MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA HYDRO

GENERAL RATE APPLICATION

2012/13 AND 2013/14

Before Board Panel:

Regis Gosselin   - Board Chairman

Raymond Lafond   - Board Member

Larry Soldier   - Board Member

HELD AT:

Public Utilities Board

400, 330 Portage Avenue

Winnipeg, Manitoba

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Pages 3143 to 3324

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1   APPEARANCES

2 Bob Peters   )Board Counsel

3

4 Patti Ramage   )Manitoba Hydro

5 Odette Fernandes   )

6

7 Byron Williams   )CAC (Manitoba)

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9 William Gange   )GAC

10 Peter Miller   )

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12 Antoine Hacault (np)   )MIPUG

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14 Michael Anderson (np)   )MKO

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1   LIST OF EXHIBITS

2 Exhibit No.   Description   Page No.

3 CAC-10   2012 integrated resource plan

4   of BC Hydro   3150

5 CAC-11   One (1) page excerpt of Hydro

6   bill containing consumption

7   history   3150

8 MH-66   Response to Undertaking 52   3222

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1   LIST OF UNDERTAKINGS

2 No.   Description   Page No.

3 66   Manitoba Hydro to verify whether

4   the assumption for the 2012 load

5   forecast for the residential sector,

6   in terms of the nominal electricity

7   price increase, was 2 percent, as

8   presented on page 56 of the load

9   forecast, or whether it was another

10   figure   3204

11 67   Manitoba Hydro to provide the data

12   in support of the analysis on whether

13   to date there has been a

14   statistically significant

15   relationship between general service

16   customer's demand and price changes;

17   a narrative of Hydro's analysis; and

18   the data from any statistical tests

19   that Manitoba Hydro may have employed

20   in concluding that there was not a

21   statistically significant

22   relationship between price and

23   general service customer demand   3214

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1   LIST OF UNDERTAKINGS (Con't)

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3150

1 --- Upon commencing at 9:00 a.m.

2

3   THE CHAIRPERSON: Good morning

4 everyone. I believe we have some documents to enter

5 into the record.

6   MR. BYRON WILLIAMS: Yes, and I've

7 chatted with My Friend, Ms. Fernandes, from Hydro, and

8 my understanding is they have no objections to these

9 being admitted as exhibits.

10   There is an excerpt from the 2012

11 integrated resource plan of British Columbia Hydro --

12 or BC Hydro -- a draft integrated resource plan which

13 we would suggest be marked as CAC Exhibit 10.

14

15 --- EXHIBIT NO. CAC-10:   2012 integrated resource

16   plan of BC Hydro

17

18   MR. BYRON WILLIAMS: And as CAC Exhibit

19 11, we would suggest you mark a one (1) page excerpt

20 from a Hydro bill. That will be the document with a

21 consumption history at the top left-hand corner and the

22 blue and black graph, in terms of consumption.

23

24 --- EXHIBIT NO. CAC-11:   One (1) page excerpt of

25   Hydro bill containing

3151

1   consumption history

2

3   MR. BYRON WILLIAMS: Mr. Chair, just --

4 there's a little bit of people sorting things out here.

5 Just for the panel's information, I had all -- I'm only

6 going to make brief reference to CAC Exhibit 9, which

7 is the one we handed out yesterday.

8   And I had also asked you to have at hand

9 CAC-8, and I'll only be making one (1) reference to

10 that one. But it's one you may want -- want to have at

11 hand. So Monsieur Lafond, that's CAC-8, which is the

12 supporting materials from January 8th. We won't get to

13 that for about twenty (20) minutes or so, twenty-five

14 (25) minutes, but that might be one you'll want to have

15 at -- at hand.

16   And before I start my cross, I believe

17 that Manitoba Hydro has a few things they'd like to

18 say.

19

20 MANITOBA HYDRO PANEL 4 - DSM, RESUMED:

21   DARREN RAINKIE, Resumed

22   ROBIN WIENS, Resumed

23   LOIS MORRISON, Resumed

24

25   MS. ODETTE FERNANDES: Thank you, Mr.

 1 Williams. Mr. Chairman, Ms. Morrison has been looking

 2 through some of her documents as a result of a

 3 discussion yesterday on the record with Mr. Williams,

 4 and she would like to make a couple of corrections to

 5 the record just to ensure that Manitoba Hydro's

 6 position is clear.

 7   THE CHAIRPERSON: Ms. Morrison, good

 8 morning.

 9   MS. LOIS MORRISON: Good morning.

10 Thank you very much. I -- I'd just like to mention

11 that during our discussion yesterday with Mr. Williams

12 regarding the target market for the low-income program,

13 we had discussed at length our response to

14 CAC/GAC/MANITOBA HYDRO-1-11C, where we referenced that

15 there are approximately twenty-five thousand (25,000)

16 electrically heated homes that were single detached or

17 multi attached meeting the Low-income Cutoff-125.

18   And as a res -- and through that

19 discussion we -- I had misstated that the 7 percent of

20 customers reporting that their insulations levels were

21 fair or poor. The 7 percent was actually the number of

22 electrically heated homes with fair or poor insulation.

23 So the math should have actually been done at 7 percent

24 against the seventy-four thousand (74,000).

25   So the actual number of homes meeting

3153

1 the LICO-125 cutoff with fair or poor insulation would

2 be five thousand three hundred and fifty-nine (5,359)

3 homes which would represent the potential target.

4   Also in our discussions yesterday -- I'm

5 sorry, if you'll give me a moment just to close up that

6 book -- we had talked at length regarding Manitoba

7 Hydro's response to CAC/GAC/MANITOBA HYDRO-1-6, which

8 was page 29 in CAC's Exhibit 6, I believe...

9

10 CONTINUED CROSS-EXAMINATION BY MR. BYRON WILLIAMS:

11   MR. BYRON WILLIAMS: Exhibit 9.

12   MS. LOIS MORRISON: Exhibit 9, sorry,

13 and in that discussion, towards the end we had -- after

14 dis -- distinguishing that two (2) of the programs had

15 really been discontinued or were not included as a

16 result of design require -- redesign requirements, or

17 deficiencies in delivery design, Mr. Williams made a

18 reference that that meant that the seven (7) items

19 identified in the response were the only ones that had

20 been screened out solely because of economic -- not

21 meeting the economic tests.

22   And I thought it would be more

23 appropriate to -- to state that -- or a more -- more

24 accurate representation to state that really tho --

25 those -- what we included there were ones that we had

3154

1 reviewed up until that time. Part of -- we have staff,

2 as I mentioned, that have a tech -- we have a technical

3 engineering group that reviews ongoing technologies

4 entering the market, constantly looking for what might

5 be the new emerging technology that might be coming

6 onto the marketplace that might suit Manitoba Hydro's

7 commercial -- or suit their market sectors.

8   So we're regularly looking on a day-to-

9 day basis. It's part of the integrated work that they

10 do. And so there's a number of items that they're

11 looking at. So it's not that we normally keep a

12 detailed list of technologies that have been looked at,

13 haven't been looked at, that have passed at MRC or have

14 -- you know, would suit our marketplace.

15   For example, we have more recently --

16 since this analysis was undertaken, we've -- we've

17 looked at items that we detailed in the rebuttal

18 related to hot-water heat pumps. And we also have

19 looked at solar domestic water heating. So there's a

20 number of items that we have looked at. We've looked

21 at whether they're economic in the Manitoba

22 marketplace, whether they're a viable opportunity in

23 the Manitoba marketplace. And we do this on a day-to-

24 day basis, which is why it's difficult for us to sit

25 down.

3155

1   And -- and it's interspersed throughout

2 our entire technical group. We have lighting

3 specialists, HVAC specialists, envelope specialists, in

4 terms of engineering support. And then in addition to

5 that, we have our marketing specialists that are

6 looking at unique markets and what other utilities are

7 offering. So we're -- we're regularly looking at what

8 the opportunities would be.

9   So to sit down and detail the entire

10 list or -- or to compile it in one (1) spot and say

11 what's the status of that at any one (1) time is -- is

12 difficult. So what we were trying to do is -- is

13 demonstrate that we are looking at these measures and

14 that we do it on a regular basis.

15   The -- the measures that were included

16 there was a submission that had been provided during

17 the last rate ap -- rate hearing. And so we have

18 looked at other ones since then and that would offer --

19 we hoped had off -- would offer, but we're still

20 monitoring them.

21   THE CHAIRPERSON: I have a follow-up

22 question in relation to one (1) of the items that was

23 shed, I guess, as a possibility. And that was the on-

24 demand water heater. And it surprised me that -- given

25 that it's very popular in other jurisdictions, it

3156

 1 surprised me that it failed so clearly in the MRC test.

 2 Like it was zero point five (0.5), I think. It's --

 3 these heaters are in regular use all over the world.

 4   And I'm just wondering, why it is in

 5 Manitoba that it would be so -- such a marginal

 6 potential application?

 7   MS. LOIS MORRISON: Are -- are you

 8 referring to a direct -- a demand control water heater,

 9 or are you referring to the solar domestic water

10 heating, or are you referring --

11   THE CHAIRPERSON: Referring to the

12 small water heaters that exist in Europe and so on,

13 where there's no tank, basically. The water is heated

14 immediately.

15   MS. LOIS MORRISON: Tankless water

16 heaters. We have looked at them. It's just that the

17 incremental cost of them is so high and -- for the

18 installation, so. And the -- although the savings are

19 attractive on the electric side, the -- the greatest

20 concern is the coincidence with our peak. So although

21 the energy savings are occurring, when they come on

22 coincides quite drastically with our peak. And so

23 there's no peak savings that would then contribute to

24 the benefit of that energy unit.

25   So as I mentioned, our marginal value is

 1 based on an -- on a winter/summer differential energy

 2 value. It also has a capacity impact and a -- summer

 3 and winter. And so when you look at how that energy is

 4 used and what the change occurs going from what -- what

 5 that new technology does to our system and how it

 6 interacts with our system, there's no benefit on that -

 7 - that technology at a capacity perspective, because it

 8 -- it actually would increase our capacity requirement,

 9 because when do people use water?

10   Pretty much around our peak time is when

11 they would be turning on their hot water. They come

12 home. They start to make supper. They turn on the hot

13 water. The hot water tank kicks in, because it's an

14 instantaneous water heating source.

15   THE CHAIRPERSON: I'm sorry. I guess

16 the followup -- the follow-up question is: I guess

17 you're looking at the lens. It just occurs to me now

18 that you're looking at the world from the lens -- using

19 the electricity lens. But if you look at the world

20 from the gas lens, they paint a different picture,

21 because the capacity issue is not an issue in the gas

22 world.

23   I mean, it wouldn't be an issue if I

24 turn on my gas heater at six o'clock, or at least I

25 draw water at six o'clock in the evening. It's not a

3158

1 capacity issue for gas, is it?

2   MS. LOIS MORRISON: It is one (1) of

3 the measures that we're looking at under our gas DSM --

4   THE CHAIRPERSON: Okay.

5   MS. LOIS MORRISON: -- initiatives. It

6 also still has a very high installed cost. And so it -

7 - when you look at the savings, given that the gas

8 prices are so low, the savings are -- the marginal

9 value is calculated differently for the gas side of the

10 business.

11   There isn't a -- it -- it's really on

12 avoiding gas purchases. So then it's really tied to

13 the primary gas price. And so as the primary gas

14 prices is relatively low compare -- and the savings are

15 -- the -- there are savings, but those savings aren't

16 large enough to offset that upfront capital cost

17 associated with the installation. So it does make it

18 difficult.

19   I would have to go back. I, off the top

20 of head, do not recall what the MRC for the gas

21 tankless is. I would have to go back and take a look

22 at that. Is that something that you would like us to

23 go and find?

24   THE CHAIRPERSON: No, I trust your -- I

25 trust your data on that. I'm just -- but I'm trying to

3159

1 understand, from the standpoint of DSM, do you look at

2 DSM comprehensively, electricity and gas together?

3   Or is it just -- so, looking at the two

4 (2) areas separately?

5   MS. LOIS MORRISON: When we're looking

6 at DSM, we're looking at creating the efficient use of

7 energy in that facility or through that operation

8 regardless of whether they're using gas or electricity.

9 As I testified before, we don't use fuel switching

10 within the DSM plan. So we wouldn't -- within the DSM

11 construct, we have not looked at incenting people to

12 choose natural gas over electricity in order to reduce

13 electricity consumption. We've always looked at

14 creating the most energy -- the most efficient use of

15 that energy source.

16   And so when we -- so when we design a

17 program, we design the Home Insulation Program, we have

18 a program that targets the most energy-efficient use of

19 natural gas and electricity in all homes. Right? So

20 it's regardless of whether you have an electrically

21 heated or a natural-gas-heated home, we are encouraging

22 that you -- we offer one (1) program.

23   So we don't have a program that targets

24 electrically heated customers and natural-gas-heated

25 customers. We have one (1) program, and that's an

3160

1 integrated program. So we -- but as I said, we don't

2 encourage fuel switching between as part of the DSM

3 initiative.

4   MR. RAYMOND LAFOND: One (1) of the

5 comments I think I heard earlier was that one (1) of

6 the big values of export was that it would displace the

7 use of coal for the production of electricity in the

8 regions we're exporting in.

9   In this case, fuel switching from

10 electricity to gas would help displace the electricity

11 generated by coal, for instance, in the US, would it

12 not?

13   MS. LOIS MORRISON: Yes, and as we

14 outlined in our fuel switching report, that is the

15 situation.

16   MR. RAYMOND LAFOND: That is the

17 situation. On the other hand, we do not try to move

18 customers from electricity to gas here in Manitoba?

19   MS. LOIS MORRISON: We're trying to

20 help them make the best decision for them economically.

21 We try -- and that's why we are taking the approach to

22 begin with, by educating them so that they have a

23 better understanding. I think the price fluctuations

24 that we saw riding up to 2008, the increase, the

25 overall increase that we're seeing in natural gas

3161

1 pricing, created a market where customers were no

2 longer feeling confident in having natural gas as their

3 fuel source.

4   And so what we're attempting to do now

5 is to basically stop that change that was occurring, or

6 at least mitigate it. And we think that the best way

7 to do that right now is really to work with the people

8 that are making the decisions, which would be the home

9 builders and that in those -- those areas I identified

10 yesterday, and better educating our customers so that

11 they can make decisions that are best suited to them.

12   Whether or not we would go out and start

13 incenting customers to choose to -- to convert, like,

14 to actively convert from electric heat to natural gas

15 heat isn't something -- although, we've -- we've

16 considered it, we've -- we look at it. We -- we

17 mentioned in our report it's something we may look at

18 in the future, to encourage them not to switch to -- to

19 electric, more so as our -- our -- our direction before

20 we more so to keep people from switching to electric

21 from natural gas.

22   But it's, more so, we'll try to make

23 sure that we have customers get the information that

24 they need. We aren't actively going to go out and,

25 say, if you have electric heat, knock on your door and

1 say, Hi, would you like to have natural gas? What we -

2 - we would rather be doing is making sure you have all

3 the information you need so that the time when you go

4 to say make a furn -- a heating system change, you can

5 make that decision at time. Well, maybe now I should

6 consider gas, or I like -- I'll stay with electric

7 because the cost -- maybe I'll consider gas, these are

8 the costs associated with it. Am I willing to bear

9 that?

10   So at this point in time, we want to

11 encourage people to make the fuel choice that's best

12 for them, given all the factors that would have

13 influenced their choice. It includes capital cost and

14 the operating cost. We want to try to stop the -- or

15 mitigate the increase that we've seen in areas that we

16 believe is more so a fallout of past market behaviours

17 or market information. But we aren't, at this point in

18 time, encour -- or considering incentives to convert

19 customers from electricity to natural gas.

20   MR. RAYMOND LAFOND: I understand your

21 comments. On the other hand, Manitoba Hydro is very

22 active, in terms of promoting changes to codes, et

23 cetera, to save energy. In terms of new constructions

24 though, the issues would be quite separate -- quite

25 different than from trying to convince someone to

1 switch from electricity to the gas when it's a brand

2 new home that's being built.

3   In other words, if Manitoba Hydro is

4 very active in -- in trying to -- to modify codes so

5 that it -- building codes, why does not Manitoba Hydro

6 lobby government, lobby builders to simply build new

7 houses with gas rather than electricity?

8   MS. LOIS MORRISON: That's actually

9 part of our strategy, is to specifically work with

10 builders in those areas. We've been actually

11 participating in builder meetings. We regularly meet -

12 - our -- our energy services group regularly meets with

13 builders and developers, because we have to extend

14 service to those developments, obviously.

15   And so as part of those meetings that

16 are going on -- we've had a couple now, and there's a

17 couple queuing up probably this -- there's a few this

18 month -- two (2) -- two (2) this month, I think, where

19 we are actually going to be meeting with the builders

20 and explaining to them again -- we've -- we've met with

21 them in the past -- and explaining to them again, and

22 trying to -- to better understand, How do we make it

23 via -- more attractive for you to install the natural

24 gas equipment in the homes?

25   So we've worked with the developers so

3164

1 that the -- we want to make sure that the gas system is

2 in the development and then make sure that we are then

3 connecting with the homebuilders to ensure that the

4 homebuilders are also putting in the appliances so that

5 it's connected to the system.

6   So we're working with those

7 organizations and with the Manitoba Home Builders'

8 Association. We'll be working with them and working --

9 doing some advertising through their orga -- their --

10 their magazines and their communication tools to better

11 inform the developers, the builders, and the homebuyers

12 so that when the homebuyer is saying, Well, why are you

13 putting -- why do I have electric?

14   Right now it's not a -- it's not

15 necessarily a consi -- as much of a consideration as my

16 granite countertops and my -- my walk-in closet and --

17 and all these other things that customers are looking

18 at when they're building a new home. So we're working

19 at it, trying to come in at all the points of the

20 delivery channel to better education them and to inform

21 them so that they are making the right decisions.

22   We've also -- we'll be looking at our

23 policies and -- and -- as to how we can influence the

24 builders and developers from a policy side, in terms of

25 our service extensions. So we're looking at where

 1 there might be opportunities.

 2   MR. RAYMOND LAFOND: Would not a three

 3 thousand (3,000) or five thousand dollar ($5,000) fee -

 4 - connection fee for electricity -- new electricity

 5 homes using electric -- electricity for space heating

 6 do the trick?

 7   MS. LOIS MORRISON: We are -- that's

 8 actually one (1) of the components of the allowances

 9 that we're looking at as to whether or not we -- we

10 should be revisiting that. We did previously revisit

11 that and did make a -- about -- I can't quite remember

12 how many years ago, but a few years ago we realigned

13 our service extension policy allowances such that if

14 you're building an electrically heated home, you got an

15 allowance of approximately three (3) to four thousand

16 dollars ($4,000) once that house connected.

17   So the cus -- so the developer pays to

18 have the service extended. Once the load is connected,

19 they would have gotten an allowance to recognize that

20 over the course of time, we would be recovering a

21 component of that investment through the rate base. So

22 there was an allowance put in place for that.

23   And so it -- regardless of where you

24 were in the province, if you connected an electric

25 home, you got that allowance. If you connected a home

1 that had natural gas as your heating system and,

2 therefore, a lower electric load, you got a lower

3 amount, around eight hundred dollars ($1,800).

4   So what we done about two (2) to three

5 (3) years ago is we changed it so regardless of -- if

6 you were adjacent to gas or if you were close to gas or

7 have access to gas, your allowance is the same

8 regardless of whether you're installing in electric-

9 heated house or in a natural-gas-heated house, period.

10   So there wasn't this -- this -- almost

11 an incentive -- a reverse incentive in place to put in

12 electric heat. So we've removed that and -- and

13 levelized the playing field there, in terms of fuel

14 choice, from that perspective. Now we're revisiting

15 our policies again to see what -- what other options

16 are there available to -- to create the right signals.

17

18 CONTINUED BY MR. BYRON WILLIAMS:

19   MR. BYRON WILLIAMS: Thank you. And I

20 -- I thank the Board members for the questions, which

21 allowed me to work my calculator.

22   Ms. Morrison, just in terms, before I

23 get to what I'd planned to discuss today, in terms of

24 your correction of the -- the record, just in terms of

25 the target population for LIEEP, in terms of housing

 1 that Manitoba Hydro has determined based up on its

 2 residential survey to be lacking in insulation, I

 3 understand you say it's -- it's 7 percent of the

 4 population of seventy-four thousand, fifty-seven

 5 (74,057)?

 6   MS. LOIS MORRISON: That is correct.

 7   MR. BYRON WILLIAMS: So subject to

 8 check, roughly five thousand one hundred and eighty-

 9 four (5,184) low-income homes?

10   MS. LOIS MORRISON: No. Oh, are you

11 referring to single detached in that calculation or --

12   MR. BYRON WILLIAMS: Well -- well, I'm

13 just -- yes. Yes, roughly 7 percent times seventy-four

14 (74), in -- in terms of single detached homes, we're

15 talking roughly five thousand, one hundred and eighty-

16 four (5,184) homes?

17   MS. LOIS MORRISON: My calculator does

18 something a little bit different. But it's five (5) --

19 it's -- it's a little -- it's five thousand, three

20 hundred and fifty-seven (5,357).

21   MR. BYRON WILLIAMS: Okay. And if I

22 were trying to back out the percentage of all-electric

23 homes from that population, I'd be getting what,

24 eighteen hundred and twenty-two (1,822)?

25   MS. LOIS MORRISON: No. That's where I

3168

1 got confused in the math, also.

2   MR. BYRON WILLIAMS: Oh, those are all

3 all-electric?

4   MS. LOIS MORRISON: Those were all all-

5 electric.

6   MR. BYRON WILLIAMS: So five thousand,

7 three hundred and fifty-seven (5,357) target low-income

8 homes, single detached homes?

9   MS. LOIS MORRISON: Yes, that are all-

10 electric.

11   MR. BYRON WILLIAMS: And then in

12 addition to that, there would be three thousand (3,000)

13 target First Nation homes?

14   MS. LOIS MORRISON: That is correct.

15   MR. BYRON WILLIAMS: And in terms of

16 the rental -- target rental homes, that figure would

17 be, Ms. Morrison...?

18

19   (BRIEF PAUSE)

20

21   MS. LOIS MORRISON: Sorry for the

22 delay. It's getting all those qualifiers onto the

23 number. Nine hundred and eighty-eight (988) single

24 detached, multi attached, excluding apartments, rentals

25 with fair to poor insulation requirements that are

 1 electrically heated.

 2   MR. BYRON WILLIAMS: And in terms of

 3 apartments, any targets, rental?

 4   MS. LOIS MORRISON: At this point in

 5 time, we have no target specifically set for the

 6 rentals that are in apartments. As I mentioned

 7 previously with the LIEEP program, we are -- apartments

 8 don't quality for the Low Income Energy Efficiency

 9 Program. But we work closely with Manitoba Home --

10 Manitoba Housing to help them bring in a number of the

11 low cost/no cost measures. And we are also, as I als -

12 - mentioned, we are working on possible other options

13 that might help that sector in the near future.

14   MR. BYRON WILLIAMS: Thank you for

15 that. And -- and so in terms of Hydro's estimates of

16 low-income persons living in apartments, somewhere

17 between seventeen (17) and eighteen thousand (18,000)

18 persons?

19   Seventeen (17) -- if you want to go to

20 page 22 of CAC Exhibit 9.

21

22   (BRIEF PAUSE)

23

24   MR. BYRON WILLIAMS: And I'm suggesting

25 to you that Hydro's estimate of renters living -- low-

3170

1 income renters living in apartments is somewhere

2 between seventeen (17) and eighteen thousand (18,000)?

