6 MR. LLOYD KUCZEK: Yes.

7 MR. BYRON WILLIAMS: And, again, at a  
8 high level, the first thing you want to do is develop a  
9 baseline doing an attitudinal survey of both groups.

10 Is that right, sir?

11 MR. LLOYD KUCZEK: Correct.

12 MR. BYRON WILLIAMS: And then at stage 2,  
13 and this is one I -- I want to focus you on, just drawing  
14 your attention down to the bottom of page 13, at time 1,  
15 T1, the experimental group got two (2) things: Pay as  
16 you go, they got the actual smart meter system; plus they  
17 got information regarding energy conservation.

18 Is that right, sir?

19 MR. LLOYD KUCZEK: Correct.

20 MR. BYRON WILLIAMS: And it was at this  
21 point in time that the control group also received the  
22 same educational information.

23 Is that right, sir?

24 MR. LLOYD KUCZEK: Correct.

25 MR. BYRON WILLIAMS: Can you elaborate on



1 what -- what type of educational information was  
2 provided?

3 MR. LLOYD KUCZEK: I -- I didn't see the  
4 package that was offered, but it would have been a  
5 package, I expect, of our Power Smart brochures or some  
6 sort of power -- it would have been a Power Smart  
7 brochure that provided consumers with different options  
8 in terms of saving energy, I guess.

9 MR. ROBERT MAYER: Sir, did it not also  
10 contain some information on how much you could expect a  
11 particular appliance to use?

12 MR. LLOYD KUCZEK: I didn't see the  
13 package so I can't say for sure what was provided, but  
14 that very well could have been provided.

15

16 CONTINUED BY MR. BYRON WILLIAMS:

17 MR. BYRON WILLIAMS: And, Mr. Kuczek, I  
18 don't want to put you to too much -- too much work, but  
19 the educational information is of interest to my clients  
20 in terms of how you motivate behaviour.

21 And I wonder -- I'm not asking for an  
22 Undertaking, but I wonder if you can get a sense of how -  
23 - how big the package is and -- and if it's not too  
24 large, whether you'd be prepared to share it with my  
25 clients?

1 MR. LLOYD KUCZEK: Certainly.

2 MR. BYRON WILLIAMS: And after the next  
3 step, as I understand it, and I'm drawing your attention  
4 to the top of page 14 is, right after receiving the  
5 information, the smart meters, energy consumption  
6 readings were collected for every study participant.

7 Is that right, sir?

8 MR. LLOYD KUCZEK: Correct.

9 MR. BYRON WILLIAMS: And then the last  
10 two (2) steps, about a year later, it was planned to do  
11 an attitudinal survey.

12 Is that right, sir?

13 MR. LLOYD KUCZEK: Correct.

14 MR. BYRON WILLIAMS: And then there was  
15 energy readings, as well, taken and there was a  
16 comparison drawn between the before and after.

17 Is that right, sir?

18 MR. LLOYD KUCZEK: Sounds correct.

19 MR. BYRON WILLIAMS: And the hypothesis  
20 that certainly Acumen was working under, was that real-  
21 time energy use information would impact attitude  
22 conserva -- the consumer's attitudes towards  
23 conservation, impact their behaviour and impact their  
24 consumption.

25 Is that right, sir?

1 MR. LLOYD KUCZEK: Yes.

2 MR. BYRON WILLIAMS: You sound so  
3 cautious.

4 And just in terms of what you are actually  
5 trying to measure, looking at those three (3) things;  
6 attitude, conservation behaviour and consumption, first  
7 of all, you were trying to measure changes within both --  
8 within both the experimental group and within the control  
9 group.

10 Is that right, sir? That's one thing  
11 you're trying to measure?

12 MR. LLOYD KUCZEK: Yes. With the primary  
13 objective of trying to determine whether or not the  
14 consumers and the control group or the experimental group  
15 would exhibit different behaviour than the control group.

16 MR. BYRON WILLIAMS: And we'll get to  
17 that in a second, but you were trying to, first of, all  
18 measure changes within each group; both the experimental  
19 group and the control group?

20 MR. LLOYD KUCZEK: Correct.

21 MR. BYRON WILLIAMS: And then you were --  
22 secondly, you were looking at the relative change between  
23 the two groups.