3   MS. LOIS MORRISON: That is correct.

4   MR. BYRON WILLIAMS: And that's the

5 group for which LIEEP currently has no target?

6

7   (BRIEF PAUSE)

8

9   MS. LOIS MORRISON: The seventeen (17)

10 to eighteen thousand (18,000) would represent all fuel

11 sources.

12   MR. BYRON WILLIAMS: So 34 percent of

13 that. Okay, that's -- forget -- I'll scratch that.

14 Now, let's leave apartments out -- out of the equation

15 for a second.

16   If we look at the -- the figures you've

17 given -- given me, in terms of First Nation housing of

18 three thousand (3,000), in terms of owned homes of five

19 thousand three hundred and fifty-seven (5,357), and in

20 terms of rentals of -- with your careful wording of

21 nine hundred and eighty-eight (988), we've got, based

22 upon Hydro's estimates, nine thousand, three hundred

23 and forty-five (9,345) target homes?

24

25   (BRIEF PAUSE)

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1   MS. LOIS MORRISON: That is correct.

2   MR. BYRON WILLIAMS: And if we turn to

3   page 21 of CAC Exhibit 9, under "LIEEP," towards the

4   bottom of the page, we'll see that Manitoba Hydro is

5   targeting reaching thirty-three hundred (3,300) of

6   those homes by March 2017?

7

8   (BRIEF PAUSE)

9

10   MS. LOIS MORRISON: Sorry for the

11 delay, Mr. Williams. I was just wanting to confirm

12 that it included all of those components. My concern

13 was that it didn't include the apartment -- sorry, the

14 rental units. It includes our targets for single --

15 individually owned homes, First Nation homes, and the

16 rental single detached/multi attached, yes.

17   MR. BYRON WILLIAMS: So we are

18 comparing, first of all, apples to apples?

19   MS. LOIS MORRISON: Yes, it appears to

20 be so.

21   MR. BYRON WILLIAMS: And so by March of

22 2017, in terms of the target low-income population,

23 Hydro is expecting to reach roughly 35 percent?

24

25   (BRIEF PAUSE)

3172

1   MS. LOIS MORRISON: It's not directly

2 comparable, because the thirty-three hundred (3,300)

3 target is out of all twenty (20) -- out of all single

4 attached -- low-income single detached/multi attached

5 customers. because it would include where we can't

6 install insulation because maybe their insulation

7 levels are already at an appropriate level.

8   So it's not directly thirty-five (35);

9 35 percent would be actually over-representing our

10 anticipated penetration rate.

11   MR. BYRON WILLIAMS: So and -- and I

12 thank you for the clarity. So what I'm understanding

13 is if we look at the target of nine thousand, three

14 hundred and forty-five (9,345), that is the target to

15 insulate the family of low-income homes that your

16 assessment suggests could be upgraded, correct?

17   MS. LOIS MORRISON: That is correct.

18   MR. BYRON WILLIAMS: And when we look

19 at the figure of thirty-three hundred (3,300), that

20 includes both the target population requiring

21 insulation -- excuse me, let me back up.

22   That includes homes you're intending to

23 insulate, but not all the homes within that thirty-

24 three hundred (3,300) are going to be insulated. They

25 may have more modest upgrades?

 1   MS. LOIS MORRISON: Yes, so more

 2 appropriately, you would compare the thirty-three

 3 hundred (3,300) to the twenty-five thousand (25,000) or

 4 the -- the larger number of homes in total to say --

 5 because, yes. So of the thirty-three hundred (3,300),

 6 a portion of those homes will be insulated because they

 7 will require insulation. A portion of those homes may

 8 only get the low cost/no cost measures installed,

 9 because they don't require increased insulation levels.

10   MR. BYRON WILLIAMS: And so the target

11 penetration rate for homes requiring -- low-income

12 homes -- I'll -- backing up.

13   All-electric low-income homes requiring

14 insulation by 2017 would be less than 35 percent?

15 Sorry, the targeted participation would be less than 35

16 percent?

17   MS. LOIS MORRISON: It's -- we would

18 hope that in reaching those thirty-three hundred

19 (3,300) customers, they would all be the ones that we

20 are targeting, in terms of having need for increased

21 insulation. However, we know in actuality we will have

22 customers participating who will not need that.

23   So we will be targeting that -- our --

24 we -- we would like to have all thirty-three hundred

25 (3,300) be ones that we reach that really need it, but

3174

1 recognizing that we won't realize that.

2   MR. BYRON WILLIAMS: Turning, just

3 again in follow-up of your -- your information this

4 morning, to page 30 of CAC-9. We see there the list of

5 seven (7) measures screened out by the MRC test

6 provided in response to an RCM/TREE information

7 request, agreed?

8   MS. LOIS MORRISON: Yes.

9   MR. BYRON WILLIAMS: And what you told

10 us this morning is that subsequent to the screening out

11 of these seven (7), there are a number of measures --

12 you listed two (2) or three (3) -- that have -- have

13 subsequently been screened out?

14   MS. LOIS MORRISON: Yes, there's more

15 than two (2) or three (3). And the difficultly would

16 be providing, in a timely manner, a comprehensive

17 listing of all the measures we look at on a regular

18 basis.

19   MR. BYRON WILLIAMS: Okay. Thank you.

20 Now, I -- I wasn't rude yesterday, but I did interrupt

21 you at the end of your evidence. Mr. Gange is heckling

22 me. But I did interrupt you just at the end of your

23 evidence. We had discussed RIM. But you were -- you

24 were explaining to me the use of the LUC. And I'm

25 going to provide you with what I understood you to --

3175

1 to be saying, in terms of the LUC in assisting you to

2 assess your portfolio. And if I've got it inaccurate,

3 you'll correct me.

4   And -- and focussing on -- on

5 residential, am I correct in suggesting to you that --

6 let's assume a one point three (1.3) cent per kilowatt

7 hour differential between the residential rate proposed

8 for Hydro of April 2013 of seven point two (7.2) cents

9 per kilowatt and its estimated marginal costs of eight

10 point five (8.5) cents per kilowatt hour.

11   With that assumption, am I correct in

12 understanding that you would have some trepidation in

13 recommending a program with an LUC of two (2) or two

14 and a half (2 1/2) cents per kilowatt hour?

15   MS. LOIS MORRISON: Actually, I could

16 still recommend a program that had an LUC of two (2) or

17 two and a half (2 1/2) cents a kilowatt hour. As I --

18 as I described yesterday, the -- the -- we -- we look

19 at the -- the marginal value at eight point five (8.5)

20 cents is a -- is a representation to provide context to

21 what the appro -- the -- the value of -- of those

22 energy savings are over a thirty (30) year time period

23 in our system. And Mr. Miles is much better at

24 describing what that is.

25   But what the eight point five (8.5)

3176

 1 cents a kilowatt hour represents is those -- a -- a

 2 levelization of the benefits over one (1) kilowatt hour

 3 per year for thirty (30) years, assuming a uniform

 4 representation of -- of energy consumption, which we

 5 know our system doesn't have, we know our -- our

 6 savings don't have.

 7   But what it does is it's bringing in --

 8 bringing together the -- the winter energy, the summer

 9 energy and the winter capacity and ener -- and summer

10 capacity components in a level -- in -- in a uniform

11 way to give us an approximation.

12   So what we do is we recognize though

13 that that is the benefit to the Corporation and to --

14 to the ratepayer. And so when we're running -- when

15 we're designing a program -- and -- and we should

16 probably speak to this in terms of programs versus

17 portfolio or the overall planning.

18   So when we're designing a program, once

19 -- once the technology has been demonstrated to -- to

20 pass the MRC, as we discussed in quite a bit of detail,

21 the program developer or the program coordinator will

22 look at what's the best way to reach this market. And

23 in it, as I've mentioned, they look at all of the

24 tests, because the program has to -- and -- and this is

25 where is has to -- has to pass the TRC or the modified

3177

1 TRC if there are additional non -- non-energy --

2 measurable non-energy benefits available. So the

3 program has to pass TRC.

4   Then what we're doing is we're trying to

5 design a program that would appropriately allocate the

6 investment between the beneficiary, being the

7 participating customer, and the Utility and the

8 ratepayer without necessarily adversely burdening the

9 nonparticipant, who is either a nonparticipant by

10 choice or by the fact that he's already participated

11 and has diminishing available opportunities to

12 participate as he goes into the future.

13   So that's what we're doing when we're

14 doing our design. We're looking at trying to create

15 that balance. And the best way to -- and we're

16 recognizing the best way to reach the market in that

17 design and who's going to pay. So there -- there's a

18 couple of components that are coming into that

19 analysis, and that's why we look at all of the tests

20 when we're doing the design.

21   It's not a process where you say, Okay,

22 well, we've -- we've looked at this test. Now let's

23 design a program. Now we'll look at how we're going to

24 -- so it passes TRC. Now we're going to look at how

25 we're going to allocate costs out.

3178

1   It's through the process of designing

2 the program and when you come up with program delivery

3 options and that, that you're identifying what the

4 program costs would be, you're identifying what

5 possible incentives might be. And then you're putting

6 it into the benefit/cost models that we use, and out

7 comes the benefit/cost tests.

8   And then you look at it and go, Okay,

9 does that meet our thresholds? We think this is the

10 best approach for that market. Is it meeting -- how --

11 how does it present, in terms of TRC, levelized utility

12 cost? And if it comes in at a levelized utility cost

13 of greater than one point three (1.3), and say it comes

14 in at two (2), which is that differential between what

15 the ratepayer is already receiving in terms of the

16 domestic rates and the additional benefit. So that's

17 representing the incremental benefit that they can take

18 advantage of.

19   If it comes in at, say, two (2), it

20 doesn't immediately go -- get pushed to the side as not

21 being a viable program. What we do then is we also

22 look at, as I mentioned, the rate impact measure test,

23 which is taking into consideration at a more detailed

24 level the -- the differ -- differentiation between that

25 value as to when those energy savings are occurring.

1 So if we have more energy savings occurring during the

2 winter, there's more value. And so that would then

3 come in on the benefits stream.

4   So it's -- although you can -- you can

5 look at the LUC, but the LUC should be compared in --

6 in context along with looking at the rate impact

7 measure. The rate impact measure test tells us --

8 because, case in point, the Home Insulation Program has

9 a levelized utility cost which is greater than that

10 differential, but it has -- it's not anticipated to

11 have an impa -- a negative impact on our rates -- long-

12 term impact on our rates because of the fact that it

13 has greater savings potential during the summer --

14 winter months.

15   So that's really how we're looking at

16 it. Does that help?

17   MR. BYRON WILLIAMS: Yes. And I just -

18 - I don't want to ask many more on this, but I just

19 want to kind of follow -- follow this example through

20 one (1) more step.

21   And it sounds to me like we're talking

22 not at the portfolio level, but at the program design

23 level.

24   MS. LOIS MORRISON: Yes. What I

25 described right now is at the program design level.

3180

1   MR. BYRON WILLIAMS: So we are not

2 screened out by the MRC. We make it through TRC. The

3 differential is more based upon LUC. Is -- is -- let's

4 say it's two (2), as compared to the one point three

5 (1.3) we've been talking about. And then you get to

6 RIM, and it's point nine (.9).

7   What do I do?

8   MS. LOIS MORRISON: You take it to your

9 division manager.

10   MR. BYRON WILLIAMS: So if the RIM is

11 one point one (1.1), you don't go to your division

12 manager, but if it's point nine (.9) --

13   MS. LOIS MORRISON: No.

14   MR. BYRON WILLIAMS: -- you do.

15   MS. LOIS MORRISON: Sorry. You come --

16 what we -- what we do is we're looking at it, trying to

17 have a comprehensive portfolio, which is why, when

18 we're doing our annual planning we -- there's two (2)

19 things that we would do.

20   The first thing is, is there a different

21 way that we can design that program and still achieve

22 those energy savings and have less of an impact on the

23 ratepayer? It's a -- it's a question you have to ask

24 yourself, because we have a financial responsibility to

25 our ratepayer. So is there -- is there another way we

3181

1 can approach that market? That's just part of good

2 business practices, is to see if there's a more

3 efficient way to reach that market.

4   If this is the best way to reach the

5 market and it's a market that we need to be in -- we

6 feel that as part of our portfolio, in order to have a

7 com -- a well-rounded, comprehensive portfolio, and we

8 have other programs within that portfolio that offset

9 that -- then it would be a program that we would

10 entertain.

11   MR. BYRON WILLIAMS: And so moving from

12 program design to portfolio, what we agreed yesterday

13 was if the portfolio is at less than one (1) for RIM --

14   MS. LOIS MORRISON: M-hm.

15   MR. BYRON WILLIAMS: -- then we've got

16 problems.

17   MS. LOIS MORRISON: If the --

18   MR. BYRON WILLIAMS: I believe your

19 evidence yesterday was you'd have a hard time

20 recommending that.

21   MS. LOIS MORRISON: I -- not that I

22 would have a hard time recommending it; I would have a

23 hard time selling it. Again, it's a business case

24 practice. Now, then at that point what we would want

25 to do is take a closer look as to what degree that has

3182

1 -- of an impact that has on the ratepayer. So if we

2 were at a point where the overall portfolio had a rate

3 impact measure of point nine-five (.95), to what extent

4 would that put upward pressure on the rates? That's

5 the type of discussion we would then enter into.

6   MR. BYRON WILLIAMS: Okay. Thank you

7 for that. Just a few last questions, not about the

8 numbers within LIEEP, but about the information that

9 you used to identify the -- the target population of

10 customers who are at LIEEP or lower and also those in

11 need of insulation, okay. Do -- just in terms of data

12 sources.

13   So in -- my understanding from your

14 discussion -- our discussion yesterday was that in

15 developing the leaf -- LIEEP assessment, both the total

16 LICO-125 population and the target population in need

17 of insulation, one (1) primary source was the 2009

18 Hydro residential survey. The -- I'll get to the First

19 Nations in a minute.

20   But that was one (1) of your sources?

21   MS. LOIS MORRISON: Yes, that's

22 correct.

23   MR. BYRON WILLIAMS: And another source

24 was your discussions with individual First Nation

25 housing representatives?

3183

 1   MS. LOIS MORRISON: For the First

 2 Nation numbers we looked at our billing system to

 3 determine the number of residential households. We

 4 then spoke with -- with representative from the

 5 community, the band housing coordinators, to augment

 6 our targets.

 7   MR. BYRON WILLIAMS: And so you would

 8 have had detailed discussions with the housing

 9 coordinators for all sixty-three (63) First Nations?

10   MS. LOIS MORRISON: The first-cut

11 target, as I mentioned, was approximately 20 percent

12 was our estimate. Then, as I mentioned, that as we

13 work with the individual communities, we are adjusting

14 that estimate either up or down, based -- in terms of

15 number of houses.

16   And so as we go forward, there's some

17 communities where we're identifying more than what we

18 had initially had thought was 20 percent, but then

19 other communities we may not be. We have not --

20 although we have contacted all sixty-three (63)

21 communities, we have not had in-depth, detailed

22 discussions with each community's housing coordinator

23 at this time.

24   MR. BYRON WILLIAMS: Ballpark, Ms.

25 Morrison, have you spoken to -- detailed discussions

1 with more than half of the housing coordinators or

2 less?

3

4   (BRIEF PAUSE)

5

6   THE CHAIRPERSON: I wonder if we could

7 maybe -- perhaps we could stand down for two (2)

8 minutes. I need to consult with Mr. Peters. So it

9 gives you more time to look through your documents.

10 Okay. So let's stand down for just two (2) minutes.

11

12 --- Upon recessing at 9:54 a.m.

13 --- Upon resuming at 10:00 a.m.

14

15   MR. BYRON WILLIAMS: Mr. Chair, I

16 believe that you're...

17   THE CHAIRPERSON: Thank you. Please go

18 ahead.

19   MS. LOIS MORRISON: Thank --

20

21 CONTINUED BY MR. BYRON WILLIAMS:

22   MR. BYRON WILLIAMS: Do you remember my

23 question, Ms. Morrison?

24   MS. LOIS MORRISON: Well, it -- I

25 apologize. But, yes, it was so long ago. The three

3185

1 thousand (3,000) First Nation homes that we have

2 targeted to complete is, as we mention, a high-level

3 estimate based on an approximation of 20 percent of the

4 fourteen thousand (14,000) homes.

5   Now, we have completed, for all sixty-

6 three (63) of the First Nation homes -- sorry, of the

7 sixty-three (63) First Nation homes (sic), there are

8 seven (7) that we have not done detailed walkthroughs

9 or discussions with the housing coordinators. And

10 there are three (3) that were flooded that are -- will

11 all be getting new homes and will therefore not be

12 addressed through this program at all.

13   So given what we've been seeing, there

14 have been some puts and takes, but we have not yet

15 finalized what that number will be. But it is still

16 coming in around that three thousand (3,000) mark.

17   MR. BYRON WILLIAMS: Thank you for

18 that. And just a final question, in terms of the --

19 the LIEEP area. In terms of, again, developing its

20 assessment of the -- the population and the -- the

21 target market, would it be fair to say that CMHC data,

22 such -- such as the CMHC assessment of Manitoba

23 households in core housing needs, has not been a

24 primary component of your information?

25   MS. LOIS MORRISON: You are correct.

3186

1   MR. BYRON WILLIAMS: And -- and just

2   for greater clarity, you would not have relied upon the

3   -- the CMHC Housing in Canada Online database or its

4   rental market reviews?

5   MS. LOIS MORRISON: Not in det -- det -

6   - not in determining the targets, no.

7   MR. BYRON WILLIAMS: Thank you. I want

8   to turn to a -- a -- an area that we -- we canvassed

9   very briefly yesterday, and -- and that is the subject

10   of independent evaluations. And I'll let you get your

11   notes, Ms. Morrison.

12   Just in terms of simplistic definitions,

13   can we divide independent evaluations into -- into two

14   (2) types, one (1) being an impact evaluation and one

15   (1) being a process evaluation? Are those terms you

16   can work with?

17   MS. LOIS MORRISON: Yes.

18   MR. BYRON WILLIAMS: And when we talk

19   about an independent impact evaluation, that would be

20   an effort to provide an outside review of a programs

21   accomplishments, numerically or otherwise?

22   MS. LOIS MORRISON: Yes, it would

23   identify energy savings, cost effectiveness, yes.

24   MR. BYRON WILLIAMS: And when we talk

25   about a process evaluation, that would be targeted at

3187

1 providing an independent review of the program's

2 operations: its strengths and its -- and its weaknesses

3 and areas of potential -- for potential improvement,

4 agreed?

5   MS. LOIS MORRISON: That is correct.

6   MR. BYRON WILLIAMS: And certainly in -

7 - you'll agree with me that in the last general rate

8 application, Manitoba Hydro -- and I'm sure you have

9 your action plan at -- at hand. But Manitoba -- I

10 could probably share it with you.

11

12   (BRIEF PAUSE)

13

14   MR. BYRON WILLIAMS: If you are looking

15 for a reference, it's page 10, Ms. Morrison. That's

16 not in the materials before the -- the panel.

17   In its action plan relating to DSM filed

18 in the last general rate application, Manitoba Hydro

19 had indicated that you intended to hire a third party

20 to conduct an evaluation of one (1) of your Power Smart

21 programs during that upcoming year.

22   Do you recall that?

23   MS. LOIS MORRISON: Yes.

24   MR. BYRON WILLIAMS: And I take it that

25 was done?

 1   MS. LOIS MORRISON: No, we did not

 2 complete that.

 3   MR. BYRON WILLIAMS: So since the --

 4 the 2010/'11 general rate application, there have not

 5 been ind -- independent evaluations of the specific --

 6 any of the specific programs of Manitoba Hydro?

 7   MS. LOIS MORRISON: You may recall that

 8 the 2010/'11 rate application did take a little longer

 9 than normal applications.

10   MR. BYRON WILLIAMS: Absolutely.

11   MS. LOIS MORRISON: And so the time

12 period that we're looking at is a little bit shorter

13 than a two (2) year period. And what we had mentioned,

14 that we were at that time reviewing the potential do

15 so. And what has happened is, I have to admit, it's

16 related to staffing resources. The individual that had

17 been tasked with that went to a new position, and it

18 took us time to backfill that position. And other

19 resources were then allocated to managing the contract

20 with our DSM market potential study, which I can attest

21 is a very large undertaking, in terms of managing that

22 contract and the process.

23   So in terms of resources, they've been

24 allocated in other areas. It's still one (1) of the

25 areas that we will be looking at whether there's

 1 opportunities.

 2   MR. BYRON WILLIAMS: We're just moving

 3 along, Ms. Morrison. That cut my work. If we could

 4 just turn your attention to CAC Exhibit 10, which is

 5 the excerpt from the BC Hydro draft 2012 integrated

 6 resource plan.

 7

 8   (BRIEF PAUSE)

 9

10   MR. BYRON WILLIAMS: And by the looks,

11 Ms. Morrison, of that thick document that you have

12 there, you've got the whole plan there?

13   MS. LOIS MORRISON: Yes.

14   MR. BYRON WILLIAMS: Just in terms of

15 the BC Hydro's -- this small excerpt from its draft DSM

16 implementation plan, and directing your attention to

17 the -- under Section 2.2 on the second page, just in --

18 in describing -- to -- to back up, Ms. Morrison, on the

19 next page there's a couple of tables, Table 5 and Table

20 6.

21   Do you see those?

22   MS. LOIS MORRISON: Yes.

23   MR. BYRON WILLIAMS: And when we look

24 under Section 2.2, what it tells us is that those

25 tables are estimates of the energy and capacity -- ca -

3190

1 - capacity savings estimated for the DSM plan at

2 roughly the ten (10) year mark, or 2021, agreed?

3   MS. LOIS MORRISON: Yes.

4   MR. BYRON WILLIAMS: And certainly, in

5 the draft DSM plan we can agree, as well, that BC

6 Hydro's planning to -- to deliver an increasing volume

7 of energy and capacity savings over a twenty (20) year

8 period, agreed?

9   MS. LOIS MORRISON: Agreed.

10   MR. BYRON WILLIAMS: And --

11   MS. LOIS MORRISON: Actually, it's

12 identified here as a ten (10) year period, not a twenty

13 (20) year period.

14   MR. BYRON WILLIAMS: Fair enough. Now,

15 certainly in -- in terms of the action plan, in terms

16 of DSM that Manitoba Hydro presented in the last

17 general rate application, it indicated it was going to

18 undertake a detailed comparison of its programming to

19 BC Hydro's programming, correct?

20   MS. LOIS MORRISON: Yes. We said that

21 we would be using a more appropriate benchmark for us,

22 which would be looking at other juris -- what other

23 jurisdictions, such as BC Hydro, have to offer, in

24 terms of programming.

25   MR. BYRON WILLIAMS: And that was an

 1 activity that you've undertaken?

 2   MS. LOIS MORRISON: We have looked at

 3 what programs BC Hydro offers compared to ours, and

 4 where are some of the differences and where are some of

 5 the opportunities.

 6   MR. BYRON WILLIAMS: And just -- just

 7 in terms of the energy savings presented in Table 5 and

 8 Table 6, it's a draft document, but would they be

 9 consistent with your understanding of BC Hydro's plans?

10   MS. LOIS MORRISON: Yes.

11   MR. BYRON WILLIAMS: Ms. Morrison, in -

12 - in terms of their propo -- anticipated cumulative

13 energy savings, one (1) -- one (1) line item caught my

14 client's eyes was -- which was with regard to the

15 residential customer and rate structures.

16   And you're aware, Ms. Morrison, that BC

17 Hydro has implemented an inverted rate for residential

18 customers?

19   MS. LOIS MORRISON: Yes, they've

20 implemented a conservation rate.

21   MR. BYRON WILLIAMS: And would I be

22 correct in suggesting to you that this table suggests

23 that in terms of their, in quotation marks,

24 "conservation rates," they are expecting both

25 cumulative energy and capacity savings, in -- in terms

3192

1 of rate structure, from the commercial and industrial

2 sectors, but they're not -- they're not planning, at

3 least in this information, for savings from the

4 residential structure -- the residential customers, in

5 terms of rate structure?

6   MS. LOIS MORRISON: Actually, they are

7 anticipating savings, and they have projected them.

8 The way it works is that -- or the way they are

9 approaching it is the savings are identified based upon

10 the fact that the actual rate was implemented, not

11 taking future savings as a result of just increasing

12 rates, unless they do a fundamental change again to the

13 structure.

14   So similar to conser -- other

15 initiatives, what they've done is those savings are

16 saved already, so they would not be reported in future-

17 going savings. Like they -- they've already basically

18 identified those as claimed savings within their

19 activity to date, might be a better way to describe it,

20 similar to how we do it with our programs to date. We

21 look going forward. They -- going forward, unless they

22 plan a fundamental structural change to their rate

23 again, they are not going to be adding new savings as a

24 result of the rate.

25   MR. BYRON WILLIAMS: That's very

3193

1 helpful. So in terms of -- why the difference between

2 residential and -- as compared to commercial and

3 industrial? Are you aware?

4   MS. LOIS MORRISON: Those are rates

5 that are yet to be implemented.

6   MR. BYRON WILLIAMS: And in terms of

7 their estimates in terms of savings, are -- are you

8 aware of what they are for the residential?

9   MS. LOIS MORRISON: Approximately 500

10 gigawatt hours.

11

12   (BRIEF PAUSE)

13

14   MR. BYRON WILLIAMS: That's very

15 helpful. Thank you. Ms. Morrison, if we can turn to

16 CAC Exhibit 11?

17

18   (BRIEF PAUSE)

19

20   MR. BYRON WILLIAMS: You'll -- you'll

21 agree with me that -- that this appears to be an

22 excerpt from someone's bill?

23   MS. LOIS MORRISON: Agreed.

24   MR. BYRON WILLIAMS: And at the top we

25 see consumption for this particular household -- let's

 1 call it the Williams household -- for both electricity

 2 and for natural gas?

 3   MS. LOIS MORRISON: Yes.

 4   MR. BYRON WILLIAMS: And what Manitoba

 5 Hydro provides to its -- its ratepayers, in terms of

 6 information, is a comparison month by month in terms of

 7 -- between the current year and the previous year, in

 8 terms of consumption?

 9   Is -- is that correct?

10   MS. LOIS MORRISON: On the mailed

11 bills, yes. There's more detail available with the

12 MyBill option.

13   MR. BYRON WILLIAMS: And that's

14 fabulous. And -- and can you detail to a small degree

15 -- apparently the -- the Chair will know this but I may

16 not -- in terms of what's on the MyBill?

17   MS. LOIS MORRISON: I can't recall but

18 -- specifically. I think it's around two (2) -- two

19 (2) or three (3) years of detail that you can do

20 comparisons with.

21   MR. BYRON WILLIAMS: Now, Ms. Morrison,

22 if -- if -- and just going to back to the residential

23 customers who receive it by paper as opposed to

24 electronically, they would get this kind of information

25 every second month, is this right, or would they get it

1 each month?

2   MS. LOIS MORRISON: If they're on

3 monthly billing, they would get it every month, and it

4 would include the estimated value for the month if it

5 was an estimated read.

6   MR. BYRON WILLIAMS: Now, in -- in

7 terms of the information Hydro provides, would it be

8 fair to say that one (1) thing it doesn't provide is an

9 expla -- explanation of the reasons associated with

10 changes in month to month consumption?

11   MS. LOIS MORRISON: We don't provide

12 that on the bill, no.

13   MR. BYRON WILLIAMS: So if -- if, for

14 example, I was trying to get insight into, you know,

15 why my bill in November was higher than my bill in --

16 in October, you'll agree with me that one (1) thing

17 that would be helpful would be to know how much of that

18 would be weather related and how much of it would be

19 related to my -- my own consumption?

20   MS. LOIS MORRISON: Some customers may

21 be interested in having that type of information.

22   MR. BYRON WILLIAMS: And based upon

23 your knowledge of the marketplace, you'd agree with me

24 that there are services out there where customers can

25 get a -- an explanation of the variance from month to

3196

1 month, in terms of how much is related to weather and

2 how much is related to their personal choices?

3   MS. LOIS MORRISON: Are -- are --

4   MR. BYRON WILLIAMS: Are you -- sorry,

5 Ms. Morrison, I'll -- I'll let you answer, and then if

6 you want me to ask to question...

7   MS. LOIS MORRISON: Talking in a more -

8 - in a more broad sense, if a customer has a concern or

9 -- or wants to have a better idea as to what the

10 weather impact is on their bill month to month, they

11 can call -- they can contact our contact centre, they

12 can email us, and we would provide that information

13 with descriptors as to what the impact of, possibly,

14 weather was. That's information that we provide

15 through our contact centre on a relatively regular

16 basis, especially during the winter months. We tell

17 them what the degree -- differences in degree day

18 heatings were so they can better answer customers'

19 inquiries.

20   MR. BYRON WILLIAMS: I guess what I was

21 asking Ms. -- Ms. Morrison, are you familiar with the

22 offerings in the market place by firms such as OPower,

23 or NEST, or Energy -- Energy Star?

24   MS. LOIS MORRISON: Yes, we're well

25 aware of them.

3197

 1   MR. BYRON WILLIAMS: And would I be

 2 accurate in suggesting to you that if I was a

 3 subscriber to, for example, NEST, I would be able to

 4 get a report comparing my consumption in this month to

 5 my consumption in the previous months and telling me

 6 how much of it was weather related -- the changes and

 7 how much of it were related to the efficiency with

 8 which I -- I manage my home resources?

 9   MS. LOIS MORRISON: I'm not familiar as

10 -- sorry, I'm not as familiar with the NEST offering.

11 But I understand that there are service providers out

12 there who will provide that level of information and

13 then also provide a comparison to your neighbour or

14 your -- your -- your -- I guess -- your -- your

15 neighbour who is somewhat like you. It may not be your

16 direct neighbour.

17   MR. BYRON WILLIAMS: And so what you're

18 telling my client is that there are services out there

19 by which a consumer can get insight into the average

20 usage of comparable houses of a comparable size, and

21 also insight into the usage of efficient homes of a

22 comparable size?

23   MS. LOIS MORRISON: They -- the -- the

24 service offerings vary. But, yes, that's one (1) of

25 the things that can be provided at a significant -- at

 1 a cost.

 2   MR. BYRON WILLIAMS: And leaving aside

 3 issues of cost for the moment, can we agree that for --

 4 for the consumer who wishes to be conscious of their

 5 choices and the consequences of their choices, this

 6 type of information could be of some utility?

 7   MS. LOIS MORRISON: Yes.

 8   MR. BYRON WILLIAMS: Now, just --

 9 that's the residential marketplace. I'm curious, in

10 terms of your offerings or the type of billing

11 information that you provide to commercial operations,

12 would a businessman or woman seeking information on

13 their -- the reasons for the variations in their --

14 their monthly usage pattern, would they be able to get

15 that type of information from their Hydro bill?

16   Do you offer an OPower or a NEST or

17 Energy Star-type service to your commercial clients,

18 ratepayers?

19   MS. LOIS MORRISON: We don't offer a

20 comparable service to the commercial customers. We do

21 offer, on a fee-for-service basis, access to EnerTrend,

22 which is a service to industrial customers, large

23 customers, where they can monitor their own energy

24 consumption on a day-to-day, minute-to-minute level.

25 They pay for that service and they can -- it helps them

3199

 1 manage their own loads.

 2   MR. BYRON WILLIAMS: And if we crystal-

 3 ball-gaze Manitoba Hydro three (3) or four (4) years

 4 out, are these type of NEST-type services or OPower-

 5 type services, are they ones that we can reasonably

 6 contemplate being in Manitoba Hydro's futures?

 7   MS. LOIS MORRISON: It's one (1) of the

 8 initiatives that I mentioned. When I -- when I spoke

 9 earlier today about initiatives that we've investigated

10 and we've looked at the costing of, which we, although

11 Mr. Byr -- Mr. Williams would have liked to of us not

12 talk about costing, we do look at the costing of these

13 initiatives. And at this point in time, that

14 initiative doesn't pass the MRC.

15   However, it is one (1) of the ones that

16 we're keep on -- on the -- the non-existent list, or

17 the list of measures that we're continuing to watch

18 for.

19   MR. BYRON WILLIAMS: And don't

20 misunderstand my client's intentions. We -- we'll be

21 talking about cost a fair bit in this hearing, perhaps

22 more with Mr. Rainkie.

23   In -- in terms of your investigations of

24 this particular type of offering, and I correct in

25 suggesting you've talked to one (1) vendor?

3200

1   MS. LOIS MORRISON: Yes, we talked to

2 one (1) vendor who has a significant market share. And

3 based upon their proposals as to what could be achieved

4 in the marketplace, we've done a -- an -- an analysis

5 of the benefit at this time.

6   MR. BYRON WILLIAMS: I'm going to be

7 turning to CAC Exhibit 8. And, Mr. Chair, I think

8 we'll be done quite soon, so I -- I'd suggest that

9 unless someone urgently needs a break, that we just

10 move on through, subject to your guidance.

11   THE CHAIRPERSON: Agreed.

12

13 CONTINUED BY MR. BYRON WILLIAMS:

14   MR. BYRON WILLIAMS: So CAC Exhibit 8

15 is the supporting materials from January 8th, so that's

16 -- and page 45 so -- is the...

17

18   (BRIEF PAUSE)

19

20   MR. BYRON WILLIAMS: Page 45 should

21 have an excerpt -- or the response to CAC-1-58. And

22 we'll come to that in just one (1) second. The other

23 thing, Ms. Morrison, I don't think you need, but if you

24 wanted to have available, I just have a couple

25 questions about your load forecast.

3201

1   The -- you can probably accept this

2 information subject to check, but the -- the page that

3 I would be referring to in your 2012 load forecast is

4 page 56. And I -- I don't think the panel needs that -

5 - that page, but certainly that's the page.

6

7   (BRIEF PAUSE)

8

9   MR. BYRON WILLIAMS: Now, Ms. Morrison,

10 if I was to look in -- deep into your load forecast at

11 page 56, would I be correct in -- in suggesting to you

12 that in terms of electricity prices for the residential

13 customer forecast, you -- your assumption was that the

14 nominal electricity price was forecast to increase by 2

15 percent in 2012/'13, 3.5 percent per year until

16 2023/'24, and then increase by 2 percent nominally per

17 year throughout the rest of the forecast period?

18   MS. LOIS MORRISON: That is correct.

19   MR. BYRON WILLIAMS: And as Mr. Rainkie

20 and I discussed yesterday, we can agree that the actual

21 interim increases for 2012/'13 are higher than the --

22 the 2 per -- 2 percent in this forecast assumption,

23 correct?

24   MS. LOIS MORRISON: That is correct.

25   MR. BYRON WILLIAMS: And in terms of

 1 the moving out beyond the -- the 2013/'14 year to the

 2 subsequent years, '14/'15, throughout the rest of the

 3 forecast, we can also agree that the indicated increase

 4 is 3.95 percent as compared to the assumptions we've

 5 discussed in -- in the 2012 load forecast?

 6

 7   (BRIEF PAUSE)

 8

 9   MR. DARREN RAINKIE: Sorry, Mr.

10 Williams, I was sidebarring with our legal counsel on

11 an outstanding undertaking just when you needed my --

12   MR. BYRON WILLIAMS: You weren't -- you

13 weren't --

14   MR. DARREN RAINKIE: -- assistance.

15   MR. BYRON WILLIAMS: You weren't

16 listening to me, Mr. Rainkie. I hope you're the only

17 one in the room.

18   MR. DARREN RAINKIE: Good thing we can

19 have a bit of levity, anyway, in this process. I think

20 we were talking about this yesterday, Mr. Peters -- Mr.

21 Williams, sorry -- is that I assume this was prepared

22 before IFF12. IFF12 has indicative rate increases of

23 3.95 percent from 2014/'15 to 2031/'32. I think this

24 had 3 1/2 percent rate increases to 2023/'24 and then 2

25 percent thereafter.

3203

 1   So just for clarity, it's -- it's a

 2 differential between 3 1/2 percent and 3.95 percent up

 3 to 2023/'24, and then a differential between 3.95 and 2

 4 percent thereafter, just -- just for clarity for the

 5 record.

 6   MR. BYRON WILLIAMS: That's fabulous.

 7 And I was going to kind of walk through that, but

 8 you've done it more elegantly than I did -- would have,

 9 Mr. Rainkie. So I thank you for that.

10   And the other difference, of course,

11 would be for the 2012/'13 year, where, rather than the

12 nominal forecast of 2 percent, the actual interim

13 granted to date are -- are in the range of 4.5 percent?

14

15   (BRIEF PAUSE)

16

17   MR. BYRON WILLIAMS: Mr. Rainkie, if

18 you look for -- on the assumptions, you'll see a 2

19 percent.

20

21   (BRIEF PAUSE)

22

23   MR. DARREN RAINKIE: Mr. Williams, I'm

24 -- I'm struggling here a bit because we've had 3 1/2

25 percent rate increase assumption in our past two (2)

3204

1 forecasts for 2012/'13. So I'm struggling where that 2

2 percent comes from in the load forecast that you were

3 chatting with Ms. -- Ms. Morrison about, unless I'm

4 missing something here. We've -- we've had 3 1/2

5 percent in our forecast for '12/'13 for a while.

6   MR. BYRON WILLIAMS: I was struggling,

7 as well, Mr. Rainkie. But it -- it's your number,

8 right? It's not -- it's not --

9   MR. DARREN RAINKIE: It's our number.

10 But I think we're going to have to look at the context

11 of that particular line, Mr. Williams, because it

12 doesn't afford with my memory.

13   MR. BYRON WILLIAMS: So -- so, Ms.

14 Morrison, I'm going to ask you by way of undertaking to

15 double-check whether the assumption for the 2012 load

16 forecast for the -- for resident -- for the residential

17 sector, in terms of the nominal electricity price

18 increase, was 2 percent, as presented on page 56 of the

19 load forecast, or -- or whether it was some other

20 figure.

21   Would you undertake to do so?

22   MS. LOIS MORRISON: Yes, we'll verify

23 that number for you.

24

25 --- UNDERTAKING NO. 66:   Manitoba Hydro to verify

3205

1   whether the assumption for

2   the 2012 load forecast for

3   the residential sector, in

4   terms of the nominal

5   electricity price increase,

6   was 2 percent, as presented

7   on page 56 of the load

8   forecast, or whether it was

9   another figure

10

11 CONTINUED BY MR. BYRON WILLIAMS:

12   MR. BYRON WILLIAMS: Now, Ms. -- Ms.

13 Morrison, just for the purposes of our discussion --

14 because the aim of this part of the discussion is to

15 understand how proposed rate increases may affect the

16 residential load forecast.

17   So could we, for the purposes of our

18 discussion, assume the figures that you've presented

19 here?

20   MS. LOIS MORRISON: Yes.

21   MR. BYRON WILLIAMS: And then taking

22 the information that Mr. Rainkie has -- has provided

23 and you have provided of the -- as opposed to what's

24 presented in this load forecast, if we were to plug in

25 for 2013 -- excuse me, for 2012/'13, 4.5 percent, and

3206

1 then for all subse -- and then for 2013 to plug in 3.5

2 percent, and then for all subsequent years to plug in

3 3.95 percent.

4   And focussing solely on Hydro's estimate

5 on the -- of the growth in the residential load, all

6 other things being equal, would we expect the load

7 forecast for residential customers to diminish?

8

9   (BRIEF PAUSE)

10

11   THE CHAIRPERSON: Mr. Williams, what

12 document are you reading from, please?

13   MR. BYRON WILLIAMS: Mr. Chair, I was

14 referring to the 2012 electric load forecast, and on

15 page 56. And if the panel -- I'm not sure -- I -- I

16 could provide my -- my single version. I don't think I

17 require it anymore if you -- or if you wish to look it

18 up. I apologize, I -- I didn't provide it.

19

20   (BRIEF PAUSE)

21

22   MS. ODETTE FERNANDES: Mr. Chairman, if

23 it would assist you, it is Attachment 1 to Manitoba

24 Hydro's submission for interim rates effective

25 September 1st. So it should be in that package of

3207

1 materials.

2   MR. BYRON WILLIAMS: Thank you, Ms.

3 Fernandes.

4

5   (BRIEF PAUSE)

6

7   MR. BYRON WILLIAMS: Mr. Chair, the --

8 the heading should say, "Assumptions," on page 56, if -

9 - and we -- we were referring about halfway down the

10 page to electricity prices.

11

12   (BRIEF PAUSE)

13

14   MR. BYRON WILLIAMS: Okay. Okay. Mr.

15 Chair, when we're ready, if you...

16   THE CHAIRPERSON: We are ready. Thank

17 you.

18   MR. BYRON WILLIAMS: And let me

19 apologize to the panel again for not providing.

20   MS. LOIS MORRISON: So, Mr. Williams,

21 what you were asking is if -- if all things were held

22 constant, if the electricity prices were to go up,

23 would we see -- what change would we see in our

24 residential forecast for electricity.

25   So, the way our model is set up is it's

3208

1 based on the ratio of pri -- of gas, the price of gas

2 to electricity, because our electricity prices have

3 been so increm -- slightly incremental, in terms of the

4 increasing amount that we haven't, in our modelling,

5 been able to identify specific price-elasticity to

6 electricity, because its been very minor -- very

7 stable, uniform type of approach to the increases to

8 the rates; whereas, gas does, as we know, move around

9 quite a bit.

10   So, if you held everything constant and

11 recognize there are a number of inputs to our -- our

12 model for our load forecast, and the natural gas price

13 were to stay constant and electricity prices were to go

14 up, therefore, creating a greater differential between

15 the two (2), we would see some change in our elec --

16 our electric load forecast. We would of course see few

17 -- we would anticipate fewer people installing elec --

18 electric heat, so that would drop our load forecast.

19

20 CONTINUED BY MR. BYRON WILLIAMS:

21   MR. BYRON WILLIAMS: And we'll thank

22 you for that.

23   You would see fewer people installing

24 electric heat. Would your model anticipate, as well,

25 that residential customers, whether using electricity

3209

1 for lighting or for heating, would also react to price

2 increases by dampening their demand?

3

4   (BRIEF PAUSE)

5

6   MS. LOIS MORRISON: That is only used

7 for the fuel competition for space heat and water heat,

8 that factor. But I will mention that because of the

9 way our -- as mentioned, we do incorporate improvements

10 to codes and standards and that within our residential

11 forecast, so the average use is still going down to

12 recognize -- for certain components or of certain end-

13 uses, to recognize improvements to standards.

14   But no, it does not reflect a

15 behavioural reduction in activity as a result of a --

16 of a price signal, specifically.

17   MR. BYRON WILLIAMS: And I may have a

18 question for Mr. Wiens, in -- in just a second but let

19 me just stay with the load forecast relating to

20 residential customers for one (1) -- one (1) more

21 second.

22   Ms. Morrison, do we also have in the

23 natural gas market -- is the price of natural gas

24 stable, as compared to the time of your forecast? Is

25 it -- is it higher? Where has natural gas gone since

3210

1 your -- your -- your forecast? You've described to me

2 that you're modelling a relationship between natural

3 gas and electricity prices, at least to some mall

4 degree, and I'm trying to understand directionally

5 where natural gas has gone.

6   MS. LOIS MORRISON: Although we can't

7 provide you with our price forecast for natural gas,

8 the price forecast that was used in this model reflects

9 the current market, per se.

10   MR. BYRON WILLIAMS: So, in terms of

11 the relationship between electricity and -- and natural

12 gas, reflect -- reflect in this forecast, gas has

13 stayed the same, and -- and assuming Hydro gets what

14 it's looking for, electricity, the -- the price

15 increases related to that electricity would have

16 increased, as compared to the assumptions in this

17 forecast?

18   MS. LOIS MORRISON: Theoretically, yes.

19 I can't tell you the -- the degree of change.

20

21   (BRIEF PAUSE)

22

23   MR. BYRON WILLIAMS: Let me ponder

24 that; and I'll see if I have any questions for you on

25 this point, Mr. Wiens.

3211

1   I want to turn to the Manitoba Hydro's

2 forecast of general service customers as related -- or

3 set out in CAC/MH 1-58, which would be page 45. Oh,

4 Exhibit CAC-8.

5

6   (BRIEF PAUSE)

7

8   MR. BYRON WILLIAMS: In terms of the

9 load forecast of Manitoba Hydro, as it relates to

10 general service customers, Ms. Morrison, would I be

11 correct in suggesting to you that your econometric

12 models do not inc -- envision or include a -- a

13 relation -- an expectation that changes in electricity

14 prices would -- would have an impact in terms of

15 choices -- or in terms of demand from general service

16 customers?

17

18   (BRIEF PAUSE)

19

20   MS. LOIS MORRISON: In doing the

21 analysis to identify the components that most greatly

22 impact customer con -- consumption in that category,

23 the ones that drive it -- the -- the -- basically, the

24 items that fall out of the analysis that have the

25 greatest impact would be the ones noted in -- in the

3212

1 response to the IR, which is the number of customers,

2 and Manitoba's GDP. Those factors have more of an

3 influence on how much a commercial customer uses, or

4 how many new commercial customers are coming onto our

5 system, than the electricity prices.

6   Primarily again, it's going to come from

7 the fact that -- that it's -- it's -- we've had such

8 uniform gradual-based rate increases that to -- to look

9 at our experience in the marketplace doesn't drive out

10 those as being the indicators. Essentially, when you

11 look at the behaviour of those customer groups, those

12 customer groups are primarily driven more so by GDP and

13 the number of residential customers.

14   MR. BYRON WILLIAMS: But to drive down

15 to the bones, in terms of your economic -- econom --

16 econometric modelling for THE general service

17 customers, am I correct in suggesting to you that you

18 do not model the reaction of customers in terms of

19 their demand to price signals?

20   MS. LOIS MORRISON: You're correct.

21   MR. BYRON WILLIAMS: So, with regard to

22 the general service customers and the 2012 load

23 forecast, there would not be any expectation built into

24 the econometric modelling that demand would be dampened

25 by price increases?

3213

 1   MS. LOIS MORRISON: That is correct.

 2   MR. BYRON WILLIAMS: Ms. Morrison, in -

 3 - in terms of your response to CAC First Round 1-58,

 4 you make it clear that Manitoba Hydro has explored the

 5 -- whether to date there has been a statistically

 6 significant relationship between general service

 7 customer's demand and price changes.

 8   Hydro's done that analysis?

 9   MS. LOIS MORRISON: Yes.

10   MR. BYRON WILLIAMS: And your

11 conclusion to date is there -- that there is not a

12 statistically significant relationship, based upon the

13 ana -- based upon information from 1990 to -- to date?