24 Would that be fair, sir?

25 MR. LLOYD KUCZEK: Yes, that's fair.

1 MR. BYRON WILLIAMS: And as Board Member  
2 Proven notice -- noted later, perhaps the most  
3 interesting part of the -- the study was the impact on  
4 family behaviour. So that was something else you were  
5 trying to look at.

6 Is that right, sir?

7 MR. LLOYD KUCZEK: Well, that would fall  
8 out of the total use -- usage within the home.

9 MR. BYRON WILLIAMS: There's actually --  
10 and we'll get to them in a couple of minutes, but there  
11 was actually some survey -- at page 33, for example, you  
12 looked at attitudinal behaviour of family members as  
13 well.

14 Is that not right, sir?

15 MR. LLOYD KUCZEK: I have to confirm.  
16 You're correct.

17 MR. BYRON WILLIAMS: It's so rare, I  
18 appreciate the validation.

19 And the -- again the -- the -- and one (1)  
20 other interesting thing that you were trying to look at,  
21 sir, or, Mr. Kuczek, excuse me, was the -- the impact of  
22 the -- of the -- the meter on different levels of usage  
23 being high level, medium level, and low level usage.

24 Do you recall that, sir?

25 MR. LLOYD KUCZEK: I don't recall it, but

1 it's -- it's probably accurate.

2 MR. BYRON WILLIAMS: You could probably  
3 look to page 17 if you were looking for a reference for  
4 that, sir.

5 MR. LLOYD KUCZEK: Okay.

6

7 (BRIEF PAUSE)

8

9 MR. BYRON WILLIAMS: Let me turn you to  
10 page 23 and, again, I don't have -- I -- I have a few  
11 more minutes, Mr. Kuczek, so we're -- in terms of the  
12 attitudes towards energy conservation, if we look at page  
13 23, Table 3.1, that's just some of the attitudes that you  
14 were trying to -- to measure.

15 Is that right, sir?

16 MR. LLOYD KUCZEK: Correct.

17 MR. BYRON WILLIAMS: And if I go to the  
18 bottom of that chain -- of that page, if you look at the  
19 -- the tests, if we look within the experimental group,  
20 itself, focussing solely on the experimental group, there  
21 was a difference in attitude, a change in the desired  
22 direction, but it was not statistically significant.

23 Is that right, sir?

24 MR. LLOYD KUCZEK: Where on page 23?

25 MR. BYRON WILLIAMS: The first bullet at

1 the bottom of the -- the page, "Pre-post Within Groups."  
2 And I'm focussing, first of all, on the change within the  
3 experimental group.

4 You'll see the statement, "differences in  
5 the desired direction but not statistically significant"?

6 MR. LLOYD KUCZEK: Correct. That's  
7 correct.

8 MR. BYRON WILLIAMS: And within the  
9 control group, in terms of attitude, the -- the  
10 difference was marginal and not statistically  
11 significant.

12 You'll see that?

13 MR. LLOYD KUCZEK: Yes.

14 MR. BYRON WILLIAMS: When you looked at  
15 the comparison between groups, there -- there was a  
16 finding that the improvement exhibited by the  
17 experimental group as a whole was significantly  
18 different, though, than the improvement exhibited by the  
19 control group.

20 Is that right, sir?

21 MR. LLOYD KUCZEK: That's correct.

22 MR. BYRON WILLIAMS: And that's a change  
23 in terms of attitudes?

24 MR. LLOYD KUCZEK: Yes.

25

1 (BRIEF PAUSE)

2

3 MR. BYRON WILLIAMS: If we turn to page  
4 29 -- actually, go back to page 28.

5 In terms of conservation behaviours, this  
6 Table 4.1 sets out some of the behaviours that you were  
7 looking at -- at measuring before and after.

8 Is that right, sir?

9 MR. LLOYD KUCZEK: Yes.

10 MR. BYRON WILLIAMS: And going to page  
11 29; within the experimental group, the finding was that  
12 the change in -- in terms of behaviour is in the desired  
13 direction and statistically significant, correct?

14 MR. LLOYD KUCZEK: Correct.

15 MR. BYRON WILLIAMS: Likewise, with the  
16 control group change -- behaviour was changed in the  
17 desired direction and was statistically significant.

18 Is that right, sir?

19 MR. LLOYD KUCZEK: Yes, and marginal.

20 MR. BYRON WILLIAMS: What the -- in terms  
21 of this finding though, Acumen noted that the improvement  
22 exhibited by the experimental group was not significantly  
23 different than the improvement exhibited by the control  
24 group.