14   MS. LOIS MORRISON: That is correct.

15   MR. BYRON WILLIAMS: And if my clients

16 are interested in -- in exploring Manitoba Hydro's

17 reasoning be -- behind this conclusion, would it be

18 possible for Manitoba Hydro to undertake to provide the

19 data in support of that analysis, a narrative of

20 Hydro's analysis and the data from any statistical

21 tests that Manitoba Hydro may have employed in con --

22 in concluding that there was not a statistically

23 significant relationship between price and general

24 service customer demand?

25

3214

1   (BRIEF PAUSE)

2

3   MS. LOIS MORRISON: Yes, Mr. Williams,

4 we can undertake to do so.

5

6 --- UNDERTAKING NO. 67:   Manitoba Hydro to provide

7   the data in support of the

8   analysis on whether to date

9   there has been a

10   statistically significant

11   relationship between

12   general service customer's

13   demand and price changes; a

14   narrative of Hydro's

15   analysis; and the data from

16   any statistical tests that

17   Manitoba Hydro may have

18   employed in concluding that

19   there was not a

20   statistically significant

21   relationship between price

22   and general service

23   customer demand

24

25 CONTINUED BY MR. BYRON WILLIAMS:

3215

1   MR. BYRON WILLIAMS: Now -- and -- and

2 I thank you for that. And has Manitoba Hydro done a

3 similar analysis for residential customers, in terms of

4 whether there was a statistically significant

5 relationship between price and demand?

6

7   (BRIEF PAUSE)

8

9   MS. LOIS MORRISON: As mentioned, we

10 use the price differential to determine the number of

11 customers following by fuel choice -- by fuel source.

12 It's not how we approach the per household consumption,

13 so we -- to -- we can't tie it to the kilowatt the same

14 way that we do the commercial sector analysis. So it

15 would be a little more difficult to try and -- and

16 provide you with something that would be in a similar

17 context.

18   MR. BYRON WILLIAMS: And just -- and --

19 and I -- I thank Manitoba Hydro for -- for their

20 undertaking. And just to conclude, in terms of the

21 general service customers, the logic flowing from the

22 econometric models that Manitoba Hydro currently

23 employs for their load forecast, as it relates to

24 general service customers, would be that, all other

25 things being equal, a 5 percent rate increase would not

3216

1 be expected to influence general service mass market

2 load any more than a 2 percent rate increase?

3

4   (BRIEF PAUSE)

5

6   MS. LOIS MORRISON: Mr. Williams,

7 theoretically, based on your hypothetical situation,

8 obviously we would anticipate it to be -- there to be

9 some measure of influence. However, based on our data

10 analysis to date, all of our regression analysis to

11 date, the -- that weather impact has not been

12 significant enough to denote -- sorry, the -- the price

13 impact has not been significant enough to denote.

14   So I would not agree that it is -- that

15 it -- that it wouldn't present a change, but I'm saying

16 that in amongst all the other things that are affecting

17 the con -- the -- the forecast for commercial sector,

18 it's small.

19   MR. BYRON WILLIAMS: And just to follow

20 through one (1) -- one (1) more step though, what I was

21 asking is: Are you modelling it, the impact?

22   And I think your -- your answer is no.

23   MS. LOIS MORRISON: No, it's not

24 specifically being modelled.

25   MR. BYRON WILLIAMS: Mr. Chair and

3217

1 members of the panel, I thank the panel for their time.

2 And Ms. Morrison, I thank you for your time. And in

3 particular, the information you brought up this morning

4 to -- to clarify the record from yesterday is -- is

5 sincerely appreciated.

6   Mr. Chairman, I have some obligations at

7 the University of Winnipeg that I -- that I'm late in

8 fulfilling. So I'm -- I'm asking the -- I'm going to be

9 excusing myself for the res -- remainder of the day.

10   THE CHAIRPERSON: Thank you, Mr.

11 Williams, all the best with that undertaking. And I

12 hope you can make it to the University fairly quickly.

13 I wonder, before we recess, if I could ask Manitoba

14 Hydro to undertake a couple of things.

15   The first thing is to -- to file a

16 detailed -- with respect to the instantaneous electric

17 water heaters, I wonder if you could undertake to file

18 detailed MRC, RIM, and LUC calculations for that

19 option, including all of your assumptions that were

20 considered as part of the calculations.

21   And the second undertaking is with

22 respect to the Water & Energy Saver Program, whether

23 you could undertake to file the detailed MRC

24 calculation, the RIM test, and the LUC results for that

25 particular option.

3218

1   MS. LOIS MORRISON: We -- we can do so.

2 The -- the measure analysis for the Water & Energy

3 Saver Program are included in our programs already, so

4 it would be in -- but we can provide it in -- in -- in

5 its own detail.

6   THE CHAIRPERSON: Okay.

7   MS. LOIS MORRISON: Sorry, one (1)

8 question. You're referring to instantaneous electric

9 water heaters, or are you referring to the tankless

10 natural gas water heaters?

11   THE CHAIRPERSON: Well, I think -- my

12 interest is the tankless gas ones in particular.

13   MS. LOIS MORRISON: Okay.

14   THE CHAIRPERSON: But have you -- have

15 you got -- I think I understood you to say there's a

16 separate set of results for electricity?

17   MS. LOIS MORRISON: Yes.

18   THE CHAIRPERSON: Why don't you si --

19 could you undertake to file those as well please?

20   MS. LOIS MORRISON: Yes.

21

22 --- UNDERTAKING NO. 68:   Manitoba Hydro to file

23   detailed MRC, RIM, and LUC

24   calculations, including all

25   assumptions that were

3219

1   considered as part of the

2   calculations, for both

3   instantaneous electric and

4   tankless natural gas water

5   heaters

6

7 --- UNDERTAKING NO. 69:   Manitoba Hydro to file the

8   detailed MRC calculation,

9   the RIM test, and the LUC

10   results for the Water &

11   Energy Saver Program

12

13   THE CHAIRPERSON: Now, just -- just one

14 (1) set -- last set of questions in relation to the --

15 the energy efficiency fund. According to the annual

16 report of March 31st, 2012, there was 20 million still

17 available in that fund.

18   And my question was whether or not all

19 of those funds have been allocated already to future

20 projects?

21   MS. LOIS MORRISON: Yes, the fund has

22 been fully committed, which means that those funds have

23 been allocated to -- or specifically earmarked for

24 individual projects. So although the dollars may not

25 be spent in the sense that the dollars have left the

3220

1 building, they have been put to the side and allocated

2 to support specific initiatives.

3   THE CHAIRPERSON: As a consequence,

4 some potential applications that might yield some, for

5 example, compelling public policy gains, basically,

6 they would not be able to access the -- the fund for

7 the time being, because the fund is fully allocated?

8   MS. LOIS MORRISON: Yes. However,

9 there are two (2) options that remain available, one

10 (1) being either making a redistri -- either

11 redistributing within the fund and recognizing that --

12 for example, when we allocate money within the fund, we

13 allocated money to support to ecoENERGY Program, and we

14 made an estimate of what we would need to do so to

15 support that fund.

16   If the participation doesn't make full

17 use of that, there's dollars left over that can be

18 reallocated within the fund to other initiatives. And

19 we have done that to support -- once -- once the

20 project is done, if it didn't use all the money that

21 was allocated we -- we move it back into being

22 available to other projects.

23   The other option, as we discussed

24 earlier, is that the board of Manitoba Hydro, in

25 consultation with the Minister, can input new funds.

3221

1   THE CHAIRPERSON: I guess, you know,

2 looking at the options available to this panel, I mean,

3 one (1) option that's available would be for this panel

4 to allocate a portion of the allocated rates, or the

5 awarded rates, to supplement the fund?

6   MS. LOIS MORRISON: I believe I need a

7 legal opinion on that.

8

9   (BRIEF PAUSE)

10

11   THE CHAIRPERSON: I'm not looking for

12 an answer right now, but -- but perhaps you could

13 consider that during the -- the break, the recess, and

14 -- and I will reflect on whether I want to pursue that

15 anymore. So let's recess for ten (10) minutes.

16

17 --- Upon recessing at 10:58 a.m.

18 --- Upon resuming at 11:18 a.m.

19

20   THE CHAIRPERSON: I believe everyone is

21 in position. We have some documents to -- to

22 recognize.

23   MS. ODETTE FERNANDES: Thank you, Mr.

24 Chairman. The first document is a response to

25 Undertaking number 52, taken at transcript page 2,439.

 1 And it was with respect to sourcing the residential

 2 consumption data in various major Canadian cities for

 3 homes that are non-electric. That would be Manitoba

 4 Hydro Exhibit number 66.

 5

 6 --- EXHIBIT NO. MH-66:   Response to Undertaking 52

 7

 8   MS. ODETTE FERNANDES: And we also have

 9 a response to Undertaking number 43, taken at

10 transcript page 2,124. And that was for Manitoba Hydro

11 to provide either written materials or the link to

12 recent decisions by the ASA -- IASB regarding the

13 interim standard for rate-regulated accounting. And

14 that would be Manitoba Hydro Exhibit number 67.

15

16 --- EXHIBIT NO. MH-67:   Response to Undertaking 43

17

18   THE CHAIRPERSON: Thank you. Before we

19 -- I'm sorry...

20   MS. ODETTE FERNANDES: Sorry. Just one

21 (1) more. This morning there was an undertaking taken

22 with respect to the discrepancy between the 4.5 percent

23 rate increase and the 2 percent referenced in the load

24 forecast at page 56. Mr. Rainkie would like to speak

25 to that.

3223

1   MR. DARREN RAINKIE: Thanks, Mr.

2 Chairman. It's too bad that Mr. Williams isn't here to

3 hear it, but I'm sure he will -- he'll review the

4 transcript. I think it was an issue -- I'm not sure

5 I'd call it a discrepancy -- an issue of timing.

6   The load forecast, of course, is one (1)

7 of the documents in our planning cycle that gets done

8 early in the process. So that load forecast, I think,

9 was finished in about April of 2012. And at that

10 point, the people in the load forecasting area, they --

11 what they would have known is that there was a 2

12 percent interim rate increase on April 1st, 2012. It

13 wasn't until June of -- June 15th that we filed the

14 rate application asking for the further 2.5 percent on

15 September 1, 2012. So it's really a matter of timing.

16 Hopefully that's clear.

17   THE CHAIRPERSON: Thank you. Monsieur

18 Lafond has some questions of Ms. Morrison.

19   MR. RAYMOND LAFOND: Essentially, just

20 before the break there was a fairly lengthy discussion

21 on the issue of -- of the relationship between

22 consumption by residential consumers as well as

23 commercial consumers with -- with the price of -- of

24 the product.

25   Would you say that growth due to

3224

1 immigration, for instance, assuming immigration would

2 continue at between fifteen (15) to twenty thousand

3 (20,000) persons a year, be a much more important

4 factor?

5   MS. LOIS MORRISON: It's an important

6 factor in our overall forecast, and it -- that's what's

7 been denoted. When you look at how we do our forecasts

8 for the residential sector, it's driven by the number

9 of customers, which would be significantly influenced

10 by the immigration.

11   And it also significantly infacts --

12 significantly impacts our forecast for the commercial

13 sector, because those people come. They build houses.

14 They need to take their kids to school somewhere. They

15 work somewhere. And that then drives more commercial

16 buildings and more -- so the number of people is a --

17 is a very significant component of our forecast.

18   MR. RAYMOND LAFOND: So number of

19 people and real GDP growth would be a more important

20 factor than just the fact that the price is increasing

21 at a higher rate than inflation?

22   MS. LOIS MORRISON: What we found is

23 that those two (2) components have more of an in --

24 appear to have more of an influence within driving out

25 that change that we observe in the past. So, yes, they

3225

 1 -- there may be some influence as a result of price

 2 response. However, that is lost -- it -- it's not

 3 significant enough to be observed within the other --

 4 the other factors over -- override it basically.

 5   MR. RAYMOND LAFOND: Yesterday, Mr.

 6 Williams referred to yourself as being -- as thinking

 7 that RIM was king. And I'm sure for Mr. Rainkie it's

 8 the net income that's king, while for Mr. Schultz it's

 9 cash that's king.

10   But that being said, this paper here

11 from SEE Action, the State and Local Energy Efficiency

12 Action Network, says in terms of DSM:

13   "It is important to design programs

14   in ways that reduce program costs and

15   to maximize customer participation."

16   So they view this as the two (2) most

17 important factors. So that being said, and to satisfy

18 the three (3) kings in the empire, would you not think

19 that focussing, for instance, by going door to door or

20 other means, firstly and mostly on the programs that

21 bring the highest value or the greatest reduction of

22 cost and -- and, therefore, at the same time doing

23 that, you would maximize customer participation.

24   Would that not be the best alternate --

25 alternative to pursue in the short run?

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1   MS. LOIS MORRISON: Well, I would

2 disagree that RIM is king. I never agreed to that.

3   MR. RAYMOND LAFOND: I said you alluded

4 to the fact that --

5   MS. LOIS MORRISON: He alluded to that,

6 yes. When we are looking at a del -- a delivery

7 mechanism for a program, one (1) option is door to

8 door. And when we're doing our design we're trying to

9 find the most cost-effective way to reach customers.

10 And for some of those initiatives it might be door to

11 door.

12   But when we do do that we try to cross-

13 sell all of our programs. What I'll do is I'll go back

14 to the ecoENERGY program that the federal government

15 supported, which was an in-home audit program. And

16 under that program, you would have an in-home -- you

17 would have an auditor come to your home and identify

18 opportunities for energy efficiency upgrades. And

19 there were certain conditions that had to be met for

20 the federal government's programs.

21   But then what we did is, because we were

22 one (1) of the service agencies, we added on to what we

23 wanted done. So while they're in the home, we wanted

24 them -- they were to identify opportunities for

25 improvement for the customer. But what we did is we

3227

1 cross -- we cross-sold programs. So while they're in

2 there talking about the ecoENERGY initiative, we wanted

3 them to talk about the Home Insulation Program. We

4 wanted to talk to them about water savings

5 opportunities.

6   MR. RAYMOND LAFOND: Okay. I hear you.

7 However, your budgets are limited. So therefore, with

8 a certain amount of budget, it seems to me that going

9 out, for instance, to visit firstly all the identified

10 electrically heating -- heated houses, space heating

11 and water heating, and -- and approaching them very

12 specifically for more insulation, which is a very

13 beneficial program, would be the alternative to -- in

14 the short run to meet -- to get the most out of your

15 budget and, secondly, to increase the participation

16 rate by not looking at everything, but looking at that

17 one (1) particular factor, while the others would

18 remain incidental, because your budgets are limited in

19 -- in any one (1) year.

20   MS. LOIS MORRISON: The actual door-to-

21 door approach is actually one (1) of the most expensive

22 ways of delivering the programs. We -- you -- you --

23 we tend to be much target -- I agree that if we are

24 doing that type of approach, we should be focussing on

25 the areas. When you're -- but the difficulty with that

3228

1 is that the electrically heated customers are not in,

2 traditionally, in the high-density areas. So door-to-

3 door opportunities are usually less expensive when

4 you're in a high-density area.

5   So when you start getting into low-

6 density areas and having to go door to door, your cost

7 to delivery increases. For example, at -- going back

8 to the ecoENERGY program, one (1) of the items that we

9 funded through the Affordable Energy Fund program was

10 the cost of travel for energy auditors to go to

11 outlying areas.

12   There were two (2) other service

13 organizations in Manitoba providing the audit services.

14 However, they focussed in the high-density areas,

15 whereas Manitoba Hydro took the position that we wanted

16 all customers in Manitoba to be able to equally access

17 these programs. And we used the Affordable Energy Fund

18 dollars to pay for that component of the audit, the

19 actual travel component.

20   So we could look at that. And we do

21 look at that when we're designing a program, as to what

22 the most effective way is to reach that market. One

23 (1) of the -- actually, one (1) of the most cost-

24 effective ways that we have found to date is working

25 with our trade allies and our contractors.

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 1   So when we're wanting a program to go

 2 out to customers, they're the ones that are selling the

 3 -- the product at the time the customer needs that

 4 change out. Installations a little different. But if

 5 a renovation contractor is talking to a customer, at

 6 that time, they can up-sell them to the insulation --

 7 to the higher level of insulation.

 8   So it's capturing that opportunity at

 9 the right moment, whereas going door to door, we may

10 not be capturing that opportunity at the point the

11 customer is willing to make that investment. And so we

12 work very closely with all of the trade allies -- so

13 all the HVAC, furnace, and heating system installers --

14 so that they are actually acting as our sales agents.

15 And they -- it's a win/win/win situation: the customer

16 is getting a product that's more energy efficient; the

17 contractor is getting an up-sell, in terms of the

18 product; and we're getting the energy savings.

19   MR. RAYMOND LAFOND: I hear you. I'll

20 ask the question more generally in the sense that how

21 would you -- how does Hydro ensure that it gets the

22 most benefits from its limited budgets? In other

23 words, get to the programs that are most beneficial for

24 the customer and for Manitoba Hydro?

25   MS. LOIS MORRISON: I think it -- I

3230

 1 think we maybe need to turn it around in that we pursue

 2 all economic opportunities and develop a program to

 3 pursue those economic opportunities. And we aren't

 4 limiting the budget in the sense of if it's economic to

 5 pursue it, we try to find the best way to reach those

 6 savings within what has deemed to be economic to

 7 invest. All right?

 8   So we would look at -- case in point, we

 9 would look at an opportunity, that if we are looking at

10 a program design, one (1) of the things, as I

11 mentioned, we would -- we would look at is, is door-to-

12 door targeted delivery an option? What's the cost?

13 What's it going to cost for us to deliver that program?

14 Is that the best way to do it? Can we do piggybacking

15 and -- it's part of the analysis that goes into the

16 design -- the detailed design at that level.

17   But we -- so -- so we're trying to

18 maximize the dollars that we have already identified as

19 being what's economic for the Utility to invest in.

20   MR. RAYMOND LAFOND: And your three (3)

21 kings are satisfied with that?

22   MS. LOIS MORRISON: So far, they

23 haven't complained.

24   MR. RAYMOND LAFOND: My last question

25 is: In terms of future technology, is it possible, or

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1 do you view as it being possible in the next little

2 while, the possibility of Manitoba Hydro being able to

3 control, for instance, the water heaters in the homes,

4 in the sense that when you heat -- you hit a peak

5 period, you could essentially dictate that water

6 heaters don't go up for fifteen (15) minutes in certain

7 areas or -- versus other areas, so as to reduce that

8 peak demand.

9   In other words -- and I'm using your

10 water heaters as an example, but there could be some

11 other appliances or whatever, and especially in

12 commercial buildings.

13   MS. LOIS MORRISON: So in commercial

14 buildings, we have programs in place, not in the sense

15 of us controlling the load, but we have programs in

16 place that help customers install demand control

17 systems which help them manage their peaking, which

18 will of course benefit us. And we do provide

19 incentives for that.

20   In terms of direct load control

21 initiatives, we have looked at it. Right now, the

22 demand component on it's own hasn't been attractive,

23 but it's one of the items that we do continue to go

24 back and look at. So, yes, we do look at that one. It

25 is one that is on our radar. There is some

 1 infrastructure that we'd require to support that in

 2 place, some communication infrastructure that we don't

 3 currently have in place.

 4   MR. RAYMOND LAFOND: Thank you.

 5   MR. LARRY SOLDIER: Ms. Morrison, when

 6 we were, I guess, involved in our initial orientation,

 7 I was -- we were -- I was told -- or, we were told, a

 8 story about a senior in -- in the core area huddled in

 9 the back room, cold and -- because he was living in a

10 drafty home that required insulation. And his energy

11 costs were twenty-five hundred (2,500) because he was

12 living -- he had an oil-fired furnace. And for the

13 sake of a -- some insulation and maybe a -- and maybe

14 some assistance in firing -- in acquiring a high-

15 efficiency furnace, he would reduce his energy costs by

16 four hundred dollar -- to -- say, to four hundred

17 dollars ($400).

18   When -- when I heard your testimony at

19 the beginning, I -- I thought, well, the likelihood of

20 me finding that person was not very likely. But after

21 listening to Mr. Williams's probing questions, there's

22 -- I guess, there may be sections of the population

23 that wouldn't receive your power -- Power Smart

24 initiatives because they don't qualify.

25   MS. LOIS MORRISON: Well, the

3233

1 individual that you describe, although it is an oil

2 furnace, we -- through the Affordable Energy Fund would

3 -- we would support installing insulation, and we would

4 assist them with the purchase of -- not cover the

5 entire cost of, but assist in the purchase of -- a

6 high-efficiency oil furnace.

7   So they would qualify if they met the

8 income qualification, which you've identified that they

9 would likely, and if they owned their home. Yes, they

10 would qualify.

11   MR. LARRY SOLDIER: But if they didn't

12 -- if they didn't and there -- there's an opportunity

13 that they may not qualify?

14   MS. LOIS MORRISON: Well, again, it

15 comes back down to who owns the home. If it's a

16 Manitoba Housing rental, then we would work with them

17 and they would get the upgrade. We -- we're really in

18 the position where we are attempting to work quite

19 closely with those targeted customers and try to -- to

20 make sure that they can access the programs that are

21 available.

22   MR. LARRY SOLDIER: I guess the other

23 part of the -- the story was the fact that the

24 individual was sick at a greater -- was sick more times

25 than -- than the normal person, because they're living

3234

1 in this cold, drafty home and are -- are using their

2 limited resources to -- to heat their home.

3   And that by working with the healthcare

4 field, where this individual may -- may end up in going

5 to the hospital for three (3) or four (4) days, costing

6 the healthcare system a thousand to fifteen hundred

7 dollars ($1,500) a day, depending on where -- where

8 they are, that there was more efficient use if -- if we

9 -- if we would provide that program using the -- the

10 healthcare model.

11   MS. LOIS MORRISON: That was one of the

12 underlying premises behind the creation of the

13 Affordable Energy Fund, which does support us going

14 into low-income homes and helps us basically get over

15 one of the major barriers, which is the ability of that

16 individual to get the upfront funding to participate in

17 the insulation upgrade.

18   So the -- the Affordable Energy Fund

19 program was set up through the Winter Heating Cost

20 Control Act, that that funding was set aside to

21 increase the ability of people to access these energy

22 efficiency opportunities that, due to circumstances

23 such as low-income and not have -- having those funds

24 or being located in other areas of the province, they

25 would be able to access these same energy efficiency

3235

1 opportunities as other individuals.

2   So when you look at the individual who,

3 in your case that you describe, would participate in

4 the program, we -- they -- if they met the criteria,

5 for the most part, we -- we were -- we are trying very

6 hard to work with the ten -- the landlords, where the

7 landlords are either social hous -- it's social housing

8 of some sort, either non-profit organization or

9 Manitoba Housing.

10   And the indi -- and the homes that are

11 owned by low-income customers, who are unable to keep

12 the up -- maintain the uptake of their -- upkeep of

13 their home, those individuals, we're -- we're removing

14 the barriers to participate by removing that

15 requirement to have the upfront cost. And that's --

16 that's in that anal -- that's -- that's why those

17 additional subsidies dollars were put in place by the

18 Winter Heating Cost Control Act.

19   MR. LARRY SOLDIER: Now, in developing

20 your marketing mat -- material -- I'm involved with the

21 healthcare organization and part of the -- the staff

22 that we have are dealing -- going into the home to do

23 an assessment, and part of their overall assessment is

24 to -- to review the environment that the -- the patient

25 or the client lives in to verify whether or not they

3236

1 have access to fresh food, and -- and so on. But they

2 also look at the home environment; whether or not

3 there's issues with the -- with heating or -- but they

4 may not necessarily have the tools to adequately assess

5 whether or not that individual has proper heating.

6   Do you have any -- have you geared any

7 materials say to the healthcare professional, if they

8 were to go in and to -- try and assess -- or try and

9 assess the client in -- in dealing with his health

10 issues, and looking at the -- like -- say like a

11 checklist?

12

13   (BRIEF PAUSE)

14

15   MS. LOIS MORRISON: We haven't

16 specifically identified a checklist for the -- someone

17 as you described, a healthcare individual who's working

18 in the home -- or visiting the home. But what we have

19 done, is we work very closely with community groups

20 that -- such as what you've described, or agencies, to

21 try and get them to -- to know about the program as

22 much as possible, and then provide brochures so that if

23 they're aware of what program is offered then they may

24 think that this is someone that they can refer to the

25 program, and then we'll send someone out to do all that

3237

1 assessment.

2   But really what we want them to do, or

3 what we would really like to have happen with the

4 individual you describe, is that that healthcare worker

5 connects them with us, so that we can get our advisor

6 in there to take a look at what opportunities there are

7 to improve their -- their -- the -- the envelope of the

8 home, and the energy efficiency of their home. So our

9 approach is more so that.

10   I -- I think our biggest concern would

11 be that healthcare -- that healthcare advisor who's

12 working in the home has so many other things they hae

13 to identify. If they can just simply say, This home

14 looks like it needs extra insulation, it seems drafty,

15 it seems this, that alone should be enough to trigger

16 them to refer them to our program, and then we can send

17 someone out.

18   MR. LARRY SOLDIER: I guess I -- I

19 don't know if there's -- if there's a way you can

20 develop some material that can highlight that to the

21 healthcare professional. Sometimes you know that

22 certain programs exist, but you -- you don't really

23 know how to access them. And -- and I'm not sure if

24 there's some kind of a marketing program you can I

25 guess piggyback on, or -- or find that can get that

3238

 1 materials through that -- to the healthcare

 2 professional?

 3   MS. LOIS MORRISON: Most definitely.

 4 If there was a number of agencies that we aren't

 5 already working -- any agency that we're not already

 6 working with, we would be able to provide them with

 7 information to basically say, If you have someone in

 8 your constituency that you're working with who needs

 9 help in terms of the -- improving the -- what they

10 might see as being an inefficient house, or apart -- or

11 multi -- or rural house, or such, to basically give us

12 a call. Really, all we need to get into their hands is

13 our phone number to make the connection for us.

14   And -- but, yeah, we -- we can look at

15 that, definitely. We have -- we can provide you with

16 copies of literature that we have that we provide to

17 the partner organizations that we work with, and maybe

18 that might better demonstrate what we're doing with the

19 partner organizations. And we'd be very happy if you'd

20 pass it onto the organization you're referring to.

21   MR. LARRY SOLDIER: And -- and at this

22 time I was involved with the First Nations some years

23 back, and it was -- when we looked at the various

24 programs that were offered by Manitoba Hydro, and then

25 when -- when we looked at it and we looked at the

 1 criteria, we found out we didn't qualify. And I'm now

 2 hap -- I'm very happy to see that you have found a way

 3 to -- to assist First Nation communities with their

 4 housing needs.

 5   And -- and I know the difficulties you

 6 may -- you have with -- with working with First Nation

 7 communities, because their issues regarding housing are

 8 a lot greater than -- than the -- putting in some

 9 insulation into the home. So, there's other issues

10 that I guess preventing you from being more active in

11 the community because those issues are not easy to

12 solve, and I just want to commend you on -- on the --

13 on that portion --

14   MS. LOIS MORRISON: Thank you very

15 much.

16   MR. RAYMOND LAFOND: Can I piggyback on

17 my member colleague's comments. Is there a very close

18 relationship with, for instance, the Department of

19 Family Services between -- between yourselves and the

20 Department of Family Service?

21   MS. LOIS MORRISON: We work with both

22 Family Services, Manitoba Housing, and EIA; Employment

23 Income Assistance.

24   MR. RAYMOND LAFOND: So, some employees

25 of Family Services, or a certain agency, would actually

1 phone you up or -- and say, You know, this person needs

2 to be helped.

3   Is that what happens?

4   MS. LOIS MORRISON: They would refer

5 that customer to our -- our -- basically our small

6 contact centre that -- we have staff on phones that

7 take calls, so if that -- if there's someone in the

8 Family Services group that identifies a customer that

9 could be a potential candidate, they basically can send

10 that customer to those staff that deal directly with

11 the customer, and they will work with -- there's --

12 there's a greater involvement in terms of helping that

13 customer through the process also; more so then what

14 you would see with our other initiatives.

15   MR. RAYMOND LAFOND: I guess my concern

16 is more the fact that -- the approach of referring the

17 customer -- or telling the customer to call or to go

18 and see Manitoba Hydro rather then a Manitoba Hydro --

19 rather that -- that employee from Family Services, or

20 whichever agency, would rather phone Manitoba Hydro and

21 say, There's a need there and when could an employee of

22 Manitoba Hydro go and meet the people and do something?

23 Because that's a lot more proactive.

24   MS. LOIS MORRISON: As I mentioned

25 previously, we -- we have two (2) approaches. We have

3241

1 -- we have where we actively go out working with

2 community groups to build participation in the program.

3 And then we also have the referrals.

4   The only concern that I would have

5 regarding that and -- and the Family Services person

6 might also, is related to, we need to speak to the

7 customer too, and the Family Services group may not be

8 quite as comfortable with the -- in terms of the

9 privacy information of sending us to that homeowners --

10 or that customers location without really creating the

11 connection between -- between Manitoba Hydro and the

12 customer.

13   So, the issue is that if Family Services

14 is calling Hydro and sending Hydro to that location,

15 what we need is them to create the connection between

16 us and the customer, or else there's too many

17 opportunities for a disconnect that we would be

18 somewhat at risk with. We -- I -- it -- it - it's

19 concerning, and -- and -- the -- the relationship that

20 we have with those agencies has been working quite well

21 in terms of creating that connection.

22   THE CHAIRPERSON: Thank you. I believe

23 that we're ready to turn the microphone over to Mr.

24 Gange.

25

3242

1 CROSS-EXAMINATION BY MR. WILLIAM GANGE:

2   MR. WILLIAM GANGE: Thank you, Mr.

3 Chair. Mr. Chair, Ms. Morrison, I've already mentioned

4 to you, I apologize if -- if I go over some items that

5 were taken -- or that -- that -- for consideration over

6 the past couple of days while I was not here, and --

7 and I would ask for your indulgence on -- on that.

8   The first point: Mr. Williams provided

9 to you Exhibit 10, which is the BC Hydro Appendix 9A.

10 Do you have that in front of you, Ms. Morrison?

11   MS. LOIS MORRISON: Yes, I do.   Thank

12 you.

13   MR. WILLIAM GANGE: Thank you.   And

14 Mr. Williams commenced the questioning on this by

15 asking you whether the residential rate in BC Hydro was

16 subject to an inverted rate.

17   Do you recall that?

18   MS. LOIS MORRISON: Yes, I do.

19   MR. WILLIAM GANGE: And you responded

20 by saying it's a conservation rate. Is there a

21 difference?

22   MS. LOIS MORRISON: No, that's just

23 branding.

24   MR. WILLIAM GANGE: Okay. That's

25 branding. So -- and -- and the -- the -- my note was

3243

1 that the inclined rate has -- had provided a savings of

2 55 gigawatt hours under the residential heading?

3   MS. LOIS MORRISON: You're referring to

4 BC Hydro's projection of what those -- the energy

5 savings associated with that conver -- that inclining

6 rate is? The projection is 500 gigawatt hours, as the

7 -- the result of that -- implementing that structural

8 change to the rate.

9   MR. WILLIAM GANGE: I -- I'm sorry,

10 that -- I like that answer better. So -- and -- and I

11 take it that although the -- the projection that

12 Manitoba Hydro would be expected to make for an

13 inclined rate would be -- would differ, but one (1)

14 would expect that there would be a DSM saving projected

15 by way of an inclined rate.

16   Is that correct?

17

18   (BRIEF PAUSE)

19

20   MR. ROBIN WIENS: Mr. Gange, as -- as

21 we discussed with Mr. Williams, you would anticipate

22 that there would be some -- or -- or with yourself,

23 actually, earlier -- that there would be some impact.

24 That impact is going to depend of course on factors

25 such as price elasticity, which as we went through with

3244

1 Mr. Williams, does not appear to be that significant.

2 And it would appear on the -- we're also dependent on

3 the degree of price differential between the initial

4 block and the -- the tail block or the conservation

5 block of the rate.

6   So, whether or not you could get a

7 similar proportionate response as BC, my -- my guess

8 is, given Manitoba Hydro's marginal rates and marginal

9 costs relative to British Columbia's, it probably

10 wouldn't be as great, unfortunately.

11   MR. WILLIAM GANGE: Yes. Thank you,

12 Mr. Wiens. And -- and I -- I attempted to be very

13 careful in my question by not attempting to make it a

14 pro rata comparison, but simply to state that one would

15 expect that there would be some sort of savings. And -

16 - and I take it that your answer is "yes", you just

17 don't know how -- how much, because it would depend, to

18 a great degree, upon the rate design?

19   MR. ROBIN WIENS: That's correct.

20   MR. WILLIAM GANGE: Okay. Thank you.

21 And -- and, Mr. Wiens, thank you for raising the issue

22 of price elasticities. In the last hearing, the

23 2010/2012 GRA, that RCM/TREE provided -- or posed an

24 interrogatory at number 68, and Manitoba Hydro provided

25 its response, which I believe that Mr. Williams

3245

1 included in -- in his -- one (1) of his exhibits. But

2 I'd just like to -- to put that on -- or I'll -- I'll

3 make mention of it: RCM/TREE Manitoba Hydro

4 Undertaking First Round 68. And it -- the -- the

5 question that was raised was:

6   "Please provide any and all price-

7   elasticity studies in the possession

8   or control of Manitoba Hydro, whether

9   or not done specifically for Manitoba

10   Hydro, regarding long and/or short-

11   term price elasticities for

12   residential customers as a whole."

13   And the answer, Mr. Wiens, which

14 probably came out under your supervision, was that

15 Manitoba Hydro does not have any price-elasticity --

16 elasticity studies done specifically for Manitoba Hyd -

17 - Hydro residential customers. But then you went on to

18 give a several paragraph answer.

19   Would it be possible to get an

20 undertaking from you to revisit the undertaking that

21 was given -- or pardon me, the -- the IR that was given

22 in the 2012 GRA and -- and update that?

23   MR. ROBIN WIENS: I don't expect I

24 would have much to update, but we can take another look

25 at it.

3246

1   MR. WILLIAM GANGE: Yes, thank you.

2 And if you don't, that's -- that's fine if you -- if

3 your -- if your answer is simply going to be, There

4 isn't anything that I can say. But -- but if it is

5 possible, that would be great.

6

7   (BRIEF PAUSE)

8

9   MR. ROBIN WIENS: So, yes, we could

10 take a -- we can take a look at that again. And if

11 there is something that we can provide you, we will.

12   MR. WILLIAM GANGE: Thank you very

13 much. Ms. Morrison, I'm going to -- thank you. The

14 undertaking will be for Manitoba Hydro to revisit

15 RCM/TREE/Manitoba Hydro Interrogatory 1-68 from the

16 2010/2012 GRA, Section A, residential customers, and

17 provide an update if possible.

18

19 --- UNDERTAKING NO. 70:   Manitoba Hydro to revisit

20   RCM/TREE/Manitoba Hydro

21   Interrogatory 1-68 from the

22   2010/2012 GRA, Section A,

23   residential customers, and

24   provide an update if

25   possible

1 CONTINUED BY MR. WILLIAM GANGE:

2   MR. WILLIAM GANGE: Ms. Morrison, I'm

3 going to refer for the next few minutes to the economic

4 load and environmental impacts of fuel switching in

5 Manitoba, which is I -- I believe Appendix 26 to the

6 filing.

7   Is that correct?

8   MS. LOIS MORRISON: I'll take your

9 assessment on that.

10   MR. WILLIAM GANGE: Okay, thank you.

11 And, Mr. Singh, I have provided to you a list of

12 documents which will be marked as Green Action Centre

13 number 5. Thank you. The Board has that? Thank you.

14

15 --- EXHIBIT NO. GAC-5:   List of documents

16

17 CONTINUED BY MR. WILLIAM GANGE:

18   MR. WILLIAM GANGE: Ms. Morrison, if

19 you could turn to page 7 of Green Action Centre Exhibit

20 5.

21   Green Action Centre had asked an

22 interrogatory that, with respect to the fuel switching

23 report, that all work paper supporting the report would

24 be provide in Excel spreadsheet form. And the answer

25 was to refer to First Round 3A, which I've provided to

3248

1 you at pages 9 and 10 of Exhibit 5.

2   Do you see that?

3   MS. LOIS MORRISON: Yes, I do.

4   MR. WILLIAM GANGE: In reference to --

5 the -- it would appear at page 9, which is

6 Interrogatory First Round number 3, that there are

7 three (3) general objections to providing Excel

8 versions of spreadsheets.

9   The first is that certain models used by

10 the Corporation are large and complex. The second one

11 is that certain spreadsheets contain significant

12 metadata. And the third one is that Manitoba Hydro

13 notes that some of the material may be subject to

14 intellectual property.

15   With respect to Second Round IR number

16 2, do -- can you advise which of the objections apply

17 to the working papers?

18   MS. LOIS MORRISON: The first two (2).

19   MR. WILLIAM GANGE: The first two (2).

20 So not the intellectual property, but the -- the

21 complexity and the metadata?

22   MS. LOIS MORRISON: Yes.

23   MR. WILLIAM GANGE: Okay. Thank you.

24 And then at page 8, continuing -- this is continuing on

25 the same theme. We had asked for the working papers

1 with respect to the net economic impact 2011 energy

2 forecasts. Again -- and you might take a brief -- or a

3 quick look at 'A' to 'I'.

4   Are any of those items covered in 'A' to

5 'I' subject to intellectual property?

6

7   (BRIEF PAUSE)

8

9   MS. LOIS MORRISON: I don't believe

10 they are. I think they're all related to the first two

11 (2) items.

12   MR. WILLIAM GANGE: Okay. And so when

13 -- when your department was looking at answering

14 undertaking -- IR number Second Round 3, would you have

15 looked at each one of these, 'A to 'I', to say, Well,

16 can we release Excel spreadsheets with respect to, for

17 instance, the net economic impact that's referred to on

18 page 28 of the report? Would you have looked at them

19 individually and said, Well, let's -- let's assess

20 whether or not we can release them?

21   MS. LOIS MORRISON: I would have to

22 double check again, but I can tell -- if you want to go

23 through the list right now I can tell you specifically

24 what the issues are for each of them but --

25   MR. WILLIAM GANGE: Oh, okay --

3250

1   MS. LOIS MORRISON: -- but --

2   MR. WILLIAM GANGE: Okay, let's --

3 let's -- if you can. That -- that would be helpful for

4 -- for me.

5   MS. LOIS MORRISON: Okay. 'A' would be

6 both the first two (2) items, because it would --

7 anything that's related to how the data comes together

8 is within the spreadsheets, and the spreadsheets and --

9 and -- are very complex and they're linked in multiple

10 cases. So -- so maybe for expedi -- to make this move

11 a little quicker.

12   So anything that relates to the -- to

13 the dollar values is tied to our avoided cost, or our

14 marginal cost values, and our gas price forecast.

15 Those are both confidential pieces of information that

16 we would not provide and are embedded in the -- the

17 spreadsheets that we're working with.

18   And so -- and then the items -- so any

19 of those items, such as the impact of -- so -- so for

20 Item I, Item B -- Item C is the tables related to the

21 forecast attributed to fuel switching. That's a

22 complex calculation. It involves a number of different

23 pieces of information that are actually coming from our

24 load forecasting modelling.

25   The -- I would have to -- related to the

3251

1 ones for the GHG impacts, I would have to double check

2 that. The net impact of fuel switching to geothermal

3 net financial impact which would be 'F', 'G', 'H', and

4 'I', are all those same components. They include --

5 they're both -- they're components of the same complex

6 spreadsheets and they all have the dollars attached to

7 them that we cannot release that are embedded within

8 those spreadsheets.

9   MR. WILLIAM GANGE: Thank you. So the

10 only ones that you'd have to double check would be

11 what, 'D' --

12   MS. LOIS MORRISON: 'D' and 'E'.

13   MR. WILLIAM GANGE: -- and 'E'? And --

14 and will you do so?

15   MS. LOIS MORRISON: Yes.

16   MR. WILLIAM GANGE: Thank you.

17   MS. LOIS MORRISON: We'll -- we'll take

18 that as an undertaking.

19   MR. WILLIAM GANGE: So the -- the

20 undertaking, to help the court reporter, is that

21 Manitoba Hydro will -- will check on GAC/Manitoba Hydro

22 Second Round Number 3D and E, the reasons for not

23 disclosing material in the Excel spreadsheet form.

24 Thank you.

25

3252

1 --- UNDERTAKING NO. 71:   Manitoba Hydro will check

2   on GAC/Manitoba Hydro

3   Second Round Number 3D and

4   E, the reasons for not

5   disclosing material in the

6   Excel spreadsheet form

7

8   MS. LOIS MORRISON: Yes.

9   MR. RAYMOND LAFOND: And, Mr. Gange, if

10 I can intervene.

11   MR. WILLIAM GANGE: Yes.

12   MR. RAYMOND LAFOND: Why would you say

13 that the natural gas price forecast is confidential?

14 Because it's a forecast in the future, and I do not

15 think that Manitoba Hydro has any real impact on future

16 prices, whatever they may be. Like very little impact

17 on -- if any, on the market.

18   MS. LOIS MORRISON: I'm not the expert

19 in this area but I do believe that that component is

20 something that goes into -- is a component of our

21 forecasting that goes into the marginal -- into the --

22 sorry, the export price forecast.

23

24   (BRIEF PAUSE)

25

3253

1   MS. LOIS MORRISON: Yes, I'm getting a

2 nod that that is the accurate interpretation.

3   MR. RAYMOND LAFOND: But anyone who's

4 importing electricity from Manitoba Hydro has it's own

5 theory on what they think future prices are going to

6 be. In other words, whether or not you think the

7 inflation -- or Manitoba Hydro thinks the inflation

8 rate is going to average, for instance, 1.5 percent

9 over the next twenty (20) years, if some import in the

10 US -- US thinks it's going to be more like 2 percent,

11 it has no influence. I mean, it's just an opinion.

12

13   (BRIEF PAUSE)

14

15   MS. ODETTE FERNANDES: Maybe I'll jump

16 in here. Mr. Cormie could speak to this a little bit

17 better then I could, but I think the issue is that

18 you've -- you've hit it when you've said, It's their

19 theory and we have our theory and we don't want them to

20 know our theory, because when we go into negotiations,

21 that could have a detrimental impact on what we can

22 achieve for our customers.

23   MR. RAYMOND LAFOND: Well, again, I

24 will revisit that question. Every single bank in

25 Canada which do compete with one another are not in the

 1 monopoly type situation, they do their forecast and

 2 they publish their forecast in terms of interest rates.

 3 But that has no -- that's no -- that's not an issue.

 4 Whether they're going to be lending a hundred billion

 5 dollars to BC or whomever, that really is not at the

 6 issue, because they all bid on -- based on that actual

 7 scenario at that particular time. Whatever they

 8 forecasted in terms of what interest rates were going

 9 to be in two (2) years, five (5) years or ten (10) or

10 fifteen (15) years is -- is not an issue in terms of

11 competition.

12

13   (BRIEF PAUSE)

14

15   MS. PATTI RAMAGE: Mr. Lafond, I'm just

16 going to suggest -- I think your question is -- it's a

17 very good question, but it's one that Mr. Cormie can

18 address best in the electric industry, which is a

19 little more of an illiquid industry and so it's the --

20 the parties in the industry don't share that type of

21 industry. But I think it would be best to let Mr.

22 Cormie be the one -- you'll get your best answer and

23 understand the best from Mr. Cormie.

24   MR. RAYMOND LAFOND: Thank you.

25   MR. WILLIAM GANGE: Mr. Chair, I'm not

1 going to be lengthy this afternoon, but I am going to

2 be more then five (5) minutes. So perhaps it would be

3 an appropriate time for lunch. The morning did whiz

4 by, but if we could come back after lunch and -- and I

5 will not take the entire afternoon.

6   THE CHAIRPERSON: Okay. We -- let's

7 recess now and we will resume our proceedings at one

8 o'clock.

9

10 --- Upon recessing at 12:04 p.m.

11 --- Upon resuming at 1:05 p.m.

12

13   THE CHAIRPERSON: I believe everyone's

14 in position. Do we have any documents that we need to

15 acknowledge?

16   MS. ODETTE FERNANDES: Not at this

17 time. But as you can see, we have brought Mr. Cormie

18 back in further, with respect to the conversation we

19 were having before lunch regarding why Manitoba Hydro's

20 gas price forecast are considered confidential. So I

21 will turn the mic over to Mr. Cormie.

22

23   DAVID CORMIE, Resumed

24

25   THE CHAIRPERSON: Welcome, Mr. Cormie.

3256

1 I'm sure you probably had other things you wanted to do

2 instead of being before us, but I'm pleased that you're

3 here. Thank you very much for attending.

4   MR. DAVID CORMIE: Yeah, I'm pleased to

5 come back.

6

7   (BRIEF PAUSE)

8

9   MR. RAYMOND LAFOND: The question

10 before lunch was essentially because a few times this

11 morning and -- or at least once this morning and maybe

12 yesterday, the comment was made that some information

13 could not be divulged, and more particularly, the

14 natural gas forecasted prices -- future prices by

15 Manitoba Hydro.

16   And my comment was simply I did not know

17 why this had to remain confidential, because whatever

18 the option of Manitoba Hydro is on future gas prices

19 has no actual real impact on market prices in North

20 America. And I compared it essentially to all banks or

21 many government agencies, including the Department of

22 Finance for the Government of Canada, come out with

23 opinions on what they think future interest rates or

24 inflation rates are going to be. And they're just

25 opinions.

 1   Yes, they do they form part of a plan,

 2 of your plan, and -- and also for us as panel members

 3 to -- to consider in our reflection. But I can't see

 4 why it is confidential, because it's an opinion that

 5 has no bearing and -- and no influence on the par -- on

 6 any markets and especially in this monopoly-type

 7 situation here.

 8   MR. DAVID CORMIE: Monsieur Lafond, I

 9 would agree with you in a very liquid market, lots of

10 buyers and sellers, what -- what Manitoba Hydro thinks

11 doesn't affect the market price. But in the --

12 specifically speaking on the power side, we are not in

13 a liquid market. There are very few sellers like

14 Manitoba Hydro, and we only have a few customers. And

15 -- and so how we value our products is highly

16 commercially sensitive, especially when we're still in

17 the process of -- of negotiating long-term contracts.

18   And for example, we have completed the

19 negotiations with Minnesota Power and Wisconsin Public

20 Service for 350 megawatts of the 1,100 megawatts that

21 Manitoba Hydro intends to take to market. So there's

22 still over 700 megawatts that still has to be committed

23 under contract.

24   And -- and ultimately, we go through

25 those negotiations, and the last thing that we talk

3258

1 about is price. And, you know, they -- essentially, we

2 have a ballpark price up to that point in time. But

3 finally, the -- the deal ends up being all about price.

4 And to the extent that a buyer can -- can use what

5 Manitoba Hydro sold the product to other customers for

6 can be used against Manitoba Hydro to -- to reduce the

7 price on the -- on these on negotiations -- ongoing

8 negotiations.