25 Is that right?

1 MR. LLOYD KUCZEK: Correct.

2 MR. BYRON WILLIAMS: And you've -- you've  
3 gone through this with Board Member Proven, but just at  
4 page 33, you'll agree that the finding of Acumen was that  
5 energy conservation behaviours of family members for both  
6 the experiments and control group appear to have changed  
7 very little throughout the course of the study?

8 MR. LLOYD KUCZEK: That was the  
9 conclusion, yes.

10 MR. BYRON WILLIAMS: Now, I want to just  
11 spend a couple minutes on conservation behaviour by  
12 usage, and -- and if you'll recall the -- the hypothesis  
13 -- and if you're looking for it, sir, it's on page 25 in  
14 terms of conservation by usage towards the bottom, the  
15 hypothesis of Acumen was that it could be postulated that  
16 low energy users already practice energy conservation,  
17 while medium and high energy users have more room to  
18 impact the level of energy they use by changing their  
19 behaviours.

20 Is that right, sir? That was their  
21 hypothesis?

22 MR. LLOYD KUCZEK: Correct.

23 MR. BYRON WILLIAMS: Now, I wanted to  
24 just turn your attention to page 34. And you'll see the  
25 -- the last paragraph:



1                   "By the end of the [the first sentence]  
2                   -- by the end of the study, compared to  
3                   other usage groups. it appears that  
4                   energy conservation behaviours am --  
5                   among low and medium energy users in  
6                   the experimental group had increased  
7                   the most."

8                   Do you see that, sir?

9                   MR. LLOYD KUCZEK:    Yes.

10                  MR. BYRON WILLIAMS:   So, in -- in terms  
11                  of the initial hypothesis that -- in terms -- at least in  
12                  terms of energy conservation behaviours, it was not borne  
13                  out by the -- the actual results.

14                  Would that be fair, sir?

15                  MR. LLOYD KUCZEK:    That'd be fair.

16                  MR. BYRON WILLIAMS:    I'm not going to --  
17                  monitoring behaviours is on page 40, and I'm not going to  
18                  kind of belabour us through that except for to ask you to  
19                  confirm that there was a -- in terms of monitoring  
20                  behaviour, going to the third bullet:

21                  "The improvement exhibited by the  
22                  experimental group was significantly  
23                  different than the marginal improvement  
24                  exhibited by the control group."

25                  Is that right, sir?   That's the third

1 bullet on page 40, suggesting that the improvement  
2 exhibited by the experimental group was significantly  
3 different than the marginal improvement exhibited by the  
4 control group.

5 Is that right, sir?

6 MR. LLOYD KUCZEK: Yes.

7 MR. BYRON WILLIAMS: I'm a little more  
8 interested again -- just to -- when we go to page 45, we  
9 see the actual results in terms of energy consumption --  
10 excuse me page -- page 47. And this is a point at the  
11 top -- this is a point made by Mr. Peters, I believe, in  
12 cross-examination:

13 "The consumption of the experimental  
14 group decreased by 1.7 percent  
15 following the installation of the smart  
16 meters. On the other hand, consumption  
17 of the control group illustrated a  
18 decline of 4.3 percent."

19 Do you see that, sir?

20 MR. LLOYD KUCZEK: Yes.

21 MR. BYRON WILLIAMS: You -- and out of  
22 fairness, you'll also see near the bottom of this page it  
23 suggests that differences between the groups were found  
24 to be statistically insignificant.

25 Is that right, sir?

1 MR. LLOYD KUCZEK: Correct.

2 MR. BYRON WILLIAMS: That being said, the  
3 -- the initial hypothesis that use of the smart meter  
4 would lead to a -- a drop in consumptive behaviour by the  
5 experimental group as compared to the control group was -  
6 - was not borne out.

7 Would that be fair, sir?

8 MR. LLOYD KUCZEK: Yes.

9

10 (BRIEF PAUSE)

11

12 MR. BYRON WILLIAMS: And, again, you had  
13 a bit of a conversation with Mr. Peters about this, but  
14 what are the implications or conclusions that Manitoba  
15 Hydro draws from -- draws from this -- from this study,  
16 sir?