9   So -- so that's -- that's the commercial

10 sensitivity that we have. There's also the issue of

11 customer sensitivity, mainly doing -- dealing with the

12 contracts that we've already negotiated. These

13 companies are investor-owned utilities. They have SEC

14 filings. Their stock price is tied to the view of the

15 market and whether this transaction is good for the

16 company or not. And so these customers want to be very

17 careful how they bring this information to market.

18   It -- ultimately, the -- they will

19 probably have to release that -- that power price, but

20 they want to do it in a -- in a manner that is -- is

21 controlled and it's done in -- in context. And so we

22 have to respect that they have their -- their business

23 needs. And -- and some of the reason that we want to

24 keep the prices for our -- our contracts confidential

25 is because it's -- it's their information as well that

 1 has to be kept confidential. They acquire power from

 2 many companies, not just Manitoba Hydro and so -- and

 3 they do that through a competitive process.

 4   And if they are paying Manitoba Hydro a

 5 premium price because they feel that Manitoba Hydro's

 6 product is a premium product, but the market learns

 7 that that price -- only learns about the price without

 8 knowing the quality of the product, then they may be

 9 hurt, because now all their other bidders for that

10 product will -- will pro -- will push the price up. So

11 being in a competitive process and keeping the prices

12 confidential is important to them.

13   MR. RAYMOND LAFOND: Can I interrupt?

14 I -- I agree with your reasoning of the last few

15 issues, in terms of current contracts in place and in

16 terms of -- of contracts or possible contracts or term

17 sheets you are currently negotiating.

18   I was referring to your opinion as to

19 what future natural gas prices were going to be --

20 like, in two (2) years, five (5) years, ten (10) years.

21 I mean, these are strictly opinions. And I cannot see

22 at all why a customer of Manitoba in the -- of Manitoba

23 in -- in the USA, for instance, would be influenced by

24 that, because they have their own analysis, their own

25 opinions of what future natural gas prices are going to

3260

1 be.

2   So to me, I don't understand the

3 relationship. But I do understand your arguments, in

4 terms of current contracts which the -- your customers

5 do not want to divulge or the terms sheets you're in

6 the process of negotiating. I -- I give that some

7 merit. But in terms of you -- what you think the gas

8 prices are going to be in ten (10) years or fifteen

9 (15) years from now, I have much difficultly with that.

10   MR. DAVID CORMIE: Yeah, and I -- and I

11 -- I was speaking essentially to the electricity price

12 forecast into which each of our consultants puts in

13 their own view of the natural gas price, and it -- it

14 becomes one of the inputs into that forecast.

15   With regard to Manitoba Hydro's view of

16 -- of what the gas prices, you know, that -- that --

17 it's probably much less of a sensitive nature and --

18   MR. RAYMOND LAFOND: And that was the

19 specific issue at hand this morning. So therefore,

20 it's not an issue, the confidentiality of Manitoba

21 Hydro's opinion of future gas prices?

22

23   (BRIEF PAUSE)

24

25   MR. DAVID CORMIE: Yes, Mr. Lafond,

3261

 1 Manitoba Hydro's electricity price forecast is affected

 2 by the -- the consultants' view. In addition to that,

 3 when Manitoba Hydro is -- is in the negotiations, I

 4 think the -- we believe that the customer is also

 5 looking at what Manitoba Hydro views the forward price

 6 of electricity as a function of natural gas. And so by

 7 -- by keeping our view of natural gas prices

 8 confidential, it enhances our ability to negotiate the

 9 best possible price. I think it's a lesser factor, but

10 it is -- it is something that we -- that we want to

11 keep confidential.

12   MR. RAYMOND LAFOND: Again, I hear you.

13 However, I am not convinced that the fact that the

14 Toronto Dominion Bank has an opinion that rates are

15 going to be such and such in two (2) years and five (5)

16 years from now that when I go and borrow from one (1) -

17 - for one (1) of my clients, that it's going to have

18 any impact on what he's going to pay.

19   It's going to be whatever -- whatever it

20 is at that time and whatever is beneficial for both

21 parties, regardless of what the person forecasted, in

22 ter -- forecasted in terms of interest rates for the

23 future.

24   MR. DAVID CORMIE: And I -- and I agree

25 with you. In -- in the context of a -- of a liquid

3262

1 market, many buyers and sellers, the market price is

2 what it is. But in this case, where it's a -- it's a

3 bilateral negotiation in a very limited market, the --

4 the forward views of the buyer and the seller are very

5 important. And to the extent that we were to reveal

6 our view of long-term natural gas prices, it can have

7 an effect on what the customer thinks that Manitoba

8 Hydro is willing to -- willing to pay -- or is prepared

9 to accept for the -- for the sale of our electricity.

10   So in the context of -- of interest

11 rates and -- and those other factors -- items, I -- I

12 agree with you. But I -- I think in our -- our specific

13 instance, we have to be very, very careful. And -- and

14 we try to keep all these assumptions about the future

15 very close to our chest so that we are not, at any --

16 at any time, putting our negotiating position at risk.

17   The -- the consequences are just -- you

18 know, for a -- for a twenty (20) year contract in --

19 that ultimately might be worth $2 1/2 billion, any

20 detraction from that because we ended up letting slip

21 something can have huge impacts for the ratepayer.

22   MR. RAYMOND LAFOND: Thank you.

23

24   (BRIEF PAUSE)

25

3263

 1   THE CHAIRPERSON: Thank you very much,

 2 Mr. Cormie, for attending. I'm -- I'm not sure, unless

 3 Mr. Gange has other questions, I would --

 4   MR. WILLIAM GANGE: I have no questions

 5 that would require Mr. Cormie to stay. I know he wants

 6 to but...

 7   MR. DAVID CORMIE: I can go and get on

 8 my snowshoes and head home. Thank you.

 9

10   (WITNESS STANDS DOWN)

11

12   THE CHAIRPERSON: Thank you very much,

13 Mr. Cormie, for attending. Back to you, Mr. Gange.

14   MR. WILLIAM GANGE: Thank you much --

15 very much, Mr. Chair.

16

17 CONTINUED BY MR. WILLIAM GANGE:

18   MR. WILLIAM GANGE: Ms. Morrison, I'm

19 going to go through a number of -- of the IRs that

20 Green Action Centre submitted with respect to the fuel

21 switching report, and they are set out in Exhibit 5.

22 I'm going to start at page 11.

23   And in -- in the answer to Second Round

24 6, Manitoba Hydro said:

25   "In the new home construction market,

3264

 1   most builders offer a standard cost

 2   for heating systems whether the

 3   customer requests a standard natural

 4   gas or electric heating system and

 5   regardless of whether the builder can

 6   install one (1) system at a lower

 7   cost."

 8   In -- I -- I just need to understand

 9   that answer better than I do at -- at present. And --

10   so the -- the commentary there, as I'm reading it, is

11   that -- that the cost of the heating system is built

12   into the price and it's -- it's just a standard price.

13   MS. LOIS MORRISON: When the builder is

14   off -- has -- has a number of models of houses that

15   they offer, that model is the base model. So if a

16   customer comes along and says, I want to have you

17   install a -- they -- they'll come along and they'll

18   say, I would like to buy-up to the granite countertops,

19   or I would -- and then the builder will add on prices.

20   Sometimes they'll give you small credits

21   if you decide to make a change that essentially is --

22   say, for example you say, I'm going to have someone

23   else do my kitchen for me. They'll give you a minor

24   credit for that amount. They won't give you the full

25   credit. It's -- it's how much they have to deviate --

3265

1 they -- they take into consideration that they have to

2 deviate from their normal practice in installing the

3 house.

4   So in terms of a heating system, they

5 would likely say, The base model is 'X', and we are

6 installing this -- this package. And if you want to

7 change that package, we're not necessarily going to

8 give you a credit for making that adjustment,

9 especially since they may feel or deem that they are

10 incurring costs by having to deviate from their normal

11 practice.

12   So if they're used to building house X,

13 house X, house X, and you come along and say, Hey, I

14 want 'X' with -- with a little bit of, you know, option

15 3, there -- there's an -- there's a deviation to their

16 normal -- to their -- to their structured process. And

17 so they would not necessarily adjust their pricing.

18 Your base model is your base model. So they may not

19 adjust that component.

20   And that's what we were hearing more so

21 from the builders, is that it has to be more of a

22 fundamental change for them to -- to adjust their

23 pricing.

24   MR. WILLIAM GANGE: But when I read

25 this -- the answer isn't suggesting that a customer

3266

1 does not have an ability to order a standard natural

2 gas heating system?

3   MS. LOIS MORRISON: That is correct.

4   MR. WILLIAM GANGE: But from Manitoba

5 Hydro's experience, are you saying that the base system

6 is probably going to be an electric heating system?

7   MS. LOIS MORRISON: It depends on the

8 builder. It depends on -- we're not saying that the

9 base mod -- system is going to be electric. We're

10 saying that if you're asking -- that if the builder's

11 base system is electric, they are not going to likely

12 give you a -- they're not -- they're -- what we're

13 referring to is, if -- if you look in the report, the

14 price that we put for a -- a retrofit installation of

15 an electric furnace was che -- the electric furnace was

16 less expensive than the natural gas furnace. But in

17 the new home construction market, if a customer were to

18 ask for an electric furnace instead of a natural gas

19 furnace, they wouldn't likely get a cost reduction.

20   That was more -- so -- so what we're

21 describing is -- is how -- why those prices, between

22 the two (2) tables of retrofit and new construction,

23 differ.

24   MR. WILLIAM GANGE: Gotcha. Okay.

25 Then if you turn to page 12 of Exhibit 5, the

1 commentary that is made there is that:

2   "In Manitoba new residential

3   construction market, virtually all

4   homes are constructed with electric

5   hot water heaters due to cost

6   considerations."

7   And -- and you make the comment that:

8   "It is observed in the new home

9   construction industry homebuilders

10   and homeowners install electric hot

11   water tanks and avoid the additional

12   cost of constructing a chimney solely

13   for the purpose of venting the

14   conventional natural gas water

15   heater."

16   That's -- that's the result of your

17 review of the industry. Is that correct?

18   MS. LOIS MORRISON: That is correct.

19   MR. WILLIAM GANGE: The -- but do I --

20 I have it right -- or do I have it right that a side-

21 vented natural gas water heater would not require the

22 construction of a chimney?

23   MS. LOIS MORRISON: That is correct,

24 but a side-vent or power-vent water tank -- natural gas

25 water tank is more expensive than the electric water

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1 tank. And when you're purchasing a new home, it's less

2 of an involvement per -- that's a smaller component of

3 the decision-making when a customer is purchasing a new

4 home. So they are -- the builder is likely the one

5 making that decision.

6   MR. RAYMOND LAFOND: What is the

7 difference in price? Like is it 50 percent more, 100

8 percent more, 200 percent more?

9

10   (BRIEF PAUSE)

11

12   MS. LOIS MORRISON: Sorry. The

13 difference price, as we noted in the report on page 12,

14 is that for a side-vent natural gas watered heater, on

15 average -- recognizing that, you know, depending if you

16 get your three (3) quotes you might get a better price

17 -- is about one thousand, seven hundred and fifty

18 dollars ($1,750), compared to a conventional water

19 heater, which is about nine hundred dollars ($900) on

20 average. So it's almost double.

21   MR. RAYMOND LAFOND: Sorry, a thousand

22 versus nine hundred (900)?

23   MS. LOIS MORRISON: One thousand, seven

24 hundred and fifty (1,750) verus nine hundred (900).

25

 1 CONTINUED BY MR. WILLIAM GANGE:

 2   MR. WILLIAM GANGE: And then at page

 3 13, which was a response to under -- IR 2-7, you -- you

 4 deal with the issue of the -- the payback period for --

 5 for the two (2) possible natural gas heaters.

 6   Is that correct?

 7   MS. LOIS MORRISON: That is correct.

 8   MR. WILLIAM GANGE: And so with respect

 9 to the difference in price for an electric water heater

10 compared to a conventional natural gas water heater,

11 that difference in price is recaptured in the first

12 year?

13   MS. LOIS MORRISON: If they're choosing

14 a natural gas water heater over an electric water

15 heater? Is that your question?

16   MR. WILLIAM GANGE: Yes.

17   MS. LOIS MORRISON: Could you please

18 rep --

19   MR. WILLIAM GANGE: Yes. I'm reading

20 at -- at the end of -- of -- of bullet 3. The payback

21 period --

22   MS. LOIS MORRISON: Yeah.

23   MR. WILLIAM GANGE: -- of purchasing a

24 conventional natural gas water tank is less than one

25 (1) year.

3270

1   MS. LOIS MORRISON: Yes, I agree. I was

2 just trying to make sure I had your comparison

3 correctly so I could answer it correctly.

4   MR. WILLIAM GANGE: And -- and then the

5 second part of this undertaking was if one had to

6 install a chimney sleeve, the payback period would be

7 three and a half (3 1/2) years?

8   MS. LOIS MORRISON: That is correct.

9   MR. WILLIAM GANGE: Did -- and I guess

10 this was our fault. Did we -- I guess we did not ask

11 you what the payback period would be for a side-vented

12 natural gas water heater.

13   But -- but from -- from this, if the

14 difference is nine hundred dollars ($900), do I take it

15 that that's -- that the payback period would be less

16 than -- less than two (2) years?

17

18   (BRIEF PAUSE)

19

20   MR. WILLIAM GANGE: And you know, Ms.

21 Morrison, if -- if -- if that's an unfair question and

22 -- and you want to take that by the way of an

23 undertaking, I'd be happy to -- to speed things along

24 in that way.

25   MS. LOIS MORRISON: Well, we -- we can

3271

1 talk just generally, but we can give you specific

2 payback on it.

3   MR. WILLIAM GANGE: Okay.

4   MS. LOIS MORRISON: But you're looking

5 at a seven hundred and fifty dollar ($750) incremental

6 cost?

7   MR. WILLIAM GANGE: Yes.

8   MS. LOIS MORRISON: To eight hundred

9 (800) -- for the natu -- side vent versus the electric

10 water tank?

11   MR. WILLIAM GANGE: Yes.

12   MS. LOIS MORRISON: And you're looking

13 still at only -- you know, this is rough calculations.

14 You're looking at about a hundred (100) -- roughly a

15 hundred dollars ($100) a year difference in the

16 operating cost. So it wouldn't be only two (2) years.

17 It would be more than two (2) years.

18   MR. WILLIAM GANGE: But --

19   MS. LOIS MORRISON: But we will, as an

20 undertaking, give you the exact calculated amount.

21   MR. WILLIAM GANGE: So -- so...

22   MS. LOIS MORRISON: Manitoba Hydro will

23 provide you with the payback for converting from a

24 electric water tank to a side-vent natural gas.

25

3272

1 --- UNDERTAKING NO. 72:   Manitoba Hydro to provide

2   the payback for converting

3   from an electric water tank

4   to side-vent natural gas

5

6 CONTINUED BY MR. WILLIAM GANGE:

7   MR. WILLIAM GANGE: At page 14 of the

8 fuel switching -- or, pardon me, at page 14 of Exhibit

9 5, I've reproduced Second Round 12 of Green Action

10 Centre. And in that IR response, you've provided the

11 total number of existing homes in gas-available areas

12 and advised that of the existing homes, approximately

13 two hundred and thirty-seven thousand (237,000) are

14 natural-gas-heated homes, and -- and currently a

15 hundred and fifty-three (153) or a hundred and fifty-

16 four thousand (154,000) are electric space heating

17 homes.

18   Is that correct?

19

20   (BRIEF PAUSE)

21

22   MS. LOIS MORRISON: That is correct.

23   MR. WILLIAM GANGE: Is that gap

24 expected to widen or shrink over the next ten (10)

25 years?

 1   MS. LOIS MORRISON: I believe we

 2 outlined that there was anticipated to be a increased

 3 number of electrically heated homes.

 4   MR. WILLIAM GANGE: Thank you. And

 5 then at page 15, as part of the fuel switching report,

 6 the -- the request was made to identify the number of

 7 existing residential customers with gas water heating

 8 converting to electric tank-type water heating. And --

 9 and so you provided that for the period 2011 to 2031.

10   And that's what that chart represents,

11 is that correct, Ms. Morrison?

12   MS. LOIS MORRISON: That is correct.

13   MR. WILLIAM GANGE: So that on -- on an

14 annual basis, as -- as many as -- well, in 2024/'25

15 you've got fifty-six hundred (5,600) homes switching to

16 water heat?

17   MS. LOIS MORRISON: Switching to

18 electric water heat.

19   MR. WILLIAM GANGE: Yes, I'm sorry,

20 switching to electric heat -- water -- water heat. And

21 it's -- it's this -- this switching that is part of the

22 concern of the fuel switching report.

23   Is that correct?

24   MS. LOIS MORRISON: This is a component

25 of it where it's happening in existing homes. We're --

 1 we recognize that there's more of an opportunity here

 2 to help customers understand the benefits of remaining

 3 with a conventional natural gas water tank.

 4   MR. WILLIAM GANGE: At pages 16 and 17,

 5 I've reproduced Undertaking Second Round 12, which

 6 shows the number of new residential customers in gas-

 7 available areas that are forecast to select electric

 8 space heating each year. And that seems to be pretty

 9 consistent between a high of 48 percent and a low of 43

10 percent.

11   So that these are -- this is your

12 estimate of those people that have the option to have

13 gas but chose to have electric space heat.

14   I -- I'm accurately stating that, am I?

15   MS. LOIS MORRISON: It's our estimate

16 of people that we think might potentially be able to

17 access -- economically access elect -- natural gas. We

18 recognize that there -- this includes a number of

19 apartments where the -- there -- there -- as I

20 mentioned in -- in the report and in some of the

21 responses to IRs, that there is a disconnect where cust

22 -- where the property manager may lik -- prefer to push

23 the costs of the heating component to the tenant and

24 have them bear the ris -- the -- they -- they would

25 then control the consumption of the heat and then also

3275

1 bear the cost associated with that. So the -- it puts

2 less -- less of a risk onto the property manager.

3   And so there are -- there is that in

4 that number is -- is the anticipate that there will be

5 electrically heated apartments.

6   MR. WILLIAM GANGE: And -- and in the

7 paragraph entitled "ii", you've stated that the average

8 increase in electric use is 1,119 kilowatts per year,

9 that that's being added to the Manitoba load pursuant

10 to this type of situation?

11   MS. LOIS MORRISON: Yes, and that would

12 reflect the blend of single detached, multi attached,

13 and apartments.

14   MR. WILLIAM GANGE: Thank you. At page

15 18, which is a reproduction of Undertaking Second Round

16 15, GAC had ak -- asked the number and percentage of

17 new customers with access to natural gas choosing to

18 use electricity for space and/or water heating by class

19 for each year.

20   And your response was that 54 percent of

21 the thirty-six fifty-four (3,654) new customers in

22 natural-gas-available areas per year would be stall --

23 installing electricity for space heating. Again,

24 that's -- that is going to result in a significant

25 increase to the Manitoba electrical load.

3276

1   Would you agree with that?

2   MS. LOIS MORRISON: That would have

3   already occurred. This is our -- our estimation based

4   upon what we've observed, in terms of households

5   connected to our system. So these ones have already,

6   essentially, entered into the -- into the grid.

7   MR. WILLIAM GANGE: I -- I'm sorry, Ms.

8   Morrison. I didn't word that very -- very well, that

9   this is during the period of 2000 to 2011.

10   So that -- this number is -- is -- isn't

11 speculative; it's a pretty good calculation of what has

12 happened over the past decade?

13   MS. LOIS MORRISON: Yes, recognizing

14 that we did not ask these customers specifically, Did

15 you choose natural gas over -- or, Did you choose

16 electricity over natural gas and were you close to --

17 economically close to natural gas service?

18   It's our best estimation based on our

19 billing system information, which shows, for areas that

20 we know to have gas service, the number of new

21 electrically heated houses that connect it. So it's a

22 -- it's a good estimation.

23   MR. WILLIAM GANGE: And -- and then

24 similarly, in -- at page 19, which is the next portion

25 of -- of Second Round 15, this time 'D', that -- that

3277

 1 your estimation with respect to the -- the increase in

 2 the load growth during the past decade is about 17.8

 3 gigawatt hours?

 4   MS. LOIS MORRISON: That's our

 5 estimation as to what's occurred, yes.

 6   MR. WILLIAM GANGE: That's with respect

 7 to the -- the load growth as a result of space heating,

 8 correct?

 9   MS. LOIS MORRISON: Yes.

10   MR. WILLIAM GANGE: And then with

11 respect to the load growth increase as a result of

12 electric water heating, there's an additional 10.5

13 gigawatt hours that has been added to the Manitoba

14 load?

15   MS. LOIS MORRISON: That is correct.

16   MR. WILLIAM GANGE: And then finally,

17 with respect to Second Round 15E, we had asked you the

18 number of existing customers switching from electricity

19 to gas for space and/or water heating and the resulting

20 electrical gigawatt hours annual load reduction. And

21 your answer was that the number of customers converting

22 the other way, from electricity to natural gas heating,

23 is estimated to be negligible.

24   Is that correct? And that -- that's

25 been your experience?

3278

 1   MS. LOIS MORRISON: During that period

 2 of time that was outlined, there was -- in our

 3 analysis, we did do an estimation of people converting

 4 from -- services going from electricity to natural gas,

 5 and then going from natural gas to electricity, and for

 6 space heating purposes.

 7   And maybe to put it into context, it was

 8 kind of like three hundred (300) to -- from natural gas

 9 to electricity and thirty (30) going from electricity

10 and natural gas, to net out at two hundred and seventy

11 (270). Maybe that's the best way to -- so the numbers

12 we presented in the -- in -- in our analysis were based

13 on the two seventy (270), the net number.

14   MR. WILLIAM GANGE: Thank you. If you

15 go to page 4 of Exhibit 5, which is a portion of the

16 executive summary, and under the heading, "Manitoba

17 Fuel Choice Trends and Impacts," the report says that:

18   "For example, virtually 100 percent

19   of the new home market is installing

20   electric water heaters."

21   That's -- after surveying the industry,

22 the conclusion that you came to is that -- that

23 virtually everybody -- all of the builders are -- are

24 putting in electric water heaters.

25   Is that correct?

3279

 1   MS. LOIS MORRISON: That is correct.

 2 And it's a trend that's also been observed in other

 3 areas of Canada.

 4   MR. WILLIAM GANGE: Yes. And -- and

 5 I'm -- I'm going to go over some things that Mr. Lafond

 6 started with this morning but I -- they're in my notes,

 7 so I've got to do it.

 8   And that is that -- would you agree with

 9 me that -- that one (1) of the reasons why new home

10 builders install electric water heaters is it's cheaper

11 for them, in terms of their cost of construction?

12   MS. LOIS MORRISON: Yes.

13   MR. WILLIAM GANGE: And Manitoba Hydro,

14 as a result of this fuel study, would recognize that a

15 very significant part of the load growth in Manitoba is

16 this trend of electric space heat -- or electric water

17 heaters?

18   MS. LOIS MORRISON: That is correct.

19   MR. WILLIAM GANGE: And would all --

20 would Manitoba Hydro, as a result of the -- the fuel

21 study, have come to the conclusion that that is an

22 unnecessary and -- and -- unnecessary and avoidable

23 increase of -- of the Manitoba load growth?

24   MS. LOIS MORRISON: We did look at that

25 sector, and there was a concern with that sector. Now,

3280

1 in terms of new homes and the water heating component,

2 we feel that the -- when you look at the economics --

3 and we did look at the comparison of what options might

4 be available, in terms of the new homes.

5   So in a new home, we doubt that you

6 would be able to influence the homebuilder to build a

7 chimney solely for the purposes of installing a natural

8 -- a conventional natural gas water tank, because that

9 now tak -- that now -- now we're talking square footage

10 in the house. We're talking -- so -- so fundamentally,

11 the -- the more square feet they can ac -- they can

12 maximize in the house, the better that they can sell --

13 the more attractive the house is to the customers.

14   So in terms of having them now install a

15 chimney solely for the purposes of the water tank,

16 we're getting into something that they -- they were

17 really not going to be probably very interested in.

18 However, we did look at the options of, well, what is -

19 - what is the economics when you compare now an

20 electric water tank to the side vent? And we did do

21 that analysis, and it is presented in the report in

22 Section 5.2, page 31.

23

24   (BRIEF PAUSE)

25

3281

1   MS. LOIS MORRISON: Where we do look at

2 from the integrated --

3   MR. WILLIAM GANGE: Ms. Morrison, if

4 you could just hang on for one (1) second, I note that

5 I had -- I had completely misled Mr. Singh by telling

6 him that there wouldn't be any references. And so the

7 panel members are --- that -- it's Appendix 26, and Ms.

8 Morrison has referred to page 31 of Appendix 26.

9

10   (BRIEF PAUSE)

11

12   MR. WILLIAM GANGE: I -- I apologize,

13 that -- that's my fault, I should have...

14   MR. RAYMOND LAFOND: Which page?

15   MR. WILLIAM GANGE: Page 31, Mr.

16 Lafond.

17

18   (BRIEF PAUSE)

19

20   MS. LOIS MORRISON: So I'm -- the rest

21 of my comments may not have necessarily needed us to

22 look to this to a great extent. I was merely going to

23 state that we do recognize that these are -- that there

24 are other options that we might wish to entertain with

25 the builder. However, the -- the economics that would

3282

1 go behind that discussion with the builder would be

2 different than looking at the economics that have been

3 presented in the materials that you've provided as part

4 of your filing.

5   So we're recog -- we would recognize

6 that from the customer's perspective, installing a

7 side-vent heater -- water heater, there is that --

8 there is more of a cost associated with it because of

9 that upfront initial cost for the -- the -- the unit

10 itself.

11   So we're -- we're as part of our

12 strategy then, I mentioned that we are working -- we

13 are intending to work with and have begun working with

14 the homebuilders and the developers to ensure that the

15 -- that they are ins -- that they are making gas

16 available where it's economic to the customer. And

17 we're hoping to work with them to have them better

18 understand what the -- the benefits are to the customer

19 and to -- to -- to the -- overall to installing natural

20 gas appliances.

21

22 CONTINUED BY MR. WILLIAM GANGE:

23   MR. WILLIAM GANGE: Thank you. On page

24 31, you do make the comment that customers are better

25 positioned economically when using electricity for

 1 water heating due to the high upfront capital cost of

 2 the side-vent natural gas tank. But --

 3   MS. LOIS MORRISON: Sorry, they're --

 4 they're better off -- if their choices are to install a

 5 -- a -- if they have the option of maintaining a

 6 conventional tank, then they're better off to have a

 7 natural gas conventional tank. However, if their

 8 option is -- is a comparison between electric water

 9 heat and a side-vent natural gas tank, when you do that

10 comparison, that -- which is what you traditionally see

11 in a brand new home -- because the conventional tank

12 isn't on the table to be the choice; the -- the

13 customer isn't normally given that as an option -- the

14 customer would have to pay that incremental cost. And

15 then they were -- then they are -- now their -- their

16 savings aren't necessarily offsetting it -- offsetting

17 that incremental cost.

18   Does that make sense?

19   MR. WILLIAM GANGE: Yes, of course it

20 does. Thank you. The -- has Hydro developed any plans

21 or -- or conducted any studies of -- of what it would

22 cost Hydro to -- to subsidize the installation of side

23 natural -- side-venting natural gas water heaters?

24   MS. LOIS MORRISON: Specifically in

25 regards to new home construction?

3284

1   MR. WILLIAM GANGE: Yes.

2   MS. LOIS MORRISON: No, we have not had

3 that level of discussion with home -- that would be a

4 level of discussion we would have to have with

5 homebuilders specifically to see what point -- if we

6 were to go down that path, our -- our preference, of

7 course, would be to move the market -- again, you're

8 looking at a -- at program design. What would be the

9 least amount of money we would have to incur on the

10 ratepayers' basis in order to move in that direction?

11   So our initial discussion will be: What

12 can we do? Right now, what do the builders need to

13 have us do, in terms of intervention, to get them to

14 move in that direction? And those discussions are

15 going to be having -- being held in the next little

16 while. And -- and some of that discussion is what

17 we're having, as I mentioned, with the developer

18 meetings that we -- we're, as part of our regularly

19 scheduled developer meetings, where we meet with the

20 developers and speak to them about service extension

21 needs and the plans for the next year going forward.

22 We're piggybacking onto those meetings with discussions

23 on what do they need to see, or what -- what are the

24 drivers for them? What do we need to do in order to

25 get them to move in this direction?

3285

1   MR. WILLIAM GANGE: Thank you. But I

2 take it from that that -- that one of the things that

3 Manitoba Hydro is planning on doing is attempting to

4 develop ideas for moving builders in -- in the

5 direction of using natural gas water heaters?

6   MS. LOIS MORRISON: Yes. Our primary

7 focus to begin with, though, will be specifically on

8 the space heating, because in terms of a -- it has a

9 significant impact. And so we will talk maybe -- we

10 will talk to both items, with a very strong focus on

11 the heating com -- space heating component to begin

12 with.

13   MR. WILLIAM GANGE: And -- and I

14 understand your comment that -- that space heating has

15 a significant impact. But those numbers that we read

16 about the impacts of -- of natural gas versus

17 electrical water heaters, the electrical water heaters

18 had a pretty significant impact upon the load growth as

19 well.

20   Wouldn't you agree with that?

21   MS. LOIS MORRISON: Yes, they do. Part

22 of that is -- sorry, yes, they do. That is with the

23 new customers. You're right.

24

25   (BRIEF PAUSE)

3286

 1

 2   MR. WILLIAM GANGE: And -- and on page

 3 4 -- so continuing on in that same -- under the same

 4 heading, "Manitoba Fuel Choice Trends and Impacts,"

 5 your prediction is that, overall, space and water

 6 heating contributes to a 3 percent load growth during

 7 the period of 2011 to 2031.

 8   Is -- am I reading that chart properly?

 9   MS. LOIS MORRISON: Yes. We are

10 estimating that -- that 3 percent of the load -- 3

11 percent of -- of our current forecast growth is

12 residing as -- is a result of increases in the electric

13 space and water heating.

14   MR. WILLIAM GANGE: At page 6 of the --

15 of Exhibit 5, I've included the last page of the

16 executive summary of -- of Appendix 26. And the

17 second-last paragraph reads:

18   "Given the economic drivers from a

19   customer's perspective, it is

20   unlikely that the Manitoba market

21   will experience any overwhelming

22   shift in space heating from natural

23   gas to electricity, provided

24   customers are informed on their

25   choices."

3287

1   Is -- is Manitoba Hydro simply -- or is

2 it -- is it limiting its approach here to information,

3 the education of -- of customers?

4   MS. LOIS MORRISON: No. What we're

5 doing is, to begin with, our strategy is to look at

6 providing customers with information to help them make

7 informed decisions. This is particularly important for

8 existing customers who may be contemplating the idea

9 that, Oh, well, my furnace has died, I should look to

10 installing electric instead. Or -- and then working --

11 so it's not specifically only targeting customers.

12 That's one (1) aspect.

13   The other aspect is, as I mentioned, is

14 dealing partic -- is dealing one (1) on one (1) with

15 developers and builders. And as I testified to earlier

16 today, part of that is including looking at our current

17 policies, in terms of service extent -- sorry, service

18 extensions, to see: Can we better align the signals to

19 encourage builders and home -- and developers to make

20 sure that natural gas appliances are installed to

21 better serve cust -- the end user?

22   Oh, and -- and as we alluded to in our -

23 - in the last paragraph of the executive summary, those

24 aren't the only things. Those -- that's where we're

25 starting right now. We'll be monitoring how well this

3288

1 -- this achieves our objectives and to see how well

2 it's received in the marketplace. And if -- if we feel

3 that it's -- it's not serving Manitoba Hydro and not

4 serving the customer base, we will revisit.

5   MR. WILLIAM GANGE: But I take it from

6 that last paragraph on page 6 of Exhibit 5, where it

7 says:

8   "The -- the Corporation prefers to

9   use market intervention mechanisms,

10   such as education, direct financial

11   incentives, rate design options, to

12   influence the market."

13   That -- that your department is in the

14 process, or at least in the planning process, of

15 attempting to put together various initiatives to

16 assist -- and this may be the wrong word, but I'll use

17 it anyways -- proper choices with respect to fuel

18 choice?

19   MS. LOIS MORRISON: We ha -- are

20 putting -- we are in the process of developing a

21 strategy, and that strategy is going to evolve over

22 time. The first steps of that strategy are as I have

23 identified. And it's -- what we're staying there --

24 saying there is that we are not opposed to exploring

25 those as options. But at this point in time, the first

3289

1 steps we're taking are as we -- as I have outlined.

2   MR. WILLIAM GANGE: Do you see the fuel

3 switching study as -- as part of that process?

4   MS. LOIS MORRISON: Do you mean the

5 fuel switching report was the first step in --

6   MR. WILLIAM GANGE: Yes.

7   MS. LOIS MORRISON: -- identifying

8 that?

9   MR. WILLIAM GANGE: Yes, that's --

10 that's what I'm trying to get at.

11   MS. LOIS MORRISON: Okay. Yes. The

12 fuel switching report was the first step in identifying

13 what the issues were.

14   MR. WILLIAM GANGE: Was the information

15 that was gathered in the -- in the fuel switching

16 report, did it -- did it assist Manitoba Hydro, in

17 terms of clarifying how much of an issue this -- this

18 trend has become?

19   In other words, did -- did -- was

20 Manitoba Hydro aware that the switching from natural

21 gas to electricity was causing a 3 percent load growth?

22   MS. LOIS MORRISON: Manitoba Hydro was

23 aware that it was causing load growth. The

24 quantification of that did arise out of the preparation

25 of the report.

3290

1   MR. WILLIAM GANGE: Thank you. One (1)

2 of the things that -- that you've mentioned -- and I --

3 I think that we marked this as an exhibit, this

4 brochure, but I don't remember what exhibit number it

5 was.

6   THE CHAIRPERSON: I believe it's 20,

7 number 20.

8   MR. WILLIAM GANGE: Thank you, Mr.

9 Chair.

10

11 CONTINUED BY MR. WILLIAM GANGE:

12   MR. WILLIAM GANGE: So this was the --

13 the brochure entitled, "Replacing your Furnace or Water

14 Heater," and -- and I think that you introduced it an

15 awfully long time ago in this Hearing, but it's -- it's

16 part of your -- your department's process to inform

17 customers.

18   Is that correct?

19   MS. LOIS MORRISON: Yes. We provided

20 it as an example of one (1) of the pieces of literature

21 that has been prepared in order to better inform

22 customers.

23   MR. WILLIAM GANGE: Could you look at

24 the -- on the inside, or where it says, "Space heating

25 lifetime cost," that -- that section.

3291

1   MS. LOIS MORRISON: Yes.

2   MR. WILLIAM GANGE: Are those numbers,

3 the twenty-five (25) year cost to run -- so the orange

4 numbers -- are they based on today's rate, or are they

5 based on a projection of what electrical rates are

6 predicted to rise as -- as has been set out in this

7 Hearing?

8   MS. LOIS MORRISON: They are based on

9 today's rate, or -- sorry, yes, today's current rate.

10 As we've testified before, we -- although we have a

11 projection, or what -- what Mr. Rainkie has, I guess,

12 has -- has deemed to be -- what did you call them? --

13 indicative rates; those have not yet been approved and

14 would not be prudent to then be putting into a

15 literature doc -- into a document that we're providing

16 to customers saying, This is what it's going to cost.

17 So what we've done -- and -- and we've identified that

18 this is today's rates and it's just...

19   MR. WILLIAM GANGE: Although, would you

20 agree with me, that it certainly would be a more

21 powerful presentation if one were to use the indicative

22 rates, and -- and disclose it as indicative rates?

23

24   (BRIEF PAUSE)

25

3292

 1   MS. LOIS MORRISON: Mr. Gange, the gas

 2 rates are also today's gas rates, and for us to put --

 3 put forward to the public a projection as to what we

 4 think is going to happen with primary gas -- natural

 5 gas rates and then not have it happen, we really aren't

 6 comfort doing so. It -- we think -- and -- and I'll be

 7 honest here, I'm quite pleased with this, that it -- it

 8 does quite well demonstrate the difference between the

 9 -- the life-cycle cost of an electrically heated -- of

10 a house electric furn -- heated with an electric

11 furnace versus a natural gas furnace.

12   MR. WILLIAM GANGE: Thank you. The --

13 the other thing that is on here is a section on the

14 back, the back centre, where it says, "did you know."

15 And this section deals with -- a couple of the items

16 deal with -- with greenhouse gas emissions.

17   Do you see that --

18   MS. LOIS MORRISON: Yes.

19   MR. WILLIAM GANGE: -- Ms. Morrison?

20 Did -- did your department give any consideration to

21 providing more information on -- on the -- the cost

22 that -- that results from the greenhouse gas reduction?

23

24   (BRIEF PAUSE)

25

3293

1   MS. LOIS MORRISON: We -- we looked at

2 this as a -- as a promotional item to try and resonate

3 with the majority of customers. And from our -- from

4 our research into what's driving most customers'

5 decisions, the majority of the customers' decisions are

6 being based primarily on economics.

7   And what we are trying to do is cor --

8 essentially correct a misconception that might be that

9 it's cheaper to heat with electricity than natural gas,

10 and we're trying to help customers better understand.

11 But we recognize and -- that some customers may want

12 that information about what the true impact is, in

13 terms of the environmental -- you know, looking at the

14 global versus local analysis, and that's why that

15 information was also included in the brochure.

16   MR. WILLIAM GANGE: Would there be any

17 way, Ms. Morrison, of -- of produc -- of providing a

18 link to the fuel-switching report, so that those

19 customers that you have that are more interested in --

20 in environmental issues than necessarily cost issues

21 could -- could obtain further information, as you've

22 set out in the -- in the fuel-switching report?

23   MS. LOIS MORRISON: We could place a

24 link on our website from the -- you'll note at the

25 bottom of the centre panel on the back page there that

3294

1 we do state:

2   "For more information go to

3   hydro.mb.ca/heating."

4   We could also provide a link from that

5 site to the fuel-switching report. That's --

6   MR. WILLIAM GANGE: Okay.

7   MS. LOIS MORRISON: -- that's no

8 problem at all --

9   MR. WILLIAM GANGE: Thank you. That's

10 just a suggestion that Professor Miller has in terms of

11 how he think it -- that that brochure could be

12 improved.

13   If I could just have a second.

14

15   (BRIEF PAUSE)

16

17   MR. WILLIAM GANGE: Ms. Morrison, thank

18 you, that's -- those are my questions with respect to

19 the -- the fuel-switching report. I -- I guess what I

20 take from that is that in future hearings we're going

21 to hear more from the DSM panel, with respect to what

22 measures have been developed with respect to dealing

23 with the fuel-switching issue.

24   Now, I'm going to tread on some -- some

25 other thin ice in terms of things that have already

3295

1 been discussed, and that's the -- the tests. And I

2 understand that Mr. Peters has asked you a number of

3 questions about that, and I understand that the -- that

4 Mr. Williams did as well. So I -- I'm hoping that we

5 can go fairly quickly and you won't have to go into

6 significant detail. But there's just a little bit of a

7 different emphasis, in terms of the questions that I'm

8 going to put to you. So, I apologize for that, but I -

9 - I do have to do that.

10   The -- Appendix F -- or Appendix 7.1 of

11 the Power Smart plan -- well, it's Appendix F of the

12 2011 Power Smart plan. And I don't think you need to

13 look at it. It just lists the six (6) tests that are

14 employed by Manitoba Hydro.

15   Can you tell me that from memory?

16   MS. LOIS MORRISON: Yes.

17   MR. WILLIAM GANGE: Thank you. And --

18 and with respect to the TRC, and RIM, and probably the

19 MRC, those tests make mention of avoided costs.

20   Cur -- that's correct?

21   MS. LOIS MORRISON: Yes, that's

22 correct.

23   MR. WILLIAM GANGE: Exactly what is

24 "avoided cost"?

25   MS. LOIS MORRISON: Well, in -- in

1 terms of the definition that Manitoba Hydro uses in --

2 it's the marginal benefits that the system receives by

3 reducing energy consumption low -- in the domestic

4 market.

5   MR. WILLIAM GANGE: And -- and the

6 components, would they -- would they be the marginal

7 generation, the transmission, and the distribution

8 costs, and line losses?

9   MS. LOIS MORRISON: It would include

10 the deferral of transmission and distribution

11 infrastructure, the benefit of deferring in --

12 investment in dis -- distribution and transmission.

13 And it would include a value for the generation

14 component, which I would turn any further questions

15 related to how that's calculated to my colleagues,

16 either Mr. -- to Mr. Miles, when he returns. And those

17 values are presented at generation, which would include

18 a component for loss -- line losses, et cetera.

19   MR. WILLIAM GANGE: Yes, thank you.

20 And I understand that Mr. Miles will be -- will be

21 back. And I'm not -- I don't intend today to quiz you

22 with respect to numbers. I'm just asking about general

23 concepts.

24   Can -- can you tell me this though: Are

25 the marginal costs -- are they -- are they long-term,

1 reflecting the cost of meeting increased loads over

2 many years, or are they short-run marginal costs

3 reflecting only the change in costs in the current

4 year?

5

6   (BRIEF PAUSE)

7

8   MS. LOIS MORRISON: Long run.

9   MR. WILLIAM GANGE: Thank you. And

10 I'll -- I'll ask -- there's a couple of questions I do

11 have about -- about how those are calculated, and I'll

12 ask those of Mr. Miles later.

13   Can you tell me this, Ms. Morrison: Do

14 -- do Hydro's estimates of marginal generation costs

15 vary amongst the seasons?

16   MS. LOIS MORRISON: There's a value

17 attributed to winter/summer energy and on-peak and off-

18 peak capacity -- sorry, on -- winter capacity and

19 summer capacity. Any further detail into that would

20 have to be present -- asked of Mr. Miles.

21   MR. WILLIAM GANGE: Okay. Thank you.

22 Then I will do that and I'll skip half a page there.

23

24   (BRIEF PAUSE)

25

3298

1   MR. WILLIAM GANGE: And -- and you may

2 have answered many of these questions previously and

3 it's part of the problem of me not being here, but --

4 so, if we can go through them -- I -- I don't want to

5 drag this out.

6   But, the MRC is -- is -- is the starting

7 point, is that correct, of -- of screening a measure?

8   MS. LOIS MORRISON: Yes, that is

9 correct.

10

11   (BRIEF PAUSE)

12

13   MR. WILLIAM GANGE: And -- and,

14 essentially, the MRC compares the costs of a DSM

15 measure with its benefits in reducing costs to Manitoba

16 Hydro and to its customers.

17   Is that correct?

18   MS. LOIS MORRISON: The MRC compares

19 the cost -- sorry, the benefits of -- of reducing the

20 energy consumption, and also includes, in its

21 calculation, where obtainable, measurable non-energy

22 benefits, such as reduction in water consumption,

23 compares those benefits to the costs of installing that

24 measure. And if it's -- if it's an incremental cost,

25 being that it's comparison -- I'm going to either --

1 I'm either going to install the more efficient version

2 of the technology, or to the full cost if it's a

3 resource acquisition; I'm going to now go and undertake

4 an insulation project.

5   MR. WILLIAM GANGE: Once that analysis

6 has been done, do I have it right that -- that -- that

7 you also apply the other tests to -- to this particular

8 program?

9   MS. LOIS MORRISON: The -- the MRC is

10 screening the tech -- is the technology or the measure.

11 So, it's -- it's -- yeah, it's two (2) steps. One (1)

12 is, is this a viable technology measure product? Is

13 this something that adds value to the system and to the

14 customer? At that point, we dec -- we determine:

15 Should we design a program around it? So, is it viable

16 now to design a program around this technology? That's

17 when we look at the other tests, in combination.

18   MR. WILLIAM GANGE: Thank you. So it's

19 -- it's -- the other tests are -- are dealing with the

20 program, not the individual measure?

21   MS. LOIS MORRISON: That is correct.

22   MR. WILLIAM GANGE: Okay. And -- and

23 in terms of -- of the analysis of the -- of the

24 program, the benefits include -- that you're looking at

25 -- include avoided costs plus any other savings to

3300

1 customers and -- for instance, less frequent

2 replacement of light bulbs, or savings in water bills?

3   MS. LOIS MORRISON: If we're able to

4 quantify the non-energy benefits, we will include them.

5 And they may include items such as you mentioned. If

6 we've been able to identify a water bill savings, that

7 will be incorporated. If there's other items that we

8 can identify specifically to that measure, then we will

9 incor -- incorporate those.

10   MR. WILLIAM GANGE: And the program is

11 -- one (1) of the analysis is the total resource cost.

12 Is that correct? That -- that test, the total resource

13 cost test?

14   MS. LOIS MORRISON: Yes.

15   MR. WILLIAM GANGE: If a program passes

16 the total resource cost test, do you ensure that it'll

17 be included in the Power Smart port -- portfolio?

18

19   (BRIEF PAUSE)

20

21   MS. LOIS MORRISON: If in -- maybe it's

22 a better way of saying it that the program must pass

23 the TRC test in order for it to be included in the

24 portfolio.

25   MR. WILLIAM GANGE: Okay. Now -- but

3301

1 then there's -- there are other tests, the levelized

2 utility cost, the LUC; the participant payback period;

3 and the rate impact measure, the RIM test.

4   Those are also used to analyze the

5 program?

6   MS. LOIS MORRISON: They are used in

7 the development of the program. So when we're -- when

8 we are developing a program, we're keeping in mind that

9 we would -- that we're trying to balance that

10 investment between the customer and the Utility in

11 order to get the most out of the -- to get -- to get as

12 many installations as possible, recognizing, you know,

13 that we're designing the program to address market

14 barriers.

15   So I -- I think, as I described this

16 morning, it's not that we design a program -- or -- or

17 it's not that we run it through the TRC test and then

18 run it through the other tests. What we're doing is

19 we're designing a program and recognizing, what's the

20 best way that we think -- what are the options that we

21 could do to pursue this program? What does that look

22 like, in terms of -- of the marketplace? What does that

23 look like, in terms of participation? What does that

24 look like, in terms of -- of cost to -- to being that

25 to market?

3302

 1   Those factors all then go into our cost

 2 effectiveness test model, and then out comes a -- those

 3 -- those cost effectiveness tests come out of -- as a

 4 result of that design. We may then -- depending on how

 5 the tests look, we may decide to make some adjustments,

 6 because maybe we could increase participation if we

 7 choose a different approach. We've done that with some

 8 of our program designs, that we've -- we've pushed it a

 9 little further.

10   The best example I have is the Water &

11 Energy Saver Program, where, when we first started that

12 whole design concept, we thought of a -- we -- we

13 thought we would go along the more traditional approach

14 of a retailer incentive. So at the till, when you go

15 to buy, it you get a -- an instant rebate.