17 MR. LLOYD KUCZEK: Well, I -- I think the  
18 -- the biggest conclusion that we drew or the -- was that  
19 pursuing a pre-pay smart meter option or service to  
20 customers probably wouldn't -- wouldn't sell in the  
21 marketplace. That would be one (1) of the reasons I may  
22 be not on top of all this information as I wasn't too  
23 encouraged by the program itself.

24 We -- as we moved forward trying to sign  
25 up customers we found it very difficult to sign-up

1 customers. In fact we ended up signing-up -- signing-up  
2 very few customers at the end of the day. And even then  
3 the -- the -- so -- so the customers that did sign up I  
4 was concerned about there being some sort of bias,  
5 because why -- why would those customers sign up and not  
6 everybody else so would this study be reflective of the  
7 entire market, as opposed to possibly some group that  
8 would be interested in this. So there was those issues.

9           So the conclusion was that likely we  
10 wouldn't be pursuing a project similar to this. The  
11 other conclusion was that pursuing another project that  
12 might be less expensive that just provided a monitoring  
13 feature, such as provided by the Blue Line didn't excite  
14 us too much either. We heard of some results with those  
15 pilots where it produced reductions in energy  
16 conservation, but we're not -- we don't necessarily  
17 believe that that's going to happen in our marketplace  
18 for the reasons I mentioned earlier.

19           We -- we think we have a marketplace  
20 that's very energy conscious and -- and is fairly aware  
21 of measures at -- today because of our Power Smart  
22 efforts and that may not necessarily be the case in other  
23 markets.

24           We do believe that the way to move forward  
25 in the future is through those technologies that that was

1 talking about earlier where you have smart meters and you  
2 have the ability to control those -- some end uses in the  
3 household. And that could be either through the Utility  
4 possibly offering some reduced or incentives to the  
5 customer if we had control over those devices, or for  
6 consumers that were interested in using those smart  
7 technologies to control their end uses.

8 MR. BOB MAYER: Mr. Kuczek, can I -- a  
9 couple of hypotheses. You mentioned that you had some  
10 control about whether you got a -- a reflective range of  
11 customers to take those meters. It's true, isn't it,  
12 that people who took those meters had to go off budget  
13 because they were now paying -- they could no longer  
14 remain on budget?

15 MR. LLOYD KUCZEK: That's true.

16 MR. BOB MAYER: And that could  
17 perceivably, especially for all electric customers and  
18 customers using space heating, that could be a  
19 considerable financial burden for people who don't have a  
20 lot of disposable income in order to pay a hydro bill of  
21 nine hundred (\$900) to a thousand dollars (\$1,000) in  
22 February for example.

23 MR. LLOYD KUCZEK: Correct.

24 MR. BOB MAYER: So could we -- can we  
25 assume and I do know a little bit about -- and in

1 northern Manitoba that would -- that would have to be a  
2 real issue. I have no idea.

3           But have you looked into that possibility  
4 in southern Manitoba? Like, for example, how many people  
5 did you get to participate who were all electric, for  
6 example? Over the -- of the hundred and twenty-seven  
7 (127) I think they said, how many of those were all  
8 electric and how many of them were standard?

9           MR. LLOYD KUCZEK: I don't know the  
10 answer to that question. The feedback from my staff was  
11 that the most difficult part was to -- there were two (2)  
12 issues: one (1) was the pre-pay feature, consumers not  
13 wanting to obviously do that; and the other problem that  
14 we had was getting people to participate in the control  
15 group. They wanted the smart meters so they -- you know,  
16 if I didn't get a smart meter, take a hike, Hydro, you  
17 know? We hear that quite often, actually.

18

19 CONTINUED BY MR. BYRON WILLIAMS:

20           MR. BYRON WILLIAMS: I have just a few  
21 more questions on -- on this point.

22           Just in terms of -- and I guess to help us  
23 along I'll refer you to page 16.

24           THE CHAIRPERSON: Mr. Williams, do you  
25 want to wait till tomorrow?

1                   MR. BYRON WILLIAMS:    I'm -- I'm at the  
2 Board's pleasure.  I have about ten (10) minutes to  
3 finish up here.

4                   THE CHAIRPERSON:    Okay.  We'll come back  
5 tomorrow at 9:00.  Thank you.

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7                                       (WITNESSES RETIRE)

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9   --- Upon adjourning at 4:04 p.m.

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13 Certified Correct

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Cheryl Lavigne

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