16   But when we started looking into some of

17 the more -- whether -- we started looking at whether or

18 not the models, like the -- the units that had the

19 lower gallons per minute, the qualifying models, they

20 weren't on the shelf. So us having a program that

21 didn't -- that -- that provided an incentive for a

22 product that wasn't on the shelf wasn't going to get us

23 where we wanted to be.

24   So then we looked at it again and we

25 thought, Okay, well we're looking at the metrics, can

3303

1 we go a little farther, what are some of the other

2 options? So we looked at whether or not we could do --

3 well, maybe we could set it up where the -- the

4 customer could buy it online. Well, then we started

5 looking at the metrics a little farther, and we

6 thought, Well, we -- we could actually give it away

7 online.

8   So we -- we kept going through those

9 iterations to see what made sense to maximize the --

10 the reach within the marketplace, recognizing there

11 were still barriers in the marketplace. And then what

12 was still cost effective from both the Utility and --

13 and the ratepayer's perspective?

14   And so it -- that's all that goes into

15 the design of a program. And so that's why you -- you

16 may find that I struggle with trying to say how we use

17 the tests. It's not a simple matter of saying, Well,

18 it passed this test, so now it goes to this test, now

19 it goes to this test. We're -- we're looking at all of

20 these components when we're designing a program.

21

22   (BRIEF PAUSE)

23

24   MR. WILLIAM GANGE: And -- and you may

25 have answered it in -- in that answer, in -- that --

3304

1 that you just gave, but I'll ask this anyways. Do --

2 do you have any estimate of the extent -- or do you

3 have any experience of the extent to which

4 participation would rise in programs if Manitoba Hydro

5 paid 100 percent of the incremental cost?

6   And -- and the reason that I said you

7 may have answered it is because you said that if you

8 went online you could give it away. So I'm taking it

9 that -- that in that situation you were absorbing 100

10 percent of the incremental cost.

11   MS. LOIS MORRISON: There are a number

12 of programs, such as that one, where we are covering

13 off 100 percent of the incremental cost. The low-

14 income program. When we first launched our Home

15 Insulation Program, our incentive offering for attic

16 insulation was approximately eight-five (85) to 90

17 percent of the incremental -- of -- of the cost of --

18 of the -- the actual insulation. So -- so if you're a

19 do-it-yourselfer, you could basically do it almost for

20 free.

21   So we have experience with it, and we --

22 we are gauging it when we are making our design as to

23 how to best manage it. And it's not always a case of

24 paying for the -- the measure. There -- there's other

25 market barriers that you have to address in order to

1 get the measure in place. And we look at that when

2 we're -- when we're developing and designing a program.

3   We're looking at all the market

4 barriers. And -- and as I mentioned some of them as --

5 how -- what's our shelf space -- what's our percentage

6 of shelf space? Do we have contractors in the market

7 that can actually install that measure, or -- or are

8 they familiar with it? So maybe we have to invest in

9 some capacity building. These are all components that

10 go into the design.

11   MR. WILLIAM GANGE: And -- and what

12 about this? Do -- do you have specific assumptions

13 about participation rates as a function of the payback

14 period?

15   MS. LOIS MORRISON: That depends on a

16 number of factors in the marketplace. It depends on

17 which market we're dealing with. We do make

18 assumptions based around what we think is acceptable.

19 And we have some broad assumptions or -- or rules of

20 thumb that we use when we're working with customers.

21 But there -- there may be rules of thumb, but they're

22 based on interactions with the different customer

23 groups.

24   Commercial customers will accept a low -

25 - a shorter payback period. They won't go for a ten

3306

1 (10) year payback period on an installation in most

2 cases. There might be the odd -- here, I'm going to

3 put all my qualifiers on it. It's really unique to the

4 type of measure also. So if it's a product that has a

5 really long life, they might be willing to go up to

6 five (5) years.

7   So if it's -- say they're going to

8 invest in a chiller, and we can work together so that

9 their payback is within five (5) years, because that

10 equipment has such a long life, they might be willing

11 to entertain that. However, a lighting application --

12 a lighting installation, they might not be willing to

13 take it. So they'll take a one (1) to two (2) year

14 payback, or a two (2) to three (3) year payback.

15 Industrial customers, a much shorter payback period.

16   So these are things that we take into

17 consideration when we're designing the program.

18 Residential customers are usually willing to take a

19 little longer payback period, depending on what we're

20 talking about. Again, it comes to the life of the --

21 the type of equipment we're looking at.

22   MR. WILLIAM GANGE: Those assumptions,

23 would you be able to -- would -- would you be able to -

24 - to specify them by way of an undertaking? Is that

25 possible?

3307

1   MS. LOIS MORRISON: I could give you an

2 example. But to give you all of them -- again, it

3 comes down to -- it's -- it's a very -- we have a

4 number of programs. We have a number of technologies.

5 We have a number of markets that we deal with. We

6 could give you an example of what we use for a customer

7 or for a technology or a program, but I don't think --

8   MR. WILLIAM GANGE: That'd be great.

9   MS. LOIS MORRISON: -- yeah, okay.

10   MR. WILLIAM GANGE: That'd be great if

11 you did that. So you'll undertake to give me one (1) -

12 - one (1) example --

13   MS. LOIS MORRISON: Okay.

14   MR. WILLIAM GANGE: -- of -- of

15 assumptions with respect to the payback period of -- of

16 one (1) type of customer and one (1) type of industry.

17 Thank you.

18

19 --- UNDERTAKING NO. 73:   Manitoba Hydro to provide

20   an example of a payback

21   period for one (1) type of

22   customer and one (1) type

23   of industry

24

25   MR. WILLIAM GANGE: I'm -- I'm getting

1 very close, Mr. Chair. I just need to talk to

2 Professor Miller for a very short period of time. I

3 don't think we even need a break. I'll just...

4

5 CONTINUED BY MR. WILLIAM GANGE:

6   MR. WILLIAM GANGE: Ms. Morrison, can

7 you advise me of this: Does the province subsidize

8 geothermal installation in the province?

9   MS. LOIS MORRISON: The Province of

10 Manitoba does have a geothermal incent -- tax credit

11 for supporting geothermal installations, yes.

12   MR. WILLIAM GANGE: And is it -- is it

13 a one size fit -- fits all, or are there different

14 subsidies depending upon where you live? For instance,

15 are you close to natural gas, are you in an all-

16 electric area.

17   Do you know the answer to that?

18   MS. LOIS MORRISON: I'm a little rusty

19 on all the specific details of that program. However,

20 I do recall -- and we could clarify that as an

21 undertaking so that I do get this right -- that there

22 is a difference for units that are installed in gas-

23 serviced areas.

24   As an undertaking, we will provide

25 details on the Province of Manitoba's geothermal

3309

1 program.

2

3 --- UNDERTAKING NO. 74:   Manitoba Hydro to provide

4   details on the Province of

5   Manitoba's geothermal

6   program

7

8 CONTINUED BY MR. WILLIAM GANGE:

9   MR. WILLIAM GANGE: In the DSM programs

10 do you target the -- those -- those consumers, low-

11 income consumers, that might be most in need of DSM?

12   MS. LOIS MORRISON: We have a well-

13 established Low Income Energy Efficiency Program that

14 is specifically targeted to aid those customers who

15 would be in the classification of low -- meet the LICO-

16 125 cutoff.

17   MR. WILLIAM GANGE: What about with

18 respect to electric heat customers? Do you target

19 electric heat customers for the possibility of using

20 geothermal?

21

22   (BRIEF PAUSE)

23

24   MS. LOIS MORRISON: With our

25 Residential Earth Power Loan, we focus our promotions

3310

1 in the electric service territory.

2

3   (BRIEF PAUSE)

4

5   MR. WILLIAM GANGE: During Mr.

6 Thomson's appearance, Ms. Morrison, I -- I don't -- I

7 don't remember if you were --

8   MS. LOIS MORRISON: Could -- sorry,

9 could I interrupt? I need to add one (1) component to

10 the -- the geothermal.

11   MR. WILLIAM GANGE: All right, all

12 right.

13   MS. LOIS MORRISON: We also -- we have

14 a commercial geothermal program that is available to

15 customers in electric service territory only.

16   MR. WILLIAM GANGE: I'm sorry, I -- I

17 was being such a smart aleck, I didn't -- I didn't

18 quite focus on you there. Could you repeat that?

19   MS. LOIS MORRISON: We have a -- our --

20 we do have, under our commercial program, geothermal

21 options focussed only -- only electric heat customers

22 are qualified to participate.

23   MR. WILLIAM GANGE: Thank you. Mr.

24 Wiens, earlier in the -- in the day, I believe that

25 there was some discussion about whether rates had --

3311

1 upward rates had an influence on commercial customers

2 and -- and their use of -- or consumption of

3 electricity. And -- and there was suggestion that

4 there -- that commercial customers may not be as

5 sensitive to upward pressure of rates.

6   Has that been your experience?

7   MR. ROBIN WIENS: All customers would

8 have some -- all cat -- there would be customers in all

9 categories of customer -- residential, commercial,

10 industrial -- who have sensitivity. And their

11 sensitivity is going to depend on a lot of other things

12 as well, their degree of sensitivity.

13   Commercial -- for commercial customers,

14 many of our small commercial customers, electricity is

15 one of dozens or hundreds of inputs that go into their

16 business, and in many cases it's a small part of it, so

17 they're not likely to have the same level of

18 sensitivity as other customers for whom electricity is

19 more important as a -- as a share, and -- or for whom

20 there are fewer substitutes available to them.

21   But, in the context of DSM, one (1) of

22 the substitutes that's available to all groups of our

23 customers is conservation programming offered by

24 Manitoba Hydro.

25   MR. WILLIAM GANGE: And my recollection

3312

1 of another fascinating hearing that we had, the Energy

2 Intensive Rate Application, was that during that

3 hearing one (1) of the -- one (1) of the large

4 intensive users came and gave evidence of -- of the

5 substantial amount of DSM measures that had been

6 introduced to its plant.

7   Do you recall that? I -- I -- we don't

8 need to get into the -- well, we cant get into the --

9 the name of the customer, but do you -- do you recall

10 that kind of evidence being brought forward?

11   MR. ROBIN WIENS: I don't recall the

12 specific customer or even the specific examples, but I

13 do recall that there was some discussion of that

14 customers participation, yes.

15   MR. WILLIAM GANGE: Yes, thank you.

16 Ms. Morrison, I just have a couple more questions and

17 that is: During the -- Mr. Thompson's presentation, he

18 made a comment that Manitoba Hydro does not intend to

19 engage in DSM that provides upward pressure on rates.

20   Does that sound like something that

21 would be consistent with Manitoba Hydro's philosophy?

22   MS. LOIS MORRISON: I believe his

23 statement was that, given our current financial

24 position, any new DSM programs have a sound business

25 case, and that DSM should reduce the upward pressure on

3313

1 rates, not increase it. I don't believe that was a --

2 a specific delineation that it -- that we were not

3 going to be -- that we were doing anything other than

4 what we've been doing to date which is -- generally, as

5 I described before; we look at it -- there's program

6 level analysis and then there's portfolio level

7 analysis. And if we can provide a program that has

8 good business case, and is in line with what we want to

9 achieve overall, and as a whole, our GSM initiative is

10 not putting upward pressure on rates, I don't see -- I

11 -- I think that's very much in line with our

12 objectives.

13   MR. WILLIAM GANGE: Thank you. And is

14 -- is that where the RIM test comes into play, in terms

15 of attempting to provide an analysis as to whether

16 there's going to be an upward pressure on rates?

17   MS. LOIS MORRISON: The RIM test would

18 provide us with a -- an indication that it's having --

19 that it may have an im -- that -- that it's likely to

20 have an upward pressure, or have some influence on our

21 rates. And -- but as I mentioned, it's used as part of

22 the overall discussion and the overall analysis of the

23 program.

24   MR. WILLIAM GANGE: Mr. Rainkie, just

25 to help justify your attendance today, does Manitoba

 1 Hydro apply a RIM test to new dam construction?

 2   MS. LOIS MORRISON: I think the missing

 3 component in that would be the loss of foregone revenue

 4 that would be a component of the RIM test, and building

 5 a new generation station would not have that component.

 6   MR. WILLIAM GANGE: So -- so the answer

 7 is "no"? It's --

 8   MS. LOIS MORRISON: I don't think it's

 9 -- it's an applicable test. It's --

10   MR. WILLIAM GANGE: -- possible? Okay,

11 thank you.

12   MS. LOIS MORRISON: -- not appropriate.

13   MR. WILLIAM GANGE: Thank you.

14   MS. LOIS MORRISON: Sorry. Just for

15 the record, if -- if I could clarify; I may have

16 misspoken earlier on regarding when Mr. Gange asked me

17 about the components of the avoided costs. I want to

18 clarify, when I had spoken to it, I had talked about

19 the components being the deferral of transmission and

20 distribution infrastructure. However, I -- the -- the

21 -- and this can again be clarified by Mr. Miles when he

22 returns, our generation marginal cost component is no

23 longer tied to cost related to the deferral of

24 generation, but rather to the marginal value of the

25 capacity and energy on the export market. Thank you.

3315

1   MR. DARREN RAINKIE: Mr. Gange, I could

2   be the highest person here relative to the time that I

3   speak today.

4   I think the question you're asking is

5   going to of course get into the NFAAT process that is

6   planned but certainly there will be information in that

7   filing on the financial impacts and rate impacts of new

8   dams, but certainly nothing that we're prepared to

9   discuss today. But -- but I just -- I'll just leave

10 you with that thought.

11

12   (BRIEF PAUSE)

13

14   MR. WILLIAM GANGE: Mr. Chair, thank

15 you. Those are my questions. Thank you, Ms. Morrison.

16   MR. ROBIN WIENS: Mr. Gange, just

17 before we retire this conversation, I want to improve

18 my load factor too here.

19   You had reminded me just a few moments

20 ago about a MIPUG member that came and spoke about

21 their extensive participation, and just -- in light of

22 the fact that there may be some misunderstanding about

23 the level of participation of large industrials, and in

24 particular those who are members of MIPUG, that -- that

25 certainly -- that -- that was an example, but certainly

3316

1   most of the others are active participants as well.

2   And I -- I'm not able to go into

3   details, but I -- I didn't want any misunderstanding

4   being left that large industrials, and in particular

5   MIPUG members, weren't participants in Manitoba Hydro's

6   DSM program, because they are.

7   MR. WILLIAM GANGE: Thank you, Mr.

8   Wiens. That -- I mean, that was always -- that was my

9   understanding as well, and -- and so I'm glad that you

10 -- that -- that you put that on, 'cause that's helpful.

11 Thank you.

12   MR. RAYMOND LAFOND: I -- I would like

13 to try and connect a few dots here. Last night reasing

14 -- reading an article in my magazine, The Economist,

15 and -- and let me quote just one (1) paragraph. It

16 said that:

17   "At it's peak in 1998 coal prov..."

18   We're talking of the US here:

19   "Coal provided 60 percent of

20   America's electricity. Even in 2010

21   when the shale gas boom was well

22   under way, it still accounted for 42

23   percent. By the middle of 2012

24   though, gas and coal were roughly

25   neck and neck, each with around a

3317

1   third of the power generation."

2   So that being -- that being said, when I

3 -- when -- when we look at Exhibit 20 here, and it

4 says:

5   "Manitoba Hydro exports surplus

6   hydro-electricity to provinces and

7   states that -- and states that would

8   otherwise burn fossil fuels like

9   coal."

10   My understanding is that, in fact -- and

11 -- and please correct me if I'm wrong, Manitoba Hydro

12 would displace very little coal fuel in the US, because

13 coal operates at a certain base level and gas comes in

14 to -- to supplement this base. And when Manitoba Hydro

15 does export it's usually at the times when they're

16 closer to peak than at the very low base, and therefore

17 they displace gas and not coal. And I would assume

18 that is also the major reason why Mr. Cormie says that

19 he is -- it is gas prices in terms of Manitoba Hydro's

20 forecasts are so sensitive.

21

22   (BRIEF PAUSE)

23

24   MS. LOIS MORRISON: Again, I will admit

25 I am not an engineer and I do not work in that area, so

3318

1 I would prefer to -- your -- your question has quite a

2 bit of value; however, it would be best served to be

3 answered by either Mr. Cormie or Mr. Miles.

4   MR. RAYMOND LAFOND: Okay. Fine. If -

5 - and if that's the case, on page 54 of the annual

6 report, the very last paragraph on that page, it says:

7   "The overall Power Smart Program is

8   expected to reduce greenhouse gas

9   emissions by over 2 1/2 million

10   tonnes annually while providing

11   Manitobans with lower energy bills."

12   There's $2.5 million tonne -- 2.5

13 million tonnes of greenhouse gas emissions; would that

14 be based on emissions produced by coal or gas, and if

15 it's a combination, in what ratios?

16   MS. LOIS MORRISON: It's -- it is based

17 on the -- a combination of both of those factors. What

18 we do is we take a factor -- some of that is actual --

19 there's two (2) parts. Some of it is natural gas

20 reduction in Manitoba. And so that is direct reduction

21 of GHGs as a result of reduction in natural gas burned

22 and consumed in Manitoba. The other component is

23 indirect GHG benefits that would be realized as a

24 result of our exports.

25   Now, from -- what we do to report that

 1 number is we take our energy savings and are

 2 essentially multiplying it by a factor that we are

 3 provided by individuals in the power -- power supply

 4 group that provide us with that factor. So --

 5   MR. RAYMOND LAFOND: And my question is

 6 whether that factor is based on displacing coal or gas?

 7   MS. LOIS MORRISON: The factor would

 8 have to be provided by Mr. Miles or -- and -- and I

 9 believe it's a combination, but they would be the ones

10 to be -- to answer that.

11   MR. RAYMOND LAFOND: So we will hear

12 about -- we will hear about that next week.

13   MS. LOIS MORRISON: Yes.

14

15   (BRIEF PAUSE)

16

17   MS. LOIS MORRISON: Actually, what we

18 could do is refer to Manitoba Hydro's response to

19 PUB/MH-1-104B. And in there we state:

20   "Today, a more conservative estimate

21   of 0.75 kg per kilowatt hour is

22   assumed. This reflects the

23   displacement of a mixture of fossil

24   fuel resources and a variety of

25   technologies and efficiencies."

3320

1   If -- if you would like more detail than

2 this, that would have to be provided by my peers.

3   MR. RAYMOND LAFOND: The only, I guess,

4 detail I want is the dif -- is the proportion of gas

5 versus coal that has been used in the calculation.

6   MS. LOIS MORRISON: Okay.

7

8   (BRIEF PAUSE)

9

10   MR. RAYMOND LAFOND: And again that's

11 because the formula that would have been used prior to

12 2010, when 62 percent in 2010 was used was produced by

13 coal in the US, and it's now down to one-third (1/3).

14 That's got to have changed over the last couple of

15 years.

16   MS. LOIS MORRISON: We'll take that as

17 an undertaking, to provide a breakdown, or -- of the

18 components of our GHG estimate.

19

20 --- UNDERTAKING NO. 75:   Manitoba Hydro to provide a

21   breakdown of the components

22   of its GHG estimate

23

24   (PANEL STANDS DOWN)

25

3321

1   THE CHAIRPERSON: Thank you. Before I

2 ask Mr. Peters to talk about the evolution of next

3 week, I wonder if there are any documents that we need

4 to acknowledge or recognize? No?

5   MS. ODETTE FERNANDES: No.

6   THE CHAIRPERSON: There being none, I

7 would ask that Mr. Peters to talk about how next week

8 is going to evolve.

9   MR. BOB PETERS: Yes, thank you, sir.

10 I believe I began the week by handing out a new

11 calendar to everybody. And in case we're doing a

12 report card, it's so far been 100 percent accurate --

13 accurate. And not only have I been able to deliver,

14 Mr. Chairman and Board members, this hearing within

15 time budget this week, we're actually early today. And

16 as a benefit --

17   MR. WILLIAM GANGE: You're welcome, Mr.

18 Peters.

19   MR. BOB PETERS: -- as a benefit -- I

20 see, now they come out -- as a benefit, Mr. Chairman

21 and Board members, we've also been able to cancel the -

22 - the Board's intended sitting on -- on Saturday of

23 this week, as the DSM panel is now concluded and

24 Manitoba Hydro's revenue requirement panel is -- is not

25 available.

3322

 1   But next week, to answer your question

 2 directly, it will be -- it will be a week dealing with

 3 revenue requirements issues from Manitoba Hydro, and

 4 those revenue requirements issue include depreciation.

 5 The present plan is that on Monday, Mr. Kennedy will be

 6 with us, and he will be -- continue to be examined by

 7 Mr. Hacault. And there may be undertakings that other

 8 parties have that they want clarified with Mr. Kennedy

 9 while he is here.

10   When Mr. Kennedy is complete in his

11 testimony, Manitoba Hydro's revenue requirement panel

12 will -- will be seated in its entirety, and Mr.

13 Williams will be asking questions related to revenue

14 requirement issues.

15   I should indicate on the 15th of

16 January, which is Tuesday, MIPUG has asked for the

17 opportunity to have two (2) of its members attend and

18 provide relative brief presentations. I believe it

19 works best for the Board and for MIPUG that those be

20 held perhaps first thing on Tuesday morning the 15th.

21 And I'll endeavour to arrange that with Mr. Hacault

22 over the weekend.

23   Then turning to next Wednesday, the date

24 has been fixed for the testimony of Mr. Chernick, and

25 he will be examined in direct by, perhaps both Mr.

3323

1 Gange and Mr. Williams, or alternatively they'll divide

2 up the work. Oh, I'm sorry, Mr. Chernick will be

3 examined by -- by Mr. Gange in -- in direct and then

4 he'll be available to be cross-examined.

5   The next day will be Mr. Dunsky, who has

6 been sponsored by a joint -- jointly by two (2) of the

7 Intervenors. So his evidence will occur on Thursday.

8   And to the extent that we need to

9 continue on revenue requirement matters, we have Friday

10 the 18th available. And I do say with reluctance, I

11 know the weekend date on Saturday is available at least

12 for perhaps a half a day, but we'll have to see how the

13 week unfolds with that.

14   The -- the overriding factor, Mr.

15 Chairman, is to see whether or not we could complete

16 the revenue requirement evidence and then the

17 Intervenor evidence in a time that will permit closing

18 submission to still occur before the 24th of January.

19 And I'm not confident that will be the case at this

20 point in time, but if -- if it can't be we'll have some

21 alternate dates for closing submissions for the Board

22 to consider.

23   One (1) last note, while we're forward-

24 planning: On January 22nd, parties should be aware

25 that the Hearing will commence at approximately 10:30

3324

 1 on January 22nd to facilitate availability of the

 2 Board.

 3   So, Mr. Chairman, next week we can

 4 expect Mr. Kennedy here on Monday morning, followed by

 5 the revenue requirement panel, and on Tuesday will be

 6 some presenters from MIPUG, on Wednesday will be Mr.

 7 Chernick, on Thursday Mr. Dunsky, and Friday we'll

 8 continue with revenue requirement.

 9   So, subject to any questions of yourself

10 and any other parties, that concludes my overview of

11 the intended plans next week.

12   THE CHAIRPERSON: There being no other

13 questions, I believe that we're adjourned for today.

14 And so we'll see -- we'll see you, those few who are

15 going to be here on Monday, we'll see you on Monday.

16   Thank you very much. Have a good

17 weekend.

18

19 --- Upon adjourning at 2:41 p.m.

20

21 Certified correct,

22

23 _____

24 Cheryl Lavigne, Ms.

25

